

Public Draft

# CITY OF ROSEVILLE AQUIFER STORAGE AND RECOVERY PROGRAM

## Supplemental Environmental Impact Report

Prepared for  
City of Roseville

August 2020





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City of Roseville

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# Acronyms and Other Abbreviations

Abbreviation/Acronym	Definition
µg/L	micrograms per liter
2012 ASR Program Final EIR	Aquifer Storage and Recovery Program Draft and Final Environmental Impact Report
AF	acre-feet
AFY	acre-feet per year
ASR	aquifer storage and recovery
California Register	California Register of Historical Resources
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CEQA Guidelines	<i>Guidelines for Implementation of the California Environmental Quality Act</i>
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Roseville
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
dB	decibel(s)
DBP	disinfection byproduct
DDW	Division of Drinking Water
DWR	California Department of Water Resources
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	Environmental Science Associates
FESA	federal Endangered Species Act
FR	<i>Federal Register</i>
General Plan	City of Roseville General Plan
GMP	groundwater management plan
GSA	groundwater sustainability agency
GSP	groundwater sustainability plan
L <sub>eq</sub>	equivalent noise level
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MLD	Most Likely Descendant
mg/l	milligrams per liter
modified Project	minor additions or changes to six aquifer storage and recovery wells that were either partially or not covered in the 2012 ASR Program Final EIR
MRP	monitoring and reporting program
National Register	National Register of Historic Places

Abbreviation/Acronym	Definition
NAHC	Native American Heritage Commission
NASb	North American River Groundwater Subbasin
NCIC	North Central Information Center
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
PCWA	Placer County Water Agency
PM <sub>10</sub>	inhalable particulate matter 10 micrometers or less in diameter
PRC	Public Resources Code
Project	City of Roseville Aquifer Storage and Recovery Program
PSA	purveyor-specific agreement
Regional Water Board	Regional Water Quality Control Board
RWA	Regional Water Authority
SCH	State Clearinghouse
SEIR	supplemental environmental impact report
SGA	Sacramento Groundwater Authority
SGMA	Sustainable Groundwater Management Act
SRF	State Revolving Fund
State Water Board	State Water Resources Control Board
TBD	to be determined
TDS	total dissolved solids
UIC	underground injection control
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
WFA	Water Forum Agreement
West Placer Groundwater Sustainability Agency	WPGSA

# EXECUTIVE SUMMARY

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## ES.1 Introduction

This Draft Supplemental Environmental Impact Report (SEIR) is a supplement to the Aquifer Storage and Recovery (ASR) Program Draft and Final Environmental Impact Report (State Clearinghouse [SCH] No. 2009072018). That previous environmental impact report (EIR), which was certified by the City of Roseville (City) on March 29, 2012, is referred to in this Draft SEIR as the “2012 ASR Program Final EIR.” The 2012 ASR Program Final EIR addressed the environmental impacts of constructing and operating 13 ASR wells capable of both water injection and groundwater extraction. Eight of the 13 wells identified were constructed. Out of the remaining five wells covered in the 2012 ASR Program Final EIR that were not constructed, two are still to be constructed and are addressed in this Draft SEIR. Therefore, this SEIR addresses eight ASR wells that were either partially or not covered in the 2012 ASR Program Final EIR. Two of the eight ASR wells are considered “back-up” sites and will only be installed if other ASR well sites are not feasible. Therefore, the total amount of ASR wells evaluated under this Draft SEIR are eight with six ASR wells to be constructed. These minor additions or changes, referred to in this Draft SEIR as the “modified Project,” are described in Chapter 2, *Project Description*.

In accordance with CEQA Guidelines Sections 15063 and 15082, the City originally prepared and published a Notice of Preparation (NOP) of an EIR on July 1, 2009 (see Appendix A of the 2012 ASR Program Draft EIR). The NOP was circulated to the public and to federal, state, and local agencies and other interested parties to solicit comments on the proposed Project. The public comment period for the NOP closed on August 3, 2009. In addition to the 45-day public and agency comment period, public scoping meetings were held on July 15 and July 29, 2009, at the City of Roseville Corporation Yard and Timber Creek Lodge, respectively.

Concerns raised in response to the NOP and oral comments received at the scoping meetings were considered during preparation of the 2012 ASR Program Draft EIR and this Draft SEIR. The scoping comments were included in Appendix B of the 2012 ASR Program Draft EIR. Preparation of this Draft SEIR does not require the release of another NOP.

This Draft SEIR is available to federal, state, and local agencies and interested organizations and individuals who may want to review and comment on the analysis in this document. Publication of the Draft SEIR marks the beginning of a 45-day public review period. The 45-day public review period for the Project extends from August 7, 2020, through September 22, 2020, ending at 5 p.m. During the public comment period, written comments should be delivered to:

Terri Shirhall, Environmental Coordinator  
City of Roseville Development Services Department  
311 Vernon Street  
Roseville, CA 95678  
916.774.5536  
tshirhall@roseville.ca.us

The Draft SEIR is available for public review at the following location:

City of Roseville Permit Center  
311 Vernon Street  
Roseville, CA 95678

Due to COVID-19 concerns, the Permit Center is currently only open Tuesdays and Thursdays and the hours for in person document review may be limited. Therefore the public is encouraged to check the City's web site first to ensure in office accommodations are available:  
<https://www.roseville.ca.us>.

Alternatively, the Draft SEIR can also be viewed or downloaded from the City's website via the following link: [www.roseville.ca.us/groundwater](http://www.roseville.ca.us/groundwater).

A public workshop will be held on August 25, 2020. The time and venue of the meeting are still to be determined, but will made be available at [www.roseville.ca.us/groundwater](http://www.roseville.ca.us/groundwater).

## ES.2 Objectives

As described in the 2012 ASR Program Final EIR, the purpose of the ASR Program is to address the above challenges while improving groundwater supply and reliability consistent with adopted regional and City groundwater management plans. The modified Project's goals and objectives are the same as those described for the original Project in the 2012 ASR Program Final EIR and are as follows:

- Maximize the City's ability to fully utilize its surface water entitlements while improving the City's overall water supply reliability, operational flexibility, and use of existing City infrastructure.
- Manage the groundwater aquifer for its storage capabilities, particularly in light of regulatory restrictions associated with surface storage, and as a sustainable resource to ensure groundwater availability during drought years.
- Develop a cost-effective means for water supply storage.
- Meet regional conjunctive use program goals as outlined in the City's General Plan consistent with opportunities to create a regional groundwater bank in the greater Sacramento area
- Maintain City of Roseville requirements identified in the Water Forum Purveyor Specific Agreement.
- Enable the City to meet prior Western Placer County Groundwater Management Plan requirements and future Groundwater Sustainability Plan requirements consistent with the Sustainable Groundwater Management Act.
- Ensure no net impact to aquifer from potential use during dry and drier years.

- Coordinate ASR permitting approval from Regional Water Quality Control Board.

## ES.3 Project Description

The 2012 ASR Program Final EIR addressed the environmental impacts of constructing and operating 13 ASR wells capable of both water injection and groundwater extraction. Eight of the 13 wells identified were constructed. Out of the remaining five wells covered in the 2012 ASR Program Final EIR that were not constructed, two are still to be constructed and are addressed in this Draft SEIR. Therefore, this SEIR addresses eight ASR wells that were either partially or not covered in the 2012 ASR Program Final EIR. Two of the eight ASR wells are considered “back-up” sites and will only be installed if other ASR well sites are not feasible. Therefore, the total amount of ASR wells evaluated under this Draft SEIR are eight with six ASR wells to be constructed. These minor additions or changes, referred to in this Draft SEIR as the “modified Project,” are described in Chapter 2, *Project Description*. Table ES-1 provides a summary of the wells addressed in the 2012 ASR Program Final EIR and the modified Project in this SEIR.

### ES.2.1 Aquifer Storage and Recovery Wells

As described in the 2012 ASR Program Final EIR, the ASR wells would be designed and constructed with ASR capabilities to both inject and extract water. The constructed ASR well sites would average between 0.5 and 1 acres, with each pump station building itself being approximately 50 feet wide by 100 feet long. The well casing located within the pump station building will extend to approximately below ground surface of 500 feet. ASR well sites typically include “top-side” or aboveground infrastructure that includes a small structure housing (also referred to as the pump station) and securing the aboveground ASR well equipment and supporting infrastructure such as pumps, electrical, and disinfection equipment. These top-side municipal wells also include underground components, infrastructure that includes a well casing, filter pack, cement, a downhole control valve, the pump, and column pipe. Top-side improvements can be protected by perimeter fencing to enclose and secure aboveground infrastructure. The type of top-side improvement generally depends on site-specific conditions and the potential need for noise mitigation (normally accomplished with a building). Top-side improvements include a building which is approximately 30 feet wide by 40 feet long by 16 feet high.

The top-side improvements would accommodate a chlorination facility to add chlorine and fluoride to the extracted groundwater before it enters the distribution system. Currently the City’s practice is to add chlorine to extracted water using a sodium hypochlorite solution. Several methods are available for using sodium hypochlorite. One method allows for onsite generation while another method uses liquid stored in onsite storage vessels. Either method may be used under the ASR Program.

**TABLE 2-1**  
**WELLS COVERED IN THE 2012 AQUIFER STORAGE AND RECOVERY PROGRAM FINAL EIR AND THIS**  
**SUPPLEMENTAL EIR FOR THE MODIFIED PROJECT**

Well No.	Name	Covered in 2012 ASR Program Final EIR?	ASR Well Status	Addressed in SEIR?
4	Darling Way	Yes	Existing and inactive (Not an ASR well, production well only)	No
5	Oakmont	Yes	Existing and inactive (Not an ASR well, production well only)	No
6	Diamond Creek	Yes	Existing and active	No
7	Woodcreek North	Yes	Existing and active	No
8	Hayden Parkway	Yes	Existing and active	No
9	Westbrook (formally West Side Dr #1, W-77)	Yes	Existing and inactive (Production well casing and screen installed, no motor or pump station)	No
10	W-76	No	No longer planned	No
11	Pleasant Grove (formerly Well 11—Woodcreek West)	Yes	Proposed	<b>Yes</b> (was identified and covered in the 2012 EIR)
12	Blue Oaks (formally Del Webb)	Yes	Existing and active	No
13	Campus Oaks (formerly Well 13—Hewlett Packard)	Yes	Proposed	<b>Yes</b> (was identified and covered in the 2012 EIR)
14	Fiddymment Road	Yes	No longer planned	No
18	Solaire (formerly Sierra Vista Specific Plan #1)	Yes	Existing and inactive (Production well casing and screen installed, no motor or pump station)	No
TBD	Sierra Vista Specific Plan #2	Yes	No longer planned	No
TBD	Creekview	Yes	No longer planned	No
TBD	Marlin	No	Proposed	<b>Yes</b>
TBD	Misty Wood	No	Proposed	<b>Yes</b>
TBD	Maidu	No	Proposed	<b>Yes</b>
TBD	Galilee	No	Proposed	<b>Yes</b>
TBD	Vencil Brown (back-up site)	No	Proposed	<b>Yes</b> (if other proposed locations are deemed infeasible)
TBD	Central Park (back-up site)	No	Proposed	<b>Yes</b> (if other proposed locations are deemed infeasible)
Total wells (21)	N/A	13	8 wells proposed (2 of which were previously covered in the 2012 ASR Program Final EIR and 2 of which are back-up sites) 4 Existing and active 4 Existing and inactive 3 No Longer Planned	8 ASR wells discussed in SEIR

NOTES: ASR = aquifer storage and recovery; EIR = environmental impact report; N/A = not applicable; SEIR = supplemental environmental impact report; TBD = to be determined  
**Boldface** in the "Need Coverage in SEIR?" column indicates those ASR wells for which this SEIR identifies potential environmental impacts of the modified Project.

SOURCE: Data compiled by Environmental Science Associates in 2020

Alternatively, initial construction may include the use of a commercially available sodium hypochlorite solution until the decision is made to go into production. This would entail using chemical tanks and offloading capabilities to handle up to 500 gallons of up to 12 percent solution hypochlorite. During operations, this may require weekly chemical deliveries by truck.

## ES.2.2 Water Supply Distribution System

As described in the 2012 ASR Program Final EIR, after construction of the ASR wells, groundwater would be extracted from the aquifer, pumped into the existing potable water supply distribution system, and delivered to customers.

## ES.2.3 Operational Characteristics

As described for the original Project in the 2012 ASR Program Final EIR, the modified Project would involve injecting surface water, obtained from Folsom Reservoir under existing City water supply contracts, into the North American Subbasin aquifer (basin number 5-21.64 as defined in DWR Bulletin 118) for storage and subsequent extraction and use in the City's water service area. Raw water taken from Folsom Reservoir would be treated using available treatment capacity at the City's Barton Road Water Treatment Plant. The plant has the ability to treat up to 100 million gallons per day of water.

Project construction could be partially funded with a grant or loan from the State Water Resources Control Board (State Water Board) State Revolving Fund (SRF) program, which is partially funded by the U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency has allowed a modified CEQA document to serve as the basis of compliance for projects applying for SRF monies. Therefore, this Draft SEIR addresses the additional regulatory components for compliance with federal requirements under the Clean Air Act (see Section 3.3.1), Endangered Species Act (Section 3.3.2), Executive Order No. 12898 – Environmental Justice (see Section 3.3.3), and National Historic Preservation Act (see Section 3.3.4).

## ES.4 Significant and Unavoidable Effects

The analysis in the 2012 ASR Final EIR determined that, at some ASR well sites, construction noise levels may reach a maximum of 78 decibels (dB) equivalent noise level (Leq) at distances of 100 feet, which would exceed the City's nighttime noise level standard of 45 dB Leq. The City's General Plan and Noise Ordinance allow an exception process for short-term construction; however, Project construction was expected to cause a substantial temporary increase in ambient noise levels in the vicinity of some of the ASR well sites. Mitigation Measure 4.3-1, "Use of Sound Attenuation during Well Drilling Operations," and Mitigation Measure 4.3-4, "Prior to Well Drilling the City Would Provide Notice to all Residents Subject to Noise Impacts," were determined to be required. However, even with mitigation, the potential would exist for noise impacts to exceed the City's interior noise standards. For those ASR well sites, the noise impact was found to be significant and unavoidable.

The City's General Plan and Noise Ordinance would still be applicable to all ASR well sites for the modified Project. Mitigation Measures 4.3-1 and 4.3-4 would be implemented and potential impacts of the modified Project would be comparable to those of the original Project as identified in the 2012 ASR Program Final EIR. The noise impact at the location of ASR Well 13–Campus Oaks would still be significant and unavoidable, as described for the original Project in the 2012 ASR Program Final EIR. In addition, to mitigate potential operational noise impacts, the modified Project would implement Mitigation Measure 4.3-3, as applicable. The modified Project would not result in new or more severe potentially significant noise impacts, and the 2012 ASR Program Final EIR adequately addresses potential noise impacts.

## **ES.5 Summary of Impacts and Mitigation Measures**

The modified Project includes all mitigation measures listed in the 2012 ASR Program Final EIR, including the environmental commitments within the ASR Program description (e.g. required per the City Mitigating Ordinances, Guidelines and Standards that apply to all development activities within the City limits). In addition, the biological resources mitigation measures (revised from the 2012 ASR Program Final EIR environmental commitments) are included in Section 3.6 of this Draft SEIR.

According to CEQA Guidelines Section 15163, this Draft SEIR needs to contain only the information needed to analyze the modified Project, including changed circumstances and new information requiring additional environmental review. Where existing information and analysis in the 2012 ASR Program Final EIR are sufficient to evaluate the impacts of the modified Project, no additional environmental review is warranted. Section 3.2, *Environmental Issues and Alternatives Not Requiring Further Analysis*, summarizes environmental issues for which potential impacts of the modified Project are adequately addressed in the certified 2012 ASR Program Final EIR and no further analysis is required. The 2012 ASR Program Final EIR included an initial study, which described existing conditions and analyzed impacts for a variety of resource areas.

The modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts on most of the resource areas, including: aesthetics; agricultural resources; air quality, including greenhouse gas emissions and global climate change; geology and soils; hazards and hazardous materials; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation and traffic; and utilities and service systems.

In light of the environmental issues not addressed further, the following CEQA resource areas are considered in greater detail in a revised impact analysis in this Draft SEIR:

- Hydrology and Water Quality (see Section 3.5)
- Biological Resources (see Section 3.6)
- Cultural Resources (see Section 3.7)

However, impacts from the modified Project resulted in less than significant impacts, or less than significant impacts with mitigation incorporated, consistent with the 2012 ASR Program Final EIR for these resource areas.

## **ES.6 Summary Cumulative Impacts**

Potential cumulative impacts of the modified Project on surface and groundwater hydrology and water quality, biological resources and cultural resources are discussed in Sections 3.5 through 3.7. Other direct impacts of the modified Project would be limited, mitigable, or very localized, or would not cause or contribute to additional cumulative impacts beyond those described for the original Project in the 2012 ASR Program Final EIR.

Therefore, the modified Project would not result in additional cumulatively considerable impacts, and the 2012 ASR Program Final EIR adequately addresses potential cumulative impacts. In addition, the modified Project includes a change to the location of six ASR wells and would not cause any significant irreversible environmental changes beyond those identified for the original Project in the 2012 ASR Program Final EIR.

## **ES.7 Summary of Alternatives**

The modified Project would entail constructing and operating ASR well sites similar to those described for the original Project in the 2012 ASR Program Final EIR, but at different locations. Therefore, the alternatives evaluated and conclusions regarding the alternatives' ability to meet Project objectives, the consistency of the alternatives with the City's plans and policies, and their impacts compared to the Project impacts, as described in the 2012 ASR Program Final EIR, are still applicable with the modified Project.

Therefore, no additional analysis is warranted, and the analysis of Alternatives 2–5 presented in the 2012 ASR Program Final EIR is adequate.

## **ES.8 Areas of Controversy**

Areas of controversy for the modified Project would be the same as those identified in the 2012 ASR Program Final EIR, including those associated with water quality, growth inducement, fairness (e.g. different aesthetic characteristics of water between Roseville residents), alternatives, and peak shaving.

## **ES.9 Issues to Be Resolved**

There are no known issues to be resolved at this time.

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# CHAPTER 1

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## Introduction

### 1.1 Introduction and Background

This Draft Supplemental Environmental Impact Report (SEIR) is a supplement to the Aquifer Storage and Recovery (ASR) Program Draft and Final Environmental Impact Report (State Clearinghouse [SCH] No. 2009072018). That previous environmental impact report (EIR), which was certified by the City of Roseville (City) on March 29, 2012, is referred to in this Draft SEIR as the “2012 ASR Program Final EIR.”

The 2012 ASR Program Final EIR identified the City’s ASR Program (referred to in this Draft SEIR as the “Project”) as an essential tool to maintain groundwater as a sustainable resource, improve the City’s water supply reliability, and meet regional conjunctive use program goals.

ASR is a process in which treated surface water is injected by specially designed groundwater wells into the groundwater aquifer for storage, then is later recovered for municipal use. To meet water demands, the City uses a portfolio approach, defined as a combination of groundwater and surface water supplies. The ASR Program is a component of the City’s strategy to maximize its ability to fully use allocated surface water and increase water supply reliability during peak demand times or dry rainfall years. In normal and wet years, the City meets buildout water demands using a combination of contracted surface water and recycled water supplies. Groundwater is used during critically dry years when surface water supplies are limited by drought. The ASR Program allows the City to inject treated surplus surface water into the underlying groundwater aquifer for storage and later extraction. In addition, future surface water contracts, such as water made available from the Central Valley Project, can be used to maximize the use of ASR infrastructure and further improve the City’s future water supply reliability.

The 2012 ASR Program Final EIR addressed the environmental impacts of constructing and operating 13 ASR wells capable of both water injection and groundwater extraction. Eight of the 13 wells identified were constructed. Out of the remaining five wells covered in the 2012 ASR Program Final EIR that were not constructed, two are still to be constructed and are addressed in this Draft SEIR. Therefore, this SEIR addresses eight ASR wells that were either partially or not covered in the 2012 ASR Program Final EIR. Two of the eight ASR wells are considered “back-up” sites and will only be installed if other ASR well sites are not feasible. Therefore, the total amount of ASR wells evaluated under this Draft SEIR are eight with six ASR wells to be constructed. These minor additions or changes, referred to in this Draft SEIR as the “modified Project,” are described in Chapter 2, *Project Description*.

## 1.2 Type of EIR

The lead agency for a project under the California Environmental Quality Act (CEQA) may prepare a supplement to a previously certified EIR if certain conditions are met. Specifically, if the requirements to prepare a subsequent EIR are met, then a supplemental EIR may be prepared if “only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation” (*Guidelines for Implementation of the California Environmental Quality Act* [CEQA Guidelines] Section 15163).

In accordance with these requirements, this Draft SEIR supplements the previously certified 2012 ASR Program Final EIR and addresses proposed modifications, changed circumstances, and new information not described in that prior environmental document.

This Draft SEIR provides additional information needed to make the 2012 ASR Program Final EIR, as supplemented, adequate for the modified Project. Consistent with CEQA Guidelines Section 15163, this Draft SEIR contains only the information needed to analyze the modified Project, including changed circumstances and new information requiring additional environmental review. Where information and analysis provided in the 2012 ASR Program Final EIR is applicable to the modified Project, it is summarized and/or incorporated by reference. Copies of the 2012 ASR Program Final EIR and addenda are available at [www.roseville.ca.us/groundwater](http://www.roseville.ca.us/groundwater).

Project construction could be partially funded with a grant or loan from the State Water Resources Control Board (State Water Board) State Revolving Fund (SRF) program, which is partially funded by the U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency has allowed a modified CEQA document to serve as the basis of compliance for projects applying for SRF monies. Therefore, this Draft SEIR addresses the additional regulatory components for compliance with federal requirements under the Clean Air Act (see Section 3.3.1), Endangered Species Act (Section 3.3.2), Executive Order No. 12898 – Environmental Justice (see Section 3.3.3), and National Historic Preservation Act (see Section 3.3.4).

## 1.3 Purpose of This Supplemental EIR

The operational characteristics of the ASR Program as described in the 2012 ASR Program Final EIR—the total number of wells used, injection and extraction volumes, treatment facilities, and conveyance facilities needed for Project implementation—are not substantively changed for the modified Project, with the exception of a change in location for four of the ASR wells. This Draft SEIR provides information about and an impact analysis for the elements of the modified Project,

which include implementing a modified ASR Program and constructing and operating associated facilities. This Draft SEIR does all of the following:

- Addresses the potential new or potentially more severe environmental impacts of implementing the proposed modified ASR Program and constructing and operating ASR wells and associated facilities (ASR wells).
- Recommends mitigation measures to avoid or minimize any new or substantially more severe environmental impacts, if applicable, to reduce them to less-than-significant levels.
- Updates the ASR Program impact analysis and mitigation measures where conditions have changed since certification of the 2012 ASR Final EIR.

### 1.3.1 Intended Uses of this Supplemental EIR

The City is the lead agency for complying with CEQA (Public Resources Code Section 21000 et seq., as amended) and the CEQA Guidelines (California Code of Regulations, Title 14). The City has prepared this Draft SEIR to provide the public and responsible and trustee agencies with information about the potential environmental effects of the modified Project. Chapter 2 presents a list of all permits and approvals required for the modified Project.

As described in CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses potential environmental effects of a proposed project, and identifies mitigation measures and alternatives to the proposed project that would reduce or avoid adverse environmental impacts. CEQA requires state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority.

As lead agency, the City will consider certifying the Final SEIR for the modified Project in accordance with CEQA requirements. If the City certifies the Final SEIR, the State Water Board will rely on the Final SEIR for CEQA compliance when it considers approving the City's waste discharge permit for the ASR Program (see Chapter 2) and grants or loans disturbed through the SRF loan program (described above).

## 1.4 Environmental Review and Approval Process

Preparation of an SEIR involves multiple steps during which the public is provided the opportunity to review and comment on the content of the SEIR, the scope of the analyses, results and conclusions presented, and the overall adequacy of the document to meet the substantive requirements of CEQA and provide full disclosure of the potential environmental consequences of implementing the modified Project and alternatives. The following discussion describes the major steps in the environmental review process that are applicable to this Draft SEIR.

### 1.4.1 Notice of Preparation

In accordance with CEQA Guidelines Sections 15063 and 15082, the City originally prepared and published a Notice of Preparation (NOP) of an EIR on July 1, 2009 (see Appendix A of the 2012 ASR Program Draft EIR). The NOP was circulated to the public and to federal, state, and local

agencies and other interested parties to solicit comments on the proposed Project. The public comment period for the NOP closed on August 3, 2009. In addition to the 45-day public and agency comment period, public scoping meetings were held on July 15 and July 29, 2009, at the City of Roseville Corporation Yard and Timber Creek Lodge, respectively.

Concerns raised in response to the NOP and oral comments received at the scoping meetings were considered during preparation of the 2012 ASR Program Draft EIR and this Draft SEIR. The scoping comments were included in Appendix B of the 2012 ASR Program Draft EIR. Preparation of this Draft SEIR does not require the release of another NOP.

## 1.4.2 Draft Supplemental EIR

This Draft SEIR is available to federal, state, and local agencies and interested organizations and individuals who may want to review and comment on the analysis in this document. Publication of the Draft SEIR marks the beginning of a 45-day public review period. The 45-day public review period for the Project extends from August 7, 2020, through September 22, 2020, ending at 5 p.m. During the public comment period, written comments should be delivered to:

Terri Shirhall, Environmental Coordinator  
City of Roseville Development Services Department  
311 Vernon Street  
Roseville, CA 95678  
916.774.5536  
tshirhall@roseville.ca.us

The Draft SEIR is available for public review at the following location:

City of Roseville Permit Center  
311 Vernon Street  
Roseville, CA 95678

Due to COVID-19 concerns, the Permit Center is currently only open Tuesdays and Thursdays and the hours for in person document review may be limited. Therefore the public is encouraged to check the City's web site first to ensure in office accommodations are available:  
<https://www.roseville.ca.us>.

Alternatively, the Draft SEIR can also be viewed or downloaded from the City's website via the following link: [www.roseville.ca.us/groundwater](http://www.roseville.ca.us/groundwater).

A public workshop will be held on August 25, 2020. The time and venue of the meeting are still to be determined, but will made be available at [www.roseville.ca.us/groundwater](http://www.roseville.ca.us/groundwater).

## 1.4.3 Final Supplemental EIR

After this Draft SEIR has been circulated and the public comments and responses to comments have been incorporated, the City will publish a Final SEIR, which will be submitted to the City Council for formal review and consideration. The Final SEIR will also be made available to the

public for review. The City Council will review the modified Project and its anticipated or potential environmental impacts, as identified in the SEIR, and will decide whether or not to certify the Final SEIR and approve the modified Project.

If the City Council decides to certify the SEIR, the City may proceed with the modified Project. CEQA requires that the lead agency neither approve nor implement a project unless the project's significant environmental effects have been reduced to less-than-significant levels, essentially "eliminating, avoiding, or substantially lessening" the expected impacts, unless specific findings are made. If the lead agency approves the project despite residual significant adverse impacts that cannot be mitigated to less-than-significant levels, the agency must state the reasons for its action in writing. This "Statement of Overriding Considerations" must be included in the record of project approval.

### 1.4.4 Mitigation Monitoring and Reporting Program

CEQA Section 21081.6(a) requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." All mitigation measures identified in the Final SEIR for the modified Project, including the applicable mitigation measures from the 2012 ASR EIR, will be included in a mitigation monitoring and reporting program, which will identify all compliance measures and responsible parties.

## 1.5 Scope of This Supplemental EIR

### 1.5.1 Level of Review

As discussed in greater detail in Chapter 2, *Project Description*, of this SEIR, the proposed construction and operational aspects of the modified ASR Program are largely the same as those described for the original Project in the 2012 ASR Program Final EIR. Six of the eight ASR well sites<sup>1</sup> proposed for construction as part of the modified Project are at different locations than described in the 2012 ASR Program Final EIR.

The 2012 ASR EIR was published before the amended CEQA Guidelines became effective on December 28, 2018. As noted in CEQA Guidelines Section 15007, the 2018 amendments to the CEQA Guidelines are prospective only and "...if a document meets the content requirements in effect when the document is sent out for public review, the document shall not need to be revised to conform to any new content requirements in Guideline amendments taking effect before the document is finally approved." The 2012 ASR Final EIR met the CEQA content requirements as of 2012; therefore, this SEIR only addresses changes to the 2012 ASR Final EIR and does not update the 2012 ASR Final EIR to reflect the 2018 version of the CEQA Guidelines.

<sup>1</sup> The proposed location for ASR Well Site No. 11–Pleasant Grove has been moved only slightly from the location proposed in the 2012 ASR Final EIR; it is effectively in the same location as analyzed previously. The other proposed ASR well, No. 13–Campus Oaks, was formerly known as the Hewlett Packard well. CEQA documentation for that well has already been completed.

CEQA allows the use of uniformly applied development policies or standards as mitigation for the environmental effects of future projects when those standards have been previously adopted by the City with findings, based on substantial evidence, that the policies or standards will substantially mitigate environmental effects (CEQA Guidelines Section 15183(f)). Consistent with CEQA Guidelines Section 15183(f), the 2012 ASR Final EIR relied on the following ordinances, standards, and resolutions that are uniformly applied to development projects throughout Roseville:

- City of Roseville General Plan (General Plan)
- Zoning Ordinance
- Noise Ordinance
- Flood Damage Prevention Ordinance
- Construction Standards
- Improvement Standards
- Tree Ordinance
- Community and Specific Plan Design Guidelines
- Resolution 03-169 (mitigation to reduce certain impacts)
- Resolution 07-137 (the City's Design and Construction Standards)

These ordinances, design guidelines, and resolutions still apply to the modified Project.

The 2012 ASR Final EIR incorporated the following documents by reference:

- City of Roseville General Plan 2025 (as amended in 2010)
- West Roseville Specific Plan, February 2004 (SCH No. 2002082057)
- North Roseville Specific Plan, July 1997 (SCH No. 96112014)
- Hewlett-Packard Master Plan Draft EIR, February 1996 (SCH No. 95112002)
- Del Webb Specific Plan EIR, February 1993 (SCH No. 93042005)
- City of Roseville Diamond Creek Well Project, Initial Study/Mitigated Negative Declaration, February 2002
- City of Roseville Aquifer Storage and Recovery Demonstration Test Phase 2, Initial Study/Negative Declaration, June 2005
- Sierra Vista Specific Plan EIR, May 2010 (SCH No. 2008032115)

Since the release of the 2012 ASR Final EIR, the City has updated the General Plan horizon year from 2025 to 2035. However, the change to the General Plan horizon year does not change the analysis contained in the 2012 ASR Final EIR. All other documents incorporated by reference in the 2012 ASR Final EIR are still applicable to the modified Project.

## 1.5.2 Summary of Issues Not Addressed Further

According to CEQA Guidelines Section 15163, this Draft SEIR needs to contain only the information needed to analyze the modified Project, including changed circumstances and new information requiring additional environmental review. Where existing information and analysis in the 2012 ASR Program Final EIR are sufficient to evaluate the impacts of the modified Project, no additional environmental review is warranted. Section 3.2, *Environmental Issues and Alternatives Not Requiring Further Analysis*, summarizes environmental issues for which potential impacts of the modified Project are adequately addressed in the certified 2012 ASR Program Final EIR and no further analysis is required. The 2012 ASR Program Final EIR included an initial study, which described existing conditions and analyzed impacts for a variety of resource areas.

The modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts on most of the resource areas, including: aesthetics; agricultural resources; air quality, including greenhouse gas emissions and global climate change; geology and soils; hazards and hazardous materials; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation and traffic; and utilities and service systems.

A discussion on how potential impacts from the modified Project are addressed in the 2012 ASR Program Final EIR is provided in Chapter 3. In addition, the alternatives analysis, cumulative impacts assessment, and other CEQA issues, as described in the 2012 ASR Program Final EIR, are still adequate for the modified Project as described in Chapter 3.

## 1.5.3 List of Issues Considered for Additional Impact Analysis

In light of the environmental issues not addressed further, the following CEQA resource areas are considered in greater detail in a revised impact analysis in this Draft SEIR:

- Hydrology and Water Quality (see Section 3.5)
- Biological Resources (see Section 3.6)
- Cultural Resources (see Section 3.7)

## 1.6 Assembly Bill 52

On March 10, 2020, Assembly Bill (AB) 52 Tribal Consultation Notices were sent to the following: United Auburn Indian Community, Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, and Tsi Akim Maidu. No response was received 30 days after certified receipt of notices.

On May 7, 2020, AB 52 Tribal Consultation Notices were again sent to the same contacts, referencing a modification to the proposed well sites identified in the previous notice. No

response has been received 30 days following certified receipt of the notices. Due to the public noticing period required by Executive Order N-54-20 signed by Governor Newsom, which states the lead agency must begin the consultation process for a period of 60 days, effective April 22, 2020. Therefore, the City allowed an additional 30 days for comments, ending on July 7, 2020. As of the date of the publication of this Draft SEIR, no response has been received.

## 1.7 EIR Organization

This Draft SEIR is organized as follows:

- **Executive Summary.** This chapter presents a summary of the modified Project description, a description of issues to be resolved, the significant environmental impacts that would result from implementation of the modified Project, and mitigation measures proposed to reduce or eliminate those impacts.
- **Chapter 1, *Introduction*.** Chapter 1 includes Project background information and describes the intended uses of this SEIR, the environmental review and approval process, and document organization.
- **Chapter 2, *Project Description*.** Chapter 2 presents an overview of the modified Project, outlines its objectives, and summarizes the components of the modified Project. The project description also describes subsequent development and approvals for which this Draft SEIR may be used.
- **Chapter 3, *Environmental Analysis*.** Chapter 3 This chapter presents a summary of the resource areas for which potential impacts of the modified Project are adequately addressed in the certified 2012 ASR Program Final EIR and no further analysis is required. Information is also provided regarding federal requirements for the State Revolving Fund (SRF) program for low-interest loans to public agencies. This chapter also provides information about the resource area topics requiring additional CEQA analysis beyond the analysis in the 2012 ASR Program Final EIR.
- **Chapter 4, *References*.** This chapter lists all references cited in the Draft SEIR.
- **Chapter 5, *SEIR Authors and Persons Consulted*.** Chapter 5 provides the names of the Draft SEIR authors and consultants, and agencies or individuals consulted during preparation of the Draft SEIR.
- **Appendices.** The appendices include materials that support the findings and conclusions presented in the text of the Draft SEIR.

## CHAPTER 2

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### Project Description

The City of Roseville (City) Aquifer Storage and Recovery (ASR) Program (referred to in this Draft Supplemental Environmental Impact Report [SEIR] as the “Project”) is an ongoing effort by the City to improve water supply reliability, maintain groundwater as a sustainable resource, improve operational flexibility, and meet the goals of the region’s conjunctive use program. As explained further in Section 2.2.6, *Conjunctive Use of Water Resources*, the term *conjunctive use* refers to the coordinated use of surface water and groundwater to increase the total water supply.

The ASR process consists of injecting treated surplus surface water through specially designed groundwater wells into underground aquifers during periods of normal and above-normal precipitation. The stored water is then available for later extraction (recovery) to meet demands for municipal use. The water source for ASR consists primarily of excess surface water supplies, such as flood flows, and surface water transferred from other entities.

The City’s ASR Program allows the City to maximize sustained use of the groundwater basin in conjunction with surface water supplies. Implementing ASR increases the City’s total water supply, enabling the City to use that supply to meet water demands during droughts or other emergencies. This supply can also be used to meet increasing water demands caused by challenges that may limit surface water supplies, such as climate change, emerging regulations for environmental needs, potential changes to Central Valley Project operations, and future Water Forum commitments. The ASR Program enables the City to bolster its existing water supply portfolio, making it more resilient to these challenges. ASR wells and the associated infrastructure constructed (collectively referred to in this Draft SEIR as “ASR wells”).

The City is working to expand ASR as a component of an overall water supply strategy to fully use available surface water and manage the groundwater aquifer for its cost-effective, large-scale storage capability, which is not readily available above ground in Roseville.

Implementation of ASR meets the conjunctive-use program goals of the City of Roseville General Plan (General Plan) and supports the conjunctive-use goals for the greater Sacramento region. In its uncoded findings for the Sustainable Groundwater Management Act of 2014 (SGMA), the California Legislature recognized groundwater recharge and conjunctive use as necessary components to achieve the statewide sustainable management of groundwater. The SGMA provides an opportunity for local agencies to avoid state intervention by managing groundwater at a local level. Agencies must manage groundwater basins to a sustainable yield over time by operating the groundwater system in balance with surface water supplies and

limiting the potential negative effects (referred to as “undesirable results”) of over-pumping groundwater aquifers. It is anticipated that the City’s ASR Program will be one of the projects and management actions identified in a SGMA groundwater sustainability plan that is due to be adopted no later than January 31, 2022.

Based on the City’s current water supply contract allocations, surface water supplies can meet the City’s projected total water demands at buildout. However, as stated above, the City uses a portfolio approach (a combination of groundwater and surface water supplies) to ensure that it can meet water demands both in above normal and below normal water years and during unplanned events and challenges. However, in normal and wet years, the City’s intent is to continue to meet water demands primarily using a combination of contracted surface water and recycled water.

Groundwater is another component of the City’s planned water supply portfolio. The City currently uses groundwater to varying extents, ranging from pumping for ongoing routine maintenance to pumping in below normal, dry, or critical years when surface water supplies are limited by drought.<sup>1</sup>

At full buildout of the ASR Program, the City would operate a network of up to 13 groundwater injection wells that could store approximately 10,000 acre-feet per year (AFY) of water. This SEIR updates the proposed locations identified in the 2012 ASR Program Draft and Final Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2009072018). That previous EIR, which was certified by the City on March 29, 2012, is referred to in this Draft SEIR as the “2012 ASR Program Final EIR.”

The locations of some previously planned ASR wells have changed based on knowledge gained regarding geology and groundwater conditions since publication of the 2012 ASR Program Final EIR. Also, the City has further evaluated demands on the water distribution system, finding less need for ASR wells on the west side of Roseville than originally proposed in the 2012 ASR Program Final EIR. The approximate volumes of surface water that the City anticipates can be stored based on the ASR infrastructure at buildout have not substantially changed relative to the volumes documented in the 2012 ASR Program Final EIR. **Table 2-1**, p. 2-15, presents a list of both existing and planned ASR wells and identifies which wells are addressed in the 2012 ASR Program Final EIR or this SEIR.

This chapter is organized as follows:

- Section 2.1, *Previous Approvals*, discusses the prior approvals for the ASR Program.
- Section 2.2, *Aquifer Storage and Recovery: Background and Context*, discusses the Project background and context for ASR, including the City’s water supply and demand, and applicable groundwater management goals, policies, and standards.

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<sup>1</sup> The City extracts a limited volume of groundwater from production wells into the distribution system every year as part of its pumping operation plan for well maintenance.

- Section 2.3, *Aquifer Storage and Recovery Program and Modified Project*, describes the proposed ASR Program and modifications to the ASR Program.
- Section 2.4, *Schedule for the Modified Project*, describes the modified Project's schedule.
- Section 2.5, *Required Permits and Approvals for the Modified Project*, discusses the permits and approvals needed for implementation of the modified Project.

## 2.1 Previous Approvals

On March 29, 2012, the Roseville City Council certified the Final EIR for the ASR Program (SCH No. 2009072018). The City also submitted a Report of Waste Discharge to the Central Valley Regional Water Quality Control Board (Regional Water Board) for the ASR Program on March 30, 2012. In a letter dated April 18, 2013, the Regional Water Board determined that the ASR Program was applicable to Water Quality Order No. 2012-0010 and assigned the Project a General Order (No. 2012-0010-DWQ-RB5S-0001) for implementation as an ASR Program.

## 2.2 Aquifer Storage and Recovery: Background and Context

### 2.2.1 Existing City Buildout: Water Supply and Demand

Over the past several decades, the City's water demand has increased commensurate with approved growth. The City's water demand has increased from 11,852 acre-feet (AF) in 1986 to 28,295 AF in 2018. At the same time, the following factors have also affected the City and the surrounding region:

- Extended drought and wet periods
- Increased regulations to dedicate surface water for environmental purposes
- New state laws and regulations such as the SGMA
- Ongoing and potential impacts on surface water and groundwater quantity

To address these challenges, consistent with General Plan policies, the City has proposed the ASR Program to meet Roseville's water supply reliability needs, and has added the proposed modifications analyzed in this SEIR.

The City's water demands are categorized as potable demand and recycled-water demand:

- *Potable demand* is the component of total water demand that will be used for public health-related activities such as drinking water and indoor use, and irrigation where recycled water is not available. Potable demand is met by surface water supplies, supplemented by groundwater supplies (as needed) when surface supplies are cut back during dry-year conditions (refer to *Operational Characteristics* in Section 2.3.3, *Project Components*).
- *Recycled water* is treated wastewater that can be used for outside irrigation in areas that have historically been irrigated with surface water.

Potable demand is calculated by subtracting estimated recycled-water demand from total water demand.

Citywide potable demand is estimated to reach 59,657 AFY at buildout within Roseville's existing boundaries. In normal and wet years, the City's primary source of water to serve the City's buildout potable water demand is the American River supply (surface water) from Folsom Reservoir. Roseville's surface water supply contracts total 66,000 AFY at buildout and include supply from the U.S. Bureau of Reclamation (32,000 AF), Placer County Water Agency (PCWA) (30,000 AF), and San Juan Water District (4,000 AF). An additional supply of 1,500 AF from PCWA is anticipated at buildout. This additional supply is available in all years in accordance with PCWA's purveyor-specific agreement in the Water Forum Agreement (WFA).

Pursuant to the City's purveyor-specific agreement in the WFA, the City may divert 58,900 AFY from the American River in normal and wet years and 39,800–54,900 AFY in drier years. The City's treatment plant can treat up to 100 million gallons per day, satisfying the summer-maximum daily demand at buildout. The City does not receive credit for any unused portion of this supply source. Rather, any amount not diverted for the City's municipal and industrial use remains in the Folsom Reservoir/American River system and complements other recreation and environmental needs.

During late 2019 and early 2020, additional surface water was made available through a U.S. Bureau of Reclamation–approved temporary transfer of Central Valley Project surface water supplies under a Sacramento Municipal Utility District water services contract. Water made available through this transfer was used solely for recharge through the ASR Program. Approximately 900 AF of surface water was recharged during December, January, and February through the use of the City's existing ASR production wells, treatment, and distribution facilities. Assuming that water is available in future years, the City has the opportunity to continue the transfer up to 6,000 AFY of water per year for another two years. This type of transfer may be replicated between other entities in the future, allowing the City to maximize its use of ASR infrastructure and improve water supply reliability benefits to Roseville and the region.

### 2.2.2 Potential American River Supply Cutbacks

As indicated above, during normal and wet years, the City can access 58,900 AFY<sup>2</sup> of its American River supply plus 1,500 AF of planned PCWA supply, which is sufficient to meet the buildout potable water demand of 59,657 AFY.<sup>3</sup> However, in accordance with the City's purveyor-specific agreement in the WFA, the City has agreed to reduce this supply source based on unimpaired inflow volumes into Folsom Reservoir in any given year. *Unimpaired inflow* is defined as the amount of water projected to enter Folsom Reservoir between March and

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<sup>2</sup> An additional water supply of 1,500 AF is planned with the proposed acquisition of 1,500 AFY of new surface water supplies obtained from PCWA in accordance with the General Plan (Mitigation Measure 4.12.1-1). This additional supply would be available in all year types.

<sup>3</sup> Amoruso Ranch Specific Plan Final EIR, May 2016.

November. The WFA categorized water years into three types: (1) normal or wet years, (2) drier years, and (3) driest (critically dry) years. These hydrologic types are defined as follows:

- *Normal or Wet Years:* When the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.
- *Drier Years:* When the projected March through November unimpaired inflow to Folsom Reservoir is between 950,000 AF and 400,000 AF.
- *Driest Years:* When the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.

Future water supply cutbacks have been estimated based on a review of 100 years of historic American River hydrologic records. According to these records, there were 2 critically dry (driest) years and 13 drier years (out of 100) when City demands would have needed to be adjusted downward to conform to available surface water supplies.

In critically dry years, the City could face American River supply cutbacks of up to 19,100 AFY, the difference between the supply for normal or wet years (58,900 AF) and the single dry-year supply allocation (39,800 AF). Increased conservation measures and supplemental supplies including groundwater or other supplies would be used to make up this deficit. Under the driest year scenario, the City's American River supplies could be reduced to no less than 39,800 AFY, which is insufficient to meet the buildout potable demand of 59,657 AFY. (For full WFA commitments, refer to the water purveyor-specific agreement in Appendix A.)

### 2.2.3 Groundwater Demand at Buildout during Normal and Wet Years

As described previously, the City's normal potable water demand at buildout, including the specific plans under review, is estimated at 59,657 AFY. When compared to available surface water supplies of 58,900 AFY plus 1,500 AF of planned PCWA supply, the City has sufficient supplies to meet the demand. Groundwater is not required to meet the City's water demand in normal or wet years.

### 2.2.4 Groundwater Demand at Buildout during Drier Years

In drier years, the City's surface water supply could be reduced to a point between 39,800 and 54,900 AFY, depending on the unimpaired flow into Folsom Reservoir. The City would make up the difference between this reduced supply and the normal/wet year supply of 58,900 AFY (4,000–19,100 AFY) by implementing conservation measures identified in the Municipal Code and supplementing available surface water supplies with groundwater. The amount of supplemental groundwater required would depend on the level of demand reduction achieved by conservation efforts.

The City is allowed to implement water conservation strategies during drought periods that, for planning purposes, are estimated to reduce water demands up to 50 percent. However, the City assumes that water conservation efforts would reduce demand by only 20 percent. A 20 percent

reduction of surface water demand would be 11,780 AFY. Depending on the amount of surface water available in a drier or driest year, and applying a 20 percent conservation rate, the amount of groundwater needed can be determined. Groundwater use would range from 0 to 7,320 AFY and would be needed to meet the potable buildout water demand of 58,900 AFY.

### 2.2.5 Groundwater Demand at Buildout during Critically Dry Years

During a critically dry year, the City's American River supply source would likely be reduced by the maximum of 19,100 AFY, resulting in an available supply of only 39,800 AFY. Under this scenario, and assuming that a 20 percent demand reduction can be achieved through conservation, the City would likely need supplemental groundwater supplies totaling 7,320 AFY to meet the net City buildout demand of 58,900 AFY (39,800 AFY American River supply + 11,780 AFY conservation + 7,320 AFY groundwater = 58,900 AFY potable water demand at buildout).

### 2.2.6 Conjunctive Use of Water Resources

The term *conjunctive use*, when referring to water resources, denotes coordinated use of surface water and groundwater to increase the total water supply. Because rivers and aquifers can be two interrelated sources of water in one area, it makes sense to manage them jointly. In fact, joint use of surface and groundwater can lead to a cost-effective, environmentally friendly water management strategy. For example, when surface water is scarce, groundwater can be used (subject to availability) to meet demand, and when surface water is in excess, groundwater can be recharged. The main advantage of conjunctive use is an overall increase in reliability and benefits with a reduction in adverse effects caused by unsustainable use of either resource (surface water or groundwater).

### 2.2.7 Applicable Plans and Policies

As outlined in the following plans and policies, conjunctive use is a recommended water supply management tool for water purveyors within the American River watershed and the North American Subbasin, which is the groundwater subbasin underlying Roseville. Regional goals for conjunctive use are framed by the following plans and policies that support the ASR Program and suggest that the City should pursue conjunctive use as part of its overall water supply strategy.

#### **State Water Resources Control Board and Central Valley Regional Water Board**

State-level regulatory oversight of water treatment and distribution of potable water is the jurisdiction of the State Water Resources Control Board (State Water Board) Division of Drinking Water (DDW) (formerly the California Department of Public Health). Because the City is a public water system, the City's Environmental Utilities Department is required to test groundwater and surface water quality in accordance with DDW drinking water standards, and for compliance with the beneficial uses of the groundwater basin. Title 22, Division 4 (Environmental Health) of the California Code of Regulations sets water quality standards and

treatment reliability criteria for potable use and provides the monitoring and testing requirements. These water quality data are automatically uploaded to the State Water Board's public website database and are summarized by the City's Environmental Utilities Department in annual water quality reports found on the City's website.

In addition, the City was required to obtain a permit from the Central Valley Regional Water Board to operate its ASR Project. On September 19, 2012, the Regional Water Board adopted General Order 2012-0010, which established general waste discharge requirements for ASR projects that inject drinking water into groundwater. On April 18, 2013, the City was granted a notice of applicability under General Order 2012-0010-DWQ-RB5S-0001, which allows the injection and extraction of water for the City's ASR Program. As part of the general order, the Central Valley Regional Water Board provided Monitoring and Reporting Program (MRP) R5-2013-0803 requirements that describe the specific water quality plan (i.e., in addition to DDW requirements) to which the City must adhere when operating the ASR Program. Data and information collected and analyzed in accordance with the Monitoring and Reporting Program are reported to the Central Valley Regional Water Board.

## Water Forum Agreement

The WFA was created in 1994 by a diverse group of community stakeholders to formulate the elements of a solution for meeting future regional water supply needs. Water Forum stakeholders have two equal objectives:

- Provide a safe and reliable water supply for the region's health and planned development to the year 2030.
- Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

The WFA allows the region to meet its needs in a balanced way by implementing seven elements:

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts on the Lower American River in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management, which also addresses recreation in the Lower American River
- Water conservation
- Groundwater management
- Water Forum successor effort

Purveyor-specific agreements were developed that describe in detail how the respective purveyors will implement each WFA element. Purveyors include the City, PCWA, San Juan Water District, and other regional water agencies. The agreements are compiled into a memorandum of understanding that each stakeholder's authorizing body has executed. In return

for signing the final WFA, water purveyors receive regional support for water supply projects, including site-specific infrastructure projects. A copy of the City's purveyor-specific agreement is included in Appendix A.

The City's purveyor-specific agreement memorializes the City's agreed-upon dry-year reduced surface water diversions and the City's commitment to the overall WFA process and successor efforts, including a commitment to exploring opportunities for conjunctive use.

An outgrowth of the WFA was the Regional Water Master Plan. The master plan calls for developing equitable, cost-effective water resources management strategies for enhancing water supply reliability, and operational flexibility for water users of Folsom Reservoir, the Lower American River, and the connected groundwater basins.

## **Regional Water Authority**

The Regional Water Authority (RWA) is a joint powers authority formed as a policy forum to discuss and address regional water issues. One of the principal missions of the RWA is to help implement conjunctive use programs prescribed by the WFA and the Regional Water Master Plan. The RWA has 19 members (including each of the cooperating agencies). Each member is a signatory to the WFA.

## **Sacramento Groundwater Authority**

The Sacramento Groundwater Authority (SGA) is a joint powers authority formed in 1998 to manage the groundwater basin in Sacramento County north of the American River. Known locally as the North Area Groundwater Basin, the basin encompasses the southern one-third of the North American Subbasin (Basin 5-21.64) as defined by the California Department of Water Resources (DWR). SGA is recognized as an essential part of implementing the groundwater management element of the WFA. In January 2016, SGA became the exclusive groundwater sustainability agency (GSA) in conformance with the SGMA for its portion of the North American Subbasin.

## **Western Placer County Groundwater Sustainability Agency**

The City is a signatory to the West Placer County Groundwater Sustainability Agency, which is one of five GSAs in the North American Subbasin. The five GSAs (West Placer, Sacramento, South Sutter, Sutter County, and Reclamation District 1001) have agreed to work together and prepare one groundwater sustainability plan (GSP) for the entire North American Subbasin.

## **Western Placer County Groundwater Management Plan**

In August 2007, the Cities of Roseville and Lincoln along with PCWA and the California American Water Company completed the Western Placer County Groundwater Management Plan. The plan was prepared in an effort to maintain a safe, sustainable, and high-quality groundwater resource to meet backup, emergency, and peak demands within a zone of the North American Subbasin (Montgomery Watson Harza 2007).

## Sustainable Groundwater Management Act

In 2014, the California Legislature enacted a three-bill law (Assembly Bill 1739 and Senate Bills 1168 and 1319) known as the SGMA. This law was enacted to provide a framework for the sustainable management of groundwater, and to strengthen local control and management of groundwater basins throughout the state with little state intervention. The SGMA empowers local agencies to adopt sustainability plans tailored to their communities' resources and needs, such that sustainable groundwater management will provide a buffer against drought and climate change, and ensure that water supplies are reliable regardless of weather patterns.

The SGMA and corresponding regulations require that high- and medium-priority groundwater basins be operated to a sustainable yield. Basin operations must balance natural and artificial groundwater recharge with groundwater use to prevent undesirable results, such as chronic lowering of groundwater levels, loss of storage, water quality impacts, land subsidence, and impacts on hydraulically connected streams. The SGMA is considered part of the statewide, comprehensive California Water Action Plan, which includes water conservation, water recycling, expanded water storage, safe drinking water, and wetlands and watershed restoration. The SGMA protects existing surface water and groundwater rights and does not affect current drought response measures.

California's 515 groundwater basins are classified into one of four categories—high, medium, low, or very low priority—based on components identified in Section 19033(b) of the California Water Code. Basin priority determines which provisions of the California Statewide Groundwater Elevation Monitoring Program and how SGMA applies in each basin. In 2019, DWR completed the first phase of responses to comments and final re-prioritization of groundwater basins in Phase I, along with draft prioritizations of groundwater basins included in Phase II.

Where applicable, the SGMA required that local agencies interested in managing groundwater signal their intent by forming as Groundwater Sustainability Agencies (GSA) by June 30, 2017. Agencies located within high- or medium-priority basins were or are required to adopt GSPs by January 31, 2020, or January 31, 2022<sup>4</sup>, respectively. A GSP must define the basin's sustainable yield, identify what conditions would constitute undesirable results in the basin, and specify the projects and actions including monitoring to be implemented to ensure that the basin is managed to avoid undesirable results. DWR will evaluate the GSP and provide the GSA with an assessment of the plan and any necessary recommendations every five years after its establishment. Annual reports including monitoring data and information must be submitted to DWR.

The time frame for GSP adoption by basins determined by DWR to be in a condition of "critical overdraft" was by January 31, 2020; all other high- and medium-priority basins have until January 31, 2022, unless covered by an Alternate Plan to a GSP. Local agencies as GSAs will have 20 years to fully implement GSPs after the plans have been adopted. The State Water Board

<sup>4</sup> Unless the local agency has submitted an alternative, as defined in the SGMA, that has been approved by DWR.

will intervene if the local agencies have not formed a GSA and/or if a GSP has not been adopted or implemented.

The North American Subbasin is not critically overdrafted; however, in 2019, DWR designated the subbasin as high priority. Therefore, the GSP for the North American Subbasin must be developed and implementation begun by January 31, 2022. As of 2019, preparation of the North American Subbasin GSP was in progress.

### **City of Roseville Urban Water Management Plan**

The City adopted its most recent urban water management plan in May 2016 (City of Roseville 2016). The plan was prepared to comply with the Urban Water Management Planning Act (California Water Code, Sections 10610–10656). Urban water management plans must be developed by urban water providers that supply more than 3,000 customers or more than 3,000 AF of water annually, and must be submitted to DWR every five years. The plans describe the availability of water; discuss water use, recycled-water use, and water conservation; and provide a framework for long-term water supply planning.

### **City of Roseville Water Conservation Ordinance**

In 1991, the City adopted the Roseville Water Conservation and Drought Mitigation Ordinance (Roseville Municipal Code, Chapter 14.09.090). The ordinance authorizes the City to declare water shortage conditions and implement drought-related water conservation mitigation measures consistent with surface water cutbacks outlined in the City’s WFA purveyor-specific agreement.

### **City of Roseville Landscape Ordinance**

The City’s Water Efficient Landscape Ordinance was adopted to comply with state law. The ordinance includes landscape design and irrigation requirements to minimize water demands for irrigation (Roseville Municipal Code, Chapter 19.67).

### **City of Roseville General Plan**

The following City of Roseville General Plan goals, policies, and implementation measures relate to the City’s ASR Program:

#### ***Public Facilities Element—Water Systems***

**Goal 1:** Maintain a water system that adequately serves the existing community and planned growth levels, ensuring the ability to meet projected water demand and to provide needed improvements, repairs and replacements in a timely manner.

**Goal 3:** Ensure that safe drinking water standards are met and maintained in accordance with State Department of Health Services and EPA [U.S. Environmental Protection Agency] regulations.

- **Policy 7:** Provide emergency back-up system to add sufficient reliability to the system as determined by the Environmental Utilities Department.

- **Policy 9:** Monitor water quality regularly and take necessary measures to prevent contamination.
- **Policy 11:** Develop and implement an aquifer storage and recovery program.
  - **Implementation Measure 2 Water System Master Plans:** The City will update the GMP [groundwater management plan] as needed to further the City's desire to increase water supply reliability through aquifer storage and recovery. This management plan would identify groundwater basin management objectives and monitoring protocols in accordance with State Requirements.
  - **Implementation Measure 9 Capital Improvement Plan:** Plan for expansion of the City's water treatment and delivery system in its five-year Capital Improvement Plan (CIP). The Plan shall establish priorities for improvements to the water supply system, including expansion of the water treatment plant, construction of larger pipelines, storage facilities, water production and groundwater wells, and improvements to the back-up system. The five-year Plan shall specify estimated costs and phasing of improvements so that they are funded appropriately and provided in a timely manner (implements Policies 7 and 11).

The ASR Program is consistent with the above Public Facilities Element goals, policies, and implementation measures, particularly Policy 7, which calls for an emergency backup system for water supply reliability; Policy 11, which calls for development and implementation of an aquifer storage and recovery program; and Implementation Measures 2 and 9, which call for updating the groundwater management plan to include ASR and for construction of larger storage facilities and more groundwater wells.

### ***Open Space and Conservation Element—Groundwater Recharge and Water Quality***

**Goal 2:** Enhance the quantity and quality of groundwater resources.

- **Policy 4:** Continue to monitor and participate in, as appropriate, regional activities affecting water resources, groundwater and water quality.
- **Policy 5:** Continue to monitor groundwater resources and investigate strategies for enhanced sustainable use. Areas where recharge potential is determined to be high shall be considered for designation as open space.
  - **Implementation Measure 12 Aquifer Storage and Recovery:** Through the Environmental Utilities Department, investigate the potential for development and implementation of an Aquifer Storage and Recovery (ASR) program. A successful ASR Program would allow the City to maximize sustained use of the groundwater basin in conjunction with surface water supplies, while providing a strong backup water supply during critically dry years consistent with the City's commitments contained in the Water Forum Agreement.

The ASR Program, and well locations, are consistent with the above Open Space and Conservation Element goals, policies, and implementation measures, particularly Goal 2, which calls for enhancing the quantity and quality of groundwater resources; Policy 5, which calls for strategies that enhance the sustainable use of groundwater; and Implementation Measure 12, which calls for development of an ASR program.

### 2.2.8 History of Aquifer Storage and Recovery in Roseville

Since 2002, the City has been actively implementing and exploring the potential for a citywide ASR Program to improve water supply reliability, maintain groundwater as a sustainable resource, improve operational flexibility, and meet regional conjunctive-use program goals.

In 2003, the City conducted a pilot project to test ASR at the well site located at Leonard Duke Davis Park, in northwest Roseville. After completion of the testing in summer 2004, City staff worked cooperatively with other Sacramento area water purveyors to assemble information that would assist the Central Valley Regional Water Board as it developed a regulatory framework specifically designed for ASR projects.

In August 2005, the Central Valley Regional Water Board approved a waiver for a two-year program based on the proposed regulatory framework.

In 2006, the City injected more than 250 million gallons (767 AF) of treated drinking water into the aquifer located under the area in and around Leonard Duke Davis Park. Beginning on July 17, 2007, this water was extracted from the aquifer and delivered to customers in the distribution system surrounding the well. This continued through February 2008, when the required volume of water was extracted and pumping ceased. Approximately 697 million gallons (2,140 AF) of water was extracted during this phase.

In 2012, the City's ASR Program conducted a demonstration-level project in partnership with DWR and the Central Valley Regional Water Board.

Also in 2012, the City certified the 2012 ASR Program Final EIR. The EIR analyzed the use of the City's existing surface water supplies conveyed from Folsom Reservoir and treated at the City's existing Barton Road Water Treatment Plant in Granite Bay, and 13 ASR injection and/or extraction wells and associated infrastructure. Additional information comparing the 2012 ASR Program Final EIR and the modified Project is provided below.

## 2.3 Aquifer Storage and Recovery Program and Modified Project

This section describes the ASR Program (as described in the 2012 ASR Program Final EIR) and the currently proposed modifications.

### 2.3.1 Aquifer Storage and Recovery Program Boundaries

The boundaries of the ASR Program lie within the Roseville city limits. The City has land use authority to ensure that there are no other ASR wells or other municipal wells within the city limits. For water that travels beyond the city limits, the City will continue to coordinate with the appropriate regulatory agencies regarding water quality issues that may affect other groundwater users. The boundaries of the modified Project are the same as the boundaries of the original Project described in the 2012 ASR Program Final EIR.

### 2.3.2 Aquifer Storage and Recovery Program Purpose and Objectives

As described in the 2012 ASR Program Final EIR, the purpose of the ASR Program is to address the above challenges while improving groundwater supply and reliability consistent with adopted regional and City groundwater management plans. The modified Project's goals and objectives are the same as those described for the original Project in the 2012 ASR Program Final EIR and are as follows:

- Maximize the City's ability to fully utilize its surface water entitlements while improving the City's overall water supply reliability, operational flexibility, and use of existing City infrastructure.
- Manage the groundwater aquifer for its storage capabilities, particularly in light of regulatory restrictions associated with surface storage, and as a sustainable resource to ensure groundwater availability during drought years.
- Develop a cost-effective means for water supply storage.
- Meet regional conjunctive use program goals as outlined in the City's General Plan consistent with opportunities to create a regional groundwater bank in the greater Sacramento area
- Maintain City of Roseville requirements identified in the Water Forum Purveyor Specific Agreement.
- Enable the City to meet prior Western Placer County Groundwater Management Plan requirements and future Groundwater Sustainability Plan requirements consistent with the Sustainable Groundwater Management Act.
- Ensure no net impact to aquifer from potential use during dry and drier years.
- Coordinate ASR permitting approval from Regional Water Quality Control Board.

### 2.3.3 Project Components

The following Project components are required for operation of the ASR Program. The components listed below are the same for the modified Project as for the original Project analyzed in the 2012 ASR Program Final EIR.

#### **Aquifer Storage and Recovery Wells**

As described in the 2012 ASR Program Final EIR, the ASR wells would be designed and constructed with ASR capabilities to both inject and extract water. The constructed ASR well sites would average between 0.5 and 1 acres, with each pump station building itself being approximately 50 feet wide by 100 feet long. The well casing located within the pump station building will extend to approximately below ground surface of 500 feet. ASR well sites typically include "top-side" or aboveground infrastructure that includes a small structure housing (also referred to as the pump station) and securing the aboveground ASR well equipment and supporting infrastructure such as pumps, electrical, and disinfection equipment. These top-side municipal wells also include underground components, infrastructure that includes a well casing, filter pack, cement, a downhole control valve, the pump, and column pipe. Top-side improvements can be protected by perimeter

fencing to enclose and secure aboveground infrastructure. The type of top-side improvement generally depends on site-specific conditions and the potential need for noise mitigation (normally accomplished with a building). Top-side improvements include a building which is approximately 30 feet wide by 40 feet long by 16 feet high.

The top-side improvements would accommodate a chlorination facility to add chlorine and fluoride to the extracted groundwater before it enters the distribution system. Currently the City's practice is to add chlorine to extracted water using a sodium hypochlorite solution. Several methods are available for using sodium hypochlorite. One method allows for onsite generation while another method uses liquid stored in onsite storage vessels. Either method may be used under the ASR Program.

Using the onsite generation method, the chlorination facility generates sodium hypochlorite by using salt, electricity, and water. Because the concentration of the solution is sufficiently diluted, the generation equipment does not require special handling or containment. Adequate ventilation of the chlorination facility would expel and dilute the generated hydrogen gas during the formation of the sodium hypochlorite solution.

Alternatively, initial construction may include the use of a commercially available sodium hypochlorite solution until the decision is made to go into production. This would entail using chemical tanks and offloading capabilities to handle up to 500 gallons of up to 12 percent solution hypochlorite. During operations, this may require weekly chemical deliveries by truck. See Photo 1 for a picture of an existing ASR well site located at Davis Park off Northpark Drive and Big Bear Drive in Roseville.



*Photo 1: Picture of Existing ASR Well Site*

## **Aquifer Storage and Recovery Program Locations**

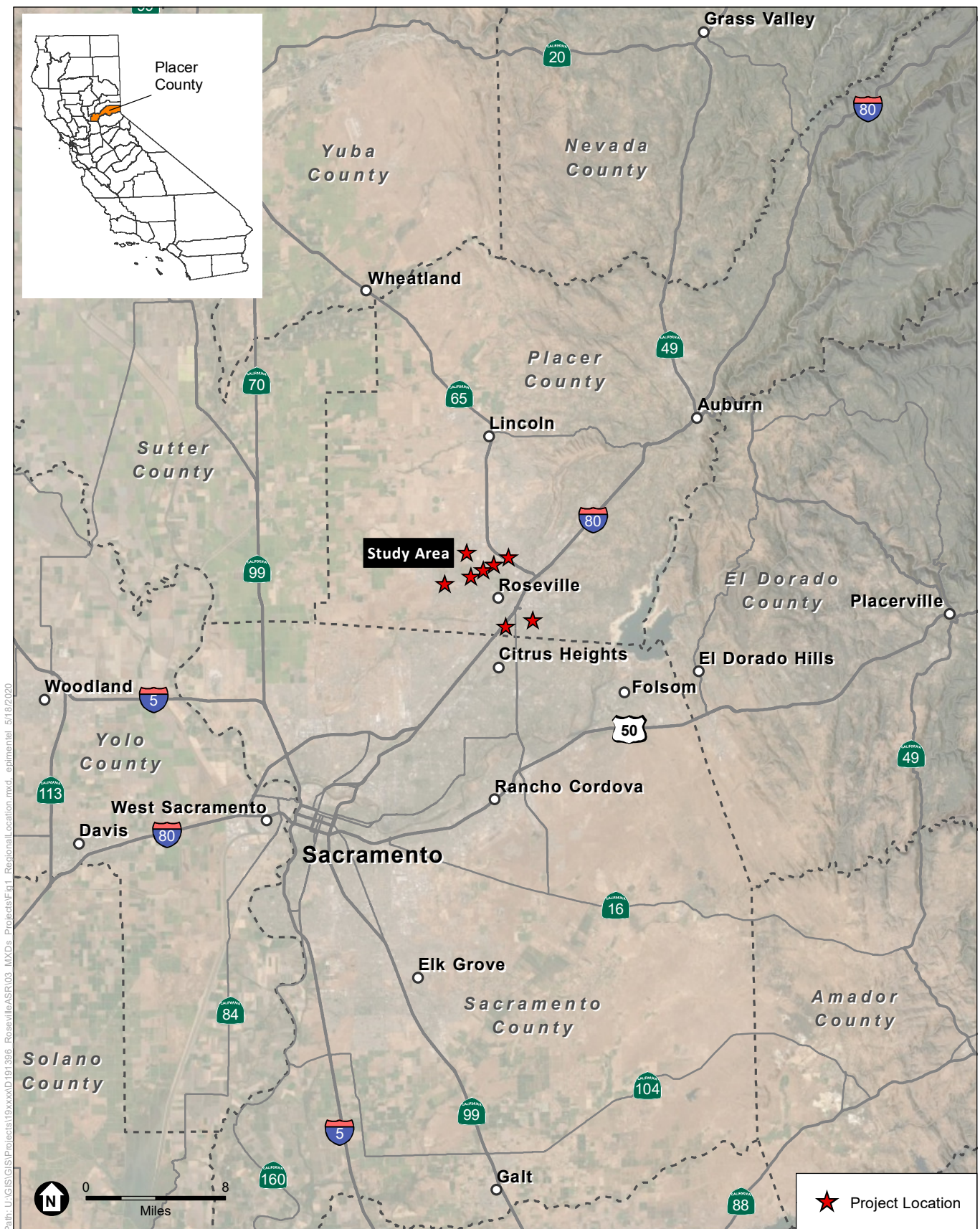
The 2012 ASR Program EIR addressed the environmental impacts of 13 proposed ASR wells. Since 2012, some of the ASR wells evaluated in the 2012 ASR Program Final EIR have been constructed. This SEIR addresses the proposed change in locations of the ASR wells and new ASR well sites. Refer to Table 2-1 for a summary of the wells addressed in the 2012 ASR Program Final EIR and the modified Project in this SEIR; the locations of the Project and well sites are shown on Figures 1 through 3h.

**TABLE 2-1**  
**WELLS COVERED IN THE 2012 AQUIFER STORAGE AND RECOVERY PROGRAM FINAL EIR AND THIS**  
**SUPPLEMENTAL EIR FOR THE MODIFIED PROJECT**

Well No.	Name	Covered in 2012 ASR Program Final EIR?	ASR Well Status	Addressed in SEIR?
4	Darling Way	Yes	Existing and inactive (Not an ASR well, production well only)	No
5	Oakmont	Yes	Existing and inactive (Not an ASR well, production well only)	No
6	Diamond Creek	Yes	Existing and active	No
7	Woodcreek North	Yes	Existing and active	No
8	Hayden Parkway	Yes	Existing and active	No
9	Westbrook (formally West Side Dr #1, W-77)	Yes	Existing and inactive (Production well casing and screen installed, no motor or pump station)	No
10	W-76	No	No longer planned	No
11	Pleasant Grove (formerly Well 11–Woodcreek West)	Yes	Proposed	<b>Yes</b> (was identified and covered in the 2012 EIR)
12	Blue Oaks (formally Del Webb)	Yes	Existing and active	No
13	Campus Oaks (formerly Well 13–Hewlett Packard)	Yes	Proposed	<b>Yes</b> (was identified and covered in the 2012 EIR)
14	Fiddymont Road	Yes	No longer planned	No
18	Solaire (formerly Sierra Vista Specific Plan #1)	Yes	Existing and inactive (Production well casing and screen installed, no motor or pump station)	No
TBD	Sierra Vista Specific Plan #2	Yes	No longer planned	No
TBD	Creekview	Yes	No longer planned	No
TBD	Marlin	No	Proposed	<b>Yes</b>
TBD	Misty Wood	No	Proposed	<b>Yes</b>
TBD	Maidu	No	Proposed	<b>Yes</b>
TBD	Galilee	No	Proposed	<b>Yes</b>
TBD	Vencil Brown (back-up site)	No	Proposed	<b>Yes</b> (if other proposed locations are deemed infeasible)
TBD	Central Park (back-up site)	No	Proposed	<b>Yes</b> (if other proposed locations are deemed infeasible)
Total wells (21)	N/A	13	8 wells proposed (2 of which were previously covered in the 2012 ASR Program Final EIR and 2 of which are back-up sites) 4 Existing and active 4 Existing and inactive 3 No Longer Planned	8 ASR wells discussed in SEIR

NOTES: ASR = aquifer storage and recovery; EIR = environmental impact report; N/A = not applicable; SEIR = supplemental environmental impact report; TBD = to be determined  
**Boldface** in the "Need Coverage in SEIR?" column indicates those ASR wells for which this SEIR identifies potential environmental impacts of the modified Project.

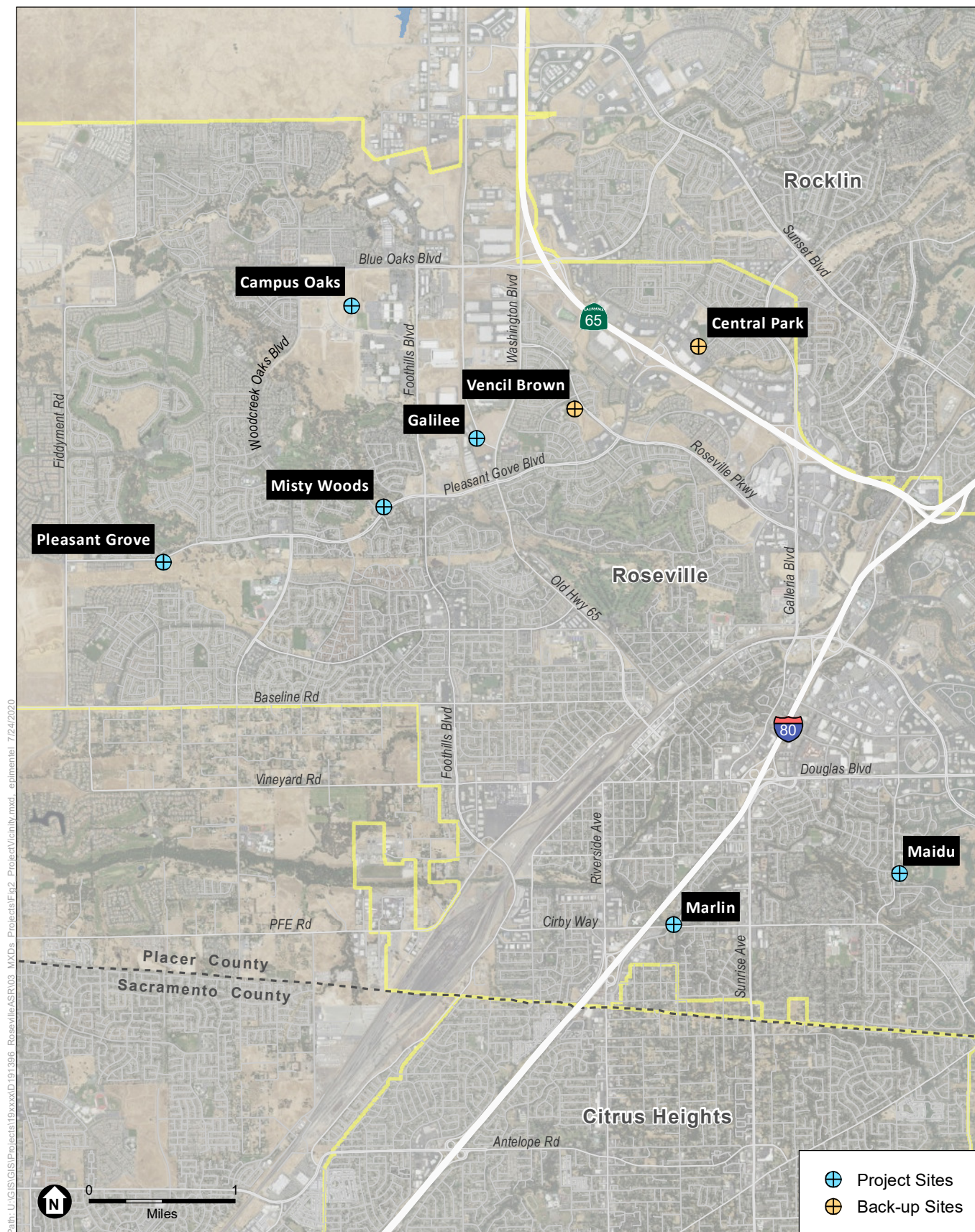
SOURCE: Data compiled by Environmental Science Associates in 2020



SOURCE: Esri, 2015; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 1**  
Regional Location



SOURCE: Esri, 2012; USDA, 2016; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 2**  
Project Vicinity



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3a**  
Project Site  
Campus Oaks



Path: U:\GIS\GIS\Projects\19xxxx\191396 Roseville ASR\03 MXDs Projects\Fig3b ProjectSite CentralPark.mxd, epimintel 2/20/2020

SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3b**  
Project Site  
Central Park



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3c**  
Project Site  
Galilee



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3d**  
Project Site  
Maidu



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3e**  
Project Site  
Marlin



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3f**  
Project Site  
Misty Woods



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3g**  
Project Site  
Pleasant Grove



SOURCE: DigitalGlobe, 2018; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 3h**  
Project Site  
Vencil Brown

## Water Supply Distribution System

As described in the 2012 ASR Program Final EIR, after construction of the ASR wells, groundwater would be extracted from the aquifer, pumped into the existing potable water supply distribution system, and delivered to customers. The change between surface water and groundwater supplies typically occurs without customer notice.

Water processed at the treatment plant and injected and extracted at ASR well sites would be metered for volume and monitored for water quality. Monitored components include biological, metals, organic and inorganic materials, and solvents. The frequency of water quality monitoring would vary depending on the chemical constituent tested; monitoring would range from constant daily ongoing analysis to monitoring conducted daily, weekly, quarterly, annually, and every three years, consistent with state DDW regulations. Monitoring would occur at the points of source water intake (i.e., Folsom Reservoir/Barton Road Water Treatment Plant and well sites) in the distribution system, and at customers' homes as needed.

The ASR Program would use the existing surface water source, Folsom Reservoir, for injection of water to the ASR wells. Raw water from Folsom Reservoir would be treated at the City's Barton Road Water Treatment Plant near Granite Bay, California. Using conventional water treatment methods including flocculation, sedimentation, filtration, and disinfection, treated water would flow through the City's existing water distribution grid to the sites of injection ASR wells. The water extracted from ASR wells would then be piped into the existing water distribution system.

## Operational Characteristics

As described for the original Project in the 2012 ASR Program Final EIR, the modified Project would involve injecting surface water, obtained from Folsom Reservoir under existing City water supply contracts, into the North American Subbasin aquifer (basin number 5-21.64 as defined in DWR Bulletin 118) for storage and subsequent extraction and use in the City's water service area. Raw water taken from Folsom Reservoir would be treated using available treatment capacity at the City's Barton Road Water Treatment Plant. The plant has the ability to treat up to 100 million gallons per day of water.

Most ASR well injections would occur during the winter and spring months, when water is typically plentiful in Folsom Reservoir and system water demands are lowest. Summer and fall ASR well injection would be more limited because of the higher seasonal customer demand in the summer months.

Typically, the geologic formation in which groundwater would be extracted for municipal drinking water yield is from the Mehrten formation. The storage zone for ASR Program operations would also mainly be in the Mehrten formation, which generally exceeds a depth of 300 feet below surface in the Project area. At that depth, water can be safely injected into the aquifer through the ASR wells without creating the potential to saturate surface soils or otherwise influence surface water levels.

During existing operations, groundwater extraction can become necessary when the City's surface water supplies are cut back in response to drought conditions. Under the City's ASR Program, as well as the modified Project, ASR well injection and extraction could also occur during normal water years to maximize conjunctive use and operational flexibility. For example, extraction from ASR wells could also occur during normal water years to meet other system operational goals, or to meet possible regulatory requirements that may be imposed on the ASR Program to "manage" or control the migration of injected water. Such requirements would be determined through the Regional Water Board's waste discharge permitting process.

Operational flexibility (the amount of water available at any given time) can be increased by timing required withdrawals to occur during peak demand periods, known as "shaving the peak." *Peak shaving* refers to supplementing surface water supplies temporarily with groundwater when treatment requirements are highest as a result of higher summer irrigation demands. These operational parameters, and projected quantities for ASR well injection and extraction, are described further below.

Concentrations of total dissolved solids (TDS) in treated surface water in the City's distribution system are approximately 50 milligrams per liter (mg/l). Concentrations in native groundwater within the target aquifer beneath Roseville (i.e., the upper Mehrten) often range between 250 and 400 mg/l. At greater depths, concentrations of TDS increase to more than 500 mg/l. The secondary (taste and odor) maximum contaminant level for TDS established by the State of California is 500 mg/l.

### ***Operational Parameters: Injection and Extraction Volumes***

The operational parameters for the ASR Program were developed based on projected water demands, a minimum 20 percent conservation factor, the quantity of water available for ASR well injection based on water year classification, and treatment plant capacity. A detailed analysis of the available water considered for ASR well injection is provided in a technical memorandum entitled "Development of an Excel-Based Solution for Generating Pumping Files for ASR Transport Scenarios" (Appendix B of the Antidegradation Analysis, Appendix E of the 2012 ASR Program Final EIR [City of Roseville 2012]). The study uses the same three water year types identified in the WFA: a wet or normal year, a drier water year, and a critical (driest) water year. The water year classifications are defined based on the amount of unimpaired inflow from the American River into Folsom Reservoir between March and November each year. If the annual unimpaired flow is below 400,000 AFY, the water year is considered critical (driest). Annual unimpaired flow above 950,000 AFY is considered a normal or wet year. Unimpaired flow between those two spectrums is considered a drier water year.

The water year classifications affect both the available supply for injection and the demand for extraction. The minimum amount of water available for injection could be as low as 0 AF during a driest year and as much as 10,000 AF during a wet year, based on population demand and the 20 percent conservation factor mandated by state law. As the City approaches buildout when all water supply contracts are being used to meet municipal demands, the amount of water available for injection will decrease.

### ***Aquifer Blending***

Blending would occur intermittently in the underground aquifer during injection and extraction cycles. Injected water stored in the aquifer for a shorter period better retains the original surface water characteristics (i.e., relatively low TDS and sodium levels). Frequent injection and extraction cycles would retain the injected water near the wellhead zone of influence for extraction capability. Blending could also be achieved through peak shaving operations as discussed below. The future completion of Roseville's Westside Pump and Tank Station will enable the City to implement other non-aquifer blending opportunities.

### ***Peak Shaving***

To increase operational flexibility, the ASR Program includes the potential for peak shaving. As described above, peak shaving refers to supplementing surface water supplies with groundwater during high-demand periods. Peak shaving could occur during the summer months when treatment requirements are highest, when the water treatment plant's capacity is reduced for maintenance, or potentially to meet permit requirements.

## **Construction Methods**

This section describes basic construction methods for the infrastructure improvements required to implement the ASR Program. These methods are considered a component of both the original Project and the proposed modified Project.

### ***Construction of Aquifer Storage and Recovery Wells***

ASR wells would be designed and constructed individually, although one or more could be packaged together, bid, designed, and constructed as a single project. During the drilling phase for each ASR well, each well would require 24-hour construction for approximately 2 weeks, but the wells would be completed sequentially, and none would be constructed simultaneously with another.

As described in the 2012 ASR Program Final EIR, the first order of work would be to move equipment and materials to the ASR well site over a period of approximately one week. The equipment and materials would be stored onsite for the duration of construction. A site yard/staging area would be established, and a project trailer may be located on the construction site. Depending on the site's location, temporary fencing may be installed around the construction site to ensure public safety and site security.

Construction of ASR wells would take place over a period of 6 to 8 weeks and would require approximately 14 days of continuous (24 hours per day) drilling operations sometime during the 6- to 8-week period. Intermittent 24-hour drilling operations would be necessary to prevent caving of the borehole and possible loss of the ASR well before completion. ASR wells would be drilled to a depth of about 500 feet. Materials excavated from the borehole would be contained and stored onsite, then removed for offsite disposal at an approved location.

Pump tests would then be carried out to evaluate the pump design parameters and to gather data on aquifer characteristics, pumping volume, water quality, and groundwater level. Groundwater

extracted from each ASR well during testing would be discharged to nearby stormwater facilities. The volume of groundwater discharged into the storm drain would be regulated to ensure that it is within the capacity of existing receiving facilities.

Water discharged from the well would also be tested before discharge. Any water not meeting Regional Water Board standards for release into the stormwater system would be contained and treated onsite before discharge or would be transported offsite for treatment and disposal.

### ***Top-Side Improvements***

After drilling of the ASR wells, construction of “top-side improvements” would take place over a 12- to 18-month time frame. This work would include constructing a building enclosure, any related driveways, landscaping, all mechanical piping and appurtenances, a chlorination facility, electrical equipment, and instrumentation controls. The construction period would be reduced for ASR well sites not requiring a building enclosure for top-side improvements. During the top-side infrastructure phase, typical construction-related dust, noise, and traffic would be experienced.

Construction demobilization would occur over a two-week period after completion of the top-side improvements. Construction equipment would be transported offsite. The site yard/staging area would be broken down, support apparatus transported offsite, and construction fencing removed. The project site would be cleaned up to ensure that trash and unused materials are not left on or near the site.

## **Environmental Commitments**

Like the original Project analyzed in the 2012 ASR Program Final EIR, the modified Project includes environmental commitments such as best management practices (BMPs) and other measures to avoid the generation of short- and long-term environmental effects by the Project. These BMPs include preparation of special handling and contingency plans before the start of Project activities, and provisions in contract specifications for contractors to implement during Project construction. The ASR Program’s environmental commitments are listed below.

### ***Traffic Control Plan***

The City will require the contractor to implement a construction traffic management plan. This plan will identify general methods for construction traffic management to minimize delays. These methods may include (but are not limited to):

- Appropriately sequencing activities (e.g., segment phasing, timing of grading, hours of construction) to minimize effects on traffic flow.
- Maintaining traffic flow in the Project area to the extent possible.
- Maintaining bicycle and pedestrian access.
- Limiting road closures to off-peak traffic periods.
- Coordinating with the press, emergency service providers, and the community by posting information on the City’s website, and contacting providers with advance warning of construction activities.

### ***Special Handling Guidelines for Drilling Muds and Pump Test Discharges***

As discussed above, ASR wells would be drilled to a depth of about 500 feet. The drilling process would generate excess materials including drilling muds, a byproduct of the drilling process, and soil cuttings from boreholes. The City would require that the contractor identify techniques for onsite storage and disposal of muds and/or any other materials that would require special handling during construction.

Once drilling is complete, as noted above, pump tests would be conducted to evaluate the pump design parameters and gather data on aquifer characteristics, pumping volume, water quality, and groundwater levels. The City would require that the contractor meet the Regional Water Board's water discharge requirements and identify procedures for addressing pump test water quality to ensure that the discharge water does not affect receiving waters or exceed the design capacity of the stormwater conveyance system. Water produced by construction activities would comply with all existing stormwater discharge requirements before discharge or disposal.

### **Mitigation Measures and Environmental Commitments**

The modified Project includes all mitigation measures listed in the 2012 ASR Program Final EIR (reproduced below), including the environmental commitments within the ASR Program description (e.g., required per the City Mitigating Ordinances, Guidelines and Standards that apply to all development activities within the City limits). In addition, the biological resources mitigation measures and cultural resources environmental commitments (revised from the 2012 ASR Program Final EIR environmental commitments) are also listed below (and in Section 3.6 of this Draft SEIR).

#### ***Noise Mitigation Measures***

**Mitigation Measure 4.3-1: Use of Sound Attenuation Measures during Well Drilling Operations.** One such method to reduce noise levels is to erect a temporary sound barrier on the sides facing residences. An example would be barriers such as noise blanket panels mounted to steel framing. Noise blanket panels can be mounted horizontally or vertically and attached to vertical steel I-beam supports. Such barriers can reduce overall noise levels by approximately 17 dB [decibels].

**Mitigation Measure 4.3-4<sup>5</sup>: Prior to Well Drilling the City Will Provide Notice to All Residents Subject to Potential Noise Impacts.** The notice will include information about the need for 24-hour construction during a portion of the drilling phase, and related noise, and information to contact the City with concerns. The City will work with individual residents on an as-needed basis in the event that the drilling construction causes extenuating circumstances.

**Mitigation Measure 4.2-3: Reduce Well Pump (Operational) Noise Levels.** Reduce noise levels associated with the well pump by providing a full or partial enclosure. The

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<sup>5</sup> There is no Mitigation Measure 4.2-2 in the 2012 ASR Program Final EIR. Therefore, the numbering for the Noise Mitigation Measures in this Draft SEIR is reflective of those in the 2012 ASR Program Final EIR.

enclosure can take the form of a blockhouse or surrounding barrier designed to accommodate a pump motor 5-feet in height, and elevated off the ground by 18 inches.

- A full enclosure with a roof would sufficiently reduce noise levels; however, ventilation openings should be located on the side of the building opposite the nearest residences. If a traditional barrier is constructed around the well site, it would need to be a minimum of 8 feet in height.
- A variety of suitable sound attenuation options would be available. In order to ensure that sound levels are adequately mitigated, a qualified acoustical expert shall be consulted regarding placement, orientation, size, and density of acoustical barriers.

### ***Air Quality Environmental Commitments***

#### **AQ-1: Air Quality**

1. Clean earth moving construction equipment with water, or sweep clean, once per day, or as necessary (e.g., when moving onsite), consistent with National Pollutant Discharge Elimination System (NPDES) BMPs, local ordinances and the City's municipal code. Water shall be applied to control dust as needed to prevent dust impacts offsite. Operation water truck(s) shall be onsite, as required, to control fugitive dust. Construction vehicles leaving the site shall be cleaned, as needed, to prevent dust, silt, mud, and dirt from being released or tracked offsite.
2. Spread soil binders on unpaved roads and employee/equipment parking areas. Soil binders shall be non-toxic in accordance with state and local regulations. Apply approved chemical soil stabilizers, or vegetated mats, etc. according to manufacturer's specifications, to all inactive construction areas (previously graded areas inactive for 96 hours).
3. Minimize diesel idling time to a maximum of 10 minutes.
4. Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators, if feasible.

### ***Hazards and Hazardous Materials Environmental Commitments***

**Hazard-1:** Prior to initiating ground-disturbing activities, the City shall evaluate areas where drilling would occur for potential historic or existing hazardous materials. This evaluation shall include visual inspections of the site for evidence of hazardous materials releases (i.e., dumping) or evidence of nearby land uses, which may indicate the use of hazardous materials or hazardous waste generation (i.e., aboveground storage tanks, placarding). If such evidence is observed, the City shall retain a qualified consultant to evaluate the potential for hazardous materials releases at the site prior to initiating construction to determine whether these releases may constitute a potential recognized environmental condition. If such a condition is determined to exist, the City shall prepare and implement a remediation plan prepared in accordance with the applicable regulatory agency (i.e., Department of Toxic Substances Control or Regional Water Board) prior to proceeding with construction.

## ***Cultural Resources Environmental Commitments***

### **Initial Pause and Assessment for All Discoveries, Regardless of Cultural Affiliation**

In the event of an unanticipated discovery during construction, all ground disturbing work must pause within a 100-foot radius of the discovery, and the construction manager must take reasonable measures to protect the discovery from damage by equipment or personnel. This may include placement of plywood or steel plates over the excavation area (if feasible), or placement of exclusionary fencing. Work may continue on other parts of the project while the following procedures are carried out, but construction personnel are strictly prohibited from disclosing the discovery to the public, which includes posting on social media.

Immediately upon taking reasonable measures to protect the discovery, the construction manager must notify the City's Development Services Department by phone, regardless of the presence of an archaeological or tribal monitor. A City representative will immediately coordinate with the monitoring archaeologist (if present) or contact the project archaeologist, or, in the absence of either, contact a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeologist.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, the City shall consult with culturally affiliated tribes in making the determination. Whenever a tribal monitor is present, he or she shall be consulted.

### **Response to False Alarms**

If the professional archaeologist determines that the find is negative for any cultural indicators, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or tribal consultation is necessary, because the discovery is not a cultural resource of any kind. Should tribal representatives or monitors desire to take possession of non-cultural materials, the tribe may execute a voluntary agreement with the property owner to take possession as long as removal has been approved in writing by the property owner (if not the City). In this case, where the find is determined to not be a cultural resource, then the maximum delay to the project activities is expected to be one business day.

If the find represents a paleontological resource, then the City's representative will notify a professionally qualified paleontologist to address the find separately and notice to

resume work at that location cannot occur until authorized by the City's representative, and the time required to do so is not addressed in this guidance. Tribal representatives may not remove paleontological materials without permission from the City and property owner (if not the City).

If the find is determined to be a cultural resource, then the procedures below apply.

### **Response to Non-Tribal Discoveries**

If a tribal monitor is not present at the time of discovery and the professionally qualified archaeologist determines that the discovery is a cultural resource but is not reasonably associated with Native American culture, then the City shall notify by e-mail any tribes that specifically requested notification of such discoveries, with a description and a photograph of the find. These requests for notification must be provided to the City in writing in advance of a discovery. Notified tribes shall be afforded up to 24 hours (none of which time period may fall on weekends or City holidays) to review the information (which may or may not include a site visit) and determine whether or not the tribe possesses information about the discovery that would differ from the determination made by the professionally qualified archaeologist. If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then work may not resume at the location until the City, in consultation with the tribe(s), addresses the find in accordance with CEQA.

If the tribe fails to respond within 24 hours or responds to concur with the archaeologist that the discovery does not constitute a tribal resource, then the archaeologist shall submit to the City, within two business days, a brief plan for evaluating the significance and recommended treatment. The City shall have up to two business days to review and approve the implementation of the plan.

Upon receiving a notice to proceed from the City, the professional archaeologist must complete the evaluation within five business days, unless additional time is granted by the City in light of the nature of the find. The results of the evaluation may be communicated to the City in an email; formal reporting may continue during construction, after the data collection is completed and the City authorizes a notice to resume work at the location.

If the evaluation results in a finding that the discovery is not a historical resource under CEQA, then work may resume at the location of the discovery immediately upon notification of such from the City's representative. The delay to project construction at that location would be expected to be no more than 10 business days.

If the evaluation results in a finding that the discovery is a historical resource under CEQA, then the professional archaeologist shall immediately implement the treatment specified in the work plan. Work may not resume at the location of the discovery until the City issues a notice to proceed. The amount of delay to the discovery location depends on the nature and extent of the discovery; however, the City shall issue a notice to resume work at that location as soon as data collection is completed by the archaeologist. Formal reporting and analysis may continue during construction, after the City authorizes a notice to resume work at the location.

### **Response to Tribal Discoveries**

If the professional archaeologist determines within one business day that the find does represent a cultural resource, and that it is reasonably believed to be associated with Native American culture, or when a notified tribe responds pursuant to the notification process in Section 3.2.3 that the find does, in fact, represent tribal resources, then the City shall notify by email, within one business day of receiving such information, all culturally affiliated tribes that specifically requested such tribal consultation notification during environmental review and planning. Tribes that did not respond to offers to consult or declined consultation without such request for notification will not be contacted. Each notified tribe will have one business day from the time of notification to request a visit of the discovery location (if so desired). Tribal representatives who wish to visit the location must notify the City's representative in its response to obtain access and safety information and all non-agency and non-contracted personnel are subject to approval by private property owners. However, it should be noted that while a property owner has the legal right to approve non-agency and non-contracted personnel, the City will not authorize work to resume until appropriate personnel have been approved for entry so that the project conditions can be satisfied. Notified tribes that do not respond or visit the location within one business day may submit comments to the City in writing; however, field visits may or may not be accommodated.

Each visiting tribe will have two business days from the time of the site visit to submit written recommendations to the City for appropriate treatment. Recommendations must be accompanied by supporting information that constitutes substantial evidence for any determination of a TCR. Any recommendations for treatment or mitigation are subject to the process illustrated in Figure 1. Only those recommendations that are determined by the City, as lead agency and engaging in good faith consultation, to be both appropriate and allowable under CEQA would be subject to payment for tribal representatives or monitors.

The City shall have three business days from the close of the two-day comment period to review the information submitted and determine: (1) whether or not the find is subject to state law; (2) whether or not the find represents either a TCR or a historical resource; (3) whether or not the find has been significantly impacted; and if so, then (4) the appropriate treatment. In the absence of substantial evidence or in the case of conflicting tribal comments, the City may elect to exercise one or more of the options specified in Section 21084.3(b), if feasible. Any recommendations submitted by tribes that are not implemented by the City shall be documented in the administrative record with an explanation as to why the recommendations were rejected. If the City determines that the find is either a TCR or a historical resource, then work cannot resume at that location until the resource is treated to the satisfaction of the City, acting as the Lead Agency.

If the City determines that the find is neither a TCR nor a historical resource, then no additional treatment is necessary under state law, and the City's representative shall issue a notice to proceed with activity at that location. In this case, the maximum delay to project activities is expected to be eight business days.

The amount of delay to the discovery location depends on the nature and extent of the discovery; however, the City shall issue a notice to resume work at that location as soon as possible. If other areas outside of the 100-foot radius of the discovery are available to continue with work, notice to resume work may be given for these locations. Formal

reporting or other types of mitigation (such as public interpretation) may continue during construction, after the City authorizes a notice to resume work at the location.

### **Response to Human Remains Subject to State Law**

If it is determined that human remains are found, or remains that are potentially human, then the treatment shall conform to the requirements of state law under California Health and Safety Code Section 7050.5 and Public Resources Code (PRC) Section 5097.98. For the purposes of this project, the definition of remains subject to state law (Section 5097.98) shall apply. This definition states: “(d)(1) Human remains of a Native American may be an inhumation or cremation, and in any state of decomposition or skeletal completeness. (2) Any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. “The City understands that Native American tribes ascribe importance to objects and surrounding soil matrix associated with human remains that is broader than what is defined in state law. The City will consider requests from tribes to treat additional objects and matrix in the same manner as human remains and will exercise its discretion in doing so on a case-by-case basis.

If the find includes human remains, or remains that are potentially human (as defined in state law), then the individual making the discovery shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641, Native American human remains and multiple human remains). The archaeologist shall notify the Placer County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, then the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the landowner does not agree with the recommendations of the MLD, then the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center, using an open space zoning designation or deed restriction as appropriate, and/or recording a reinternment document with Placer County (AB 2641).

### ***Biological Resources Mitigation Measures***

The biological environmental commitments in the 2012 ASR Program Final EIR (Bio-1 Survey for Wetlands, Bio-2 Survey for Riparian Habitat and Special Status Species and Bio-3 Construct Outside the Nesting Season or Conduct Preconstruction Raptor Nesting Surveys) have been modified slightly and included in the SEIR as mitigation measures to address the specific locations of the ASR wells addressed in this Draft SEIR.

**Mitigation Measure 3.6-1:** If construction (including equipment staging) occurs during the breeding season for nesting birds and raptors (between February 15 and September 15), a qualified biologist shall conduct a preconstruction nesting bird and raptor survey before the onset of construction activities. The preconstruction nesting bird and raptor surveys shall be conducted within 14 days before the start of construction activities between February 15 and September 15. Surveys for raptor nests (excluding Swainson's hawk) shall extend 500 feet from the ASR well sites. In addition, a 0.25-mile windshield-level survey shall be conducted to determine whether Swainson's hawk nests occur in the vicinity. If no active nests are detected, a letter report documenting the results of the survey shall be submitted to the City and no additional mitigation is recommended as long as construction begins within 14 days of the survey and does not halt for more than 14 days.

**Mitigation Measure 3.6-2:** If Migratory Bird Treaty Act-protected birds or raptors are found to be nesting on or adjacent to the ASR well sites, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nest area and to avoid take. The buffer shall be maintained around the nest area and monitored until the end of the breeding season, or until the biological monitor determines that the young have fledged and are foraging on their own or the nest is no longer active. The extent of these buffers shall be determined by the qualified biologist and shall depend on the species identified, the level of noise or construction disturbance, the line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Generally accepted avoidance buffers are 100 feet for nesting birds and 250–500 feet for nesting raptors. A letter report documenting the rationale for the established buffer and the results of monitoring shall be submitted to the City within 14 days of the date the biologist determines that the nest is no longer active and the avoidance buffer is no longer required.

**Mitigation Measure 3.6-3:** Following the results of the wetland verification or determination from USACE, and before the start of construction, silt fencing followed by straw wattles or other erosion control measures shall be placed around the edge of potentially occurring seasonal wetlands on the Vencil Brown ASR well site. In addition, silt fencing shall be placed at the edge of the well footprint between the well's work area and the potentially occurring seasonal wetlands, ephemeral drainage, and riparian area on the Vencil Brown well site. Silt fencing followed by straw wattles or other erosion control measures shall be placed at the edges of the Pleasant Grove, Campus Oaks, and Misty Woods ASR well sites to prohibit construction activities in waterways and riparian areas. Trucks and other vehicles shall not be allowed to park beyond the fencing, nor shall equipment be stored beyond the fencing. No vegetation removal or ground-disturbing activities shall be permitted beyond the fencing. The fencing shall remain intact for the duration of the construction activities.

## 2.4 Schedule for the Modified Project

Certification of this SEIR is targeted for December, 2020; Assuming the necessary permits are obtained, the City will continue its goal to continue ASR operations at the modified well locations as soon as possible.

ASR Program infrastructure will be prioritized and programmed as information becomes available, based on geologic and water quality well data collected from pilot boreholes and

monitoring wells planned for construction in summer and fall 2020 (outside the scope of this SEIR). Construction of the remaining ASR wells and top-side improvements could begin in summer 2021. It is expected that the ASR Program would be fully operational with the proposed wells by 2050.

The above schedule is based on the City's current plans and funding. The availability of grants or similar funding opportunities, changes in the growth rate, and water demand could alter implementation plans or the order of well construction.

## 2.5 Required Permits and Approvals for the Modified Project

The proposed modification to the existing ASR Program would require approvals by the City and the Regional Water Board to ensure consistency with the approved General Order Permit that was issued in 2013. **Table 2-2** lists those agencies that will, or could, have some form of involvement in Project approval and therefore would serve as responsible agencies under CEQA. Permits issued by these agencies for ASR operations would identify requirements for ASR operation, monitoring, and reporting.

**TABLE 2-2**  
**RESPONSIBLE AGENCIES AND REQUIRED PERMITS AND APPROVALS**

Regulatory Agency	Type of Permit or Approval	Reason for Permit or Approval
Roseville City Council	Project and CEQA Approval	City Council is the approving authority for SEIR certification and the proposed modifications to the ASR Program
Roseville Public Works Department/ Development Services/Environmental Utilities Department	Improvement Plans, Grading and/or Encroachment Permit	Compliance with City Design and Construction Standards, Mitigating Policies and Standards
Roseville Development Services Department (Planning Division)	Tree Permit (if applicable)	Compliance with City Tree Protection Ordinance
Roseville Fire Department	Hazardous Materials Use and Storage	City's Certified Unified Program Agency
Central Valley Regional Water Quality Control Board	Waste Discharge Permit	Required for groundwater injection operations
California Department of Public Health	Domestic Water Supply Permit	Required for all municipal water supply facilities

NOTES: ASR = aquifer storage and recovery; CEQA = California Environmental Quality Act; City = City of Roseville; SEIR = supplemental environmental impact report  
SOURCE: Data compiled by Environmental Science Associates in 2020

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## **CHAPTER 3**

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# **Environmental Setting, Impacts, and Mitigation Measures**

### **3.1 Introduction**

This chapter presents a summary of the resource areas for which potential impacts of the modified Project are adequately addressed in the certified 2012 ASR Program Final EIR and no further analysis is required. Information is also provided regarding federal requirements for the State Revolving Fund (SRF) program for low-interest loans to public agencies. This chapter also provides information about the resource area topics requiring additional CEQA analysis (e.g., new ASR well locations) beyond the analysis in the 2012 ASR Program Final EIR.

### **3.2 Environmental Issues and Alternatives Not Requiring Further Analysis**

According to CEQA Guidelines Section 15163, this Draft SEIR is required to contain only the information needed to analyze the modified Project, including changed circumstances and new information requiring additional environmental review. Where existing information and analysis in the 2012 ASR Program Final EIR are sufficient to evaluate the impacts of the modified Project, no additional environmental review is warranted. The following discussion summarizes environmental issues for which potential impacts of the modified Project, or alternatives, are adequately addressed in the certified 2012 ASR Program Final EIR and no further analysis is required.

#### **3.2.1 Aesthetics**

The analysis in the 2012 ASR Final EIR determined that aesthetics impacts would be less than significant, or no impact would occur, with construction and operation of the Project. All ASR well sites analyzed are located within the Roseville city limits and none are considered scenic or located within a scenic vista.

In addition, the analysis noted that the ASR well sites are relatively small (approximately 50 feet wide by 100 feet long and 500 feet deep), and that in some instances, the most visible aspect of the well site would be top-side improvements constructed to enclose the pump station facilities (approximately 30 feet wide by 40 feet long and 16 feet high). Some type of fencing could be used in lieu of a structure; however, all ASR well sites were designed in accordance with applicable City design guidelines and standards. Also, limited nighttime lighting would be needed during temporary drilling operations and nighttime maintenance would be infrequent. The 2012

ASR Final EIR also determined that any aesthetics impacts would be mitigated by application of Resolution 03-169.

The modified Project includes different locations for eight of the proposed ASR wells with six ASR wells to be constructed (as two of the eight wells are considered back-up sites). However, the wells would still be located within the Roseville city limits, and not in locations considered scenic or within a scenic vista; would be the same size as described for the original Project in the 2012 ASR Program Final EIR; and would be constructed in accordance with applicable City design guidelines and standards.

Construction activities for the modified Project would be similar in duration, with minor and short-term lighting requirements, and there would be an approximately 2-week period when 24-hour drilling would be required, as described for the original Project in the 2012 ASR Program Final EIR. While top-side improvements may be constructed over a 12- to 18-month timeframe, these improvements would have minimal impacts on aesthetics given the limited construction (e.g., landscaping, driveways, piping and appurtenances). Operation of the modified Project would be substantively the same as described in the 2012 ASR Program Final EIR (with pump station buildings equipped with outdoor lights with on/off switches) and would cause no visible change to aesthetic resources. In addition, as stated for the original Project in the 2012 ASR Program Final EIR, any aesthetics impacts of the modified Project would be mitigated by application of Resolution 03-169.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts on aesthetics.

### 3.2.2 Agricultural Resources

The analysis in the 2012 ASR Final EIR determined that no impact on agricultural resources would occur with construction and operation of the Project. The ASR wells would be in existing and planned (entitled) urban development areas and regional parks. They would be on parcels with appropriate land use and zoning designations for public/quasi-public uses, and not in areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or areas under Williamson Act contracts.

As described for the original Project in the 2012 ASR Final EIR, the modified Project would be installed on parcels owned by the City of Roseville, or on parcels supporting non-agricultural land uses. The modified Project would not be installed in any areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or areas under Williamson Act contracts. As described for the original Project in the 2012 ASR Program Final EIR, construction and operation of the modified Project is not anticipated to interfere with adjacent land uses, including agricultural uses.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts on agricultural resources.

### 3.2.3 Air Quality and Greenhouse Gas Emissions

The analysis in the 2012 ASR Program Final EIR determined that impacts related to air quality and greenhouse gas emissions would be less than significant or less than significant with mitigation incorporated, or no impact would occur, with construction and operation of the Project. The analysis found that construction emissions would be well below levels that would constitute a significant impact and below the thresholds of significance identified by the Placer County Air Pollution Control District. Operational emissions were also found to be less than significant because ASR wells do not directly generate emissions and the cumulative operational effects would not exceed the air district's cumulative thresholds of significance. Nonetheless, 2012 ASR Program Final EIR Mitigation Measure AQ-1, "Air Quality Mitigation Measures," was required to ensure that all feasible control measures would be implemented to reduce emissions to the extent possible. It was determined that chlorination activities necessary for operation of the ASR wells would produce minor chemical odors that would be limited to within the pump station buildings.

The 2012 ASR Program Final EIR determined that implementing the ASR wells would generate greenhouse gases, but that these emissions would be offset by existing City programs that reduce vehicle emissions and maximize energy efficiency and, because of the Project's relatively small scale, the impact of the emissions would be less than significant. The City has existing programs in place that reduce a minimize greenhouse gas emissions, such as utilizing a diverse portfolio of renewable resources (e.g., geothermal, wind, solar, bioenergy, and small hydro).

For the modified Project, there would be no change from the air quality analysis presented in the 2012 ASR Program Final EIR. The duration of construction (6 to 8 weeks per well, with potential for 24-hour continuous drilling for 14 days out of the construction period) and operational emissions would not change under the modified Project. Top-side improvements may be constructed over a 12- to 18-month timeframe, but their impacts on air quality would be minimal, given the limited construction (e.g., landscaping, driveways, piping, and appurtenances). Mitigation Measure AQ-1 would remain a requirement of the proposed construction and operation. As stated for the original Project in the 2012 ASR Program Final EIR, implementing the modified Project would generate greenhouse gases, but these emissions would be offset by City programs and, because of the relatively small scale of the modified Project, the impact of the emissions would be less than significant. In addition, chlorination activities necessary for operation of the modified Project would produce minor chemical odors that would be limited to within the pump station buildings, and the impact would be less than significant as described for the original Project in the 2012 ASR Program EIR.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to air quality and greenhouse gas emissions.

### 3.2.4 Geology, Soils, and Seismicity

The analysis in the 2012 ASR Final EIR determined that impacts on geology and soils would be less than significant, or no impact would occur, with construction and operation of the Project. The analysis found that the ASR wells would not expose people or structures to potential substantial adverse effects involving seismic shaking, ground failure, or landslides because the Project area is classified as a low-severity earthquake zone and no active faults are known to exist in Placer County. The ASR wells would be constructed in compliance with the Uniform Building Code and California Building Code; would be designed to preclude locating a well on soils that are expansive or subject to landslides; and would be consistent with the City's Design/Construction Standards (Resolution 07-137) and Roseville Municipal Code Section 14.11.010.

The modified Project includes different locations for eight of the proposed ASR wells with six ASR wells to be constructed (as two of the eight wells are considered back-up sites). However, all wells would still be located within the Roseville city limits in areas with relatively similar regional geological characteristics. None of the ASR wells would be located near any known active faults, nor would they increase potential geological hazards such as liquefaction or landslides.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to geology, soils, and seismicity.

### 3.2.5 Hazards and Hazardous Materials

The analysis in the 2012 ASR Final EIR determined that impacts related to hazards and hazardous materials would be less than significant with mitigation incorporated, or no impact would occur, with construction and operation of the Project. The analysis found that construction of the ASR wells would be consistent with the City's Resolution 17-137 (Design and Construction Standards). In addition, hazardous materials would be transported, stored, and disposed of in compliance with federal, state, and local regulations. Operation of the ASR wells would use minor amounts of water treatment chemicals, but the City would implement methods to minimize health and safety risks. The 2012 ASR Program Final EIR identified Mitigation Measure Hazard-1, which required evaluating the proposed well sites for evidence of past hazardous materials releases and provided protocols for addressing any suspect contamination that might be encountered at each well site. The analysis also determined that no ASR well site would be within an airport land use plan, result in a safety hazard to surrounding airports, interfere with emergency response or evaluation plans, or expose people or structures to hazards related to wildland fires.

As described for the original Project in the 2012 ASR Program Final EIR, construction activities for the modified Project would involve using fuels, lubricants, and other construction-related fluids and storing and using diesel fuel during operations. The modified Project would place some of the wells in different locations; however, it would not involve other disturbances or releases of potentially hazardous materials, or the use, storage, or transport of substantial amounts of other

hazardous materials beyond those described in the 2012 ASR Program Final EIR. In addition, the modified Project would not be within an airport land use plan, result in a safety hazard to surrounding airports, interfere with emergency response or evaluation plans, or expose people or structures to hazards related to wildland fires.

The modified Project would be consistent with Resolution 17-137, and hazardous materials would be transported, stored, and disposed of in compliance with federal, state, and local regulations. In addition, implementation of Mitigation Measure Hazard-1 would still apply.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to hazards and hazardous materials.

### 3.2.6 Land Use and Planning

The analysis in the 2012 ASR Final EIR determined that no impacts related to land use and planning would occur with construction and operation of the Project, and the Project would be exempt from certain land use thresholds under CEQA Section 15183/Public Resources Code Section 21083.3. The analysis found that the Project wells would be installed on City-owned parcels, parcels dedicated to the City for location of municipal wells, or portions of large City-owned parcels and would not require linear elements that could create the potential for division of a community. The analysis also determined that construction and operation of the ASR wells would be consistent with the General Plan's water system policies, land use designations, and noise policy. In addition, there are no habitat conservation or natural community conservation plans in the Project area.

As described for the original Project in the 2012 ASR Program Final EIR, the modified Project would be installed on City-owned parcels (including parks designated as a park and recreation district in the City's zoning ordinance), parcels dedicated to the City for location of municipal wells, or portions of large City-owned parcels and would not require linear elements that could create the potential for division of a community. Land use plans, policies, and regulations (the General Plan's water system policies, land use designations, and noise policy) would apply to the modified Project just as they did to the Project locations analyzed in the 2012 ASR Program Final EIR. Regarding potential noise impacts, see Section 3.2.9, *Noise*, below.

The modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to land use and planning.

### 3.2.7 Mineral Resources

The analysis in the 2012 ASR Final EIR determined that impacts on mineral resources would be less than significant with construction or operation of the Project. The analysis found that implementing the ASR wells would not require excavation for mineral resources or result in the

loss in availability of a known resource that would be of value to the region and the residents of the state. In addition, the analysis determined that no locally important mineral resource recovery sites were delineated in the General Plan, related specific plans, or other land use plans prepared for the City.

As described for the original Project in the 2012 ASR Program Final EIR, implementing the modified Project would not require excavation for mineral resources or result in the loss in availability of a known resource that would be of value to the region and the residents of the state. The modified Project is located within the Roseville city limits and would not create a loss of availability of known mineral resources.

Because of the absence of important mineral resources, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts on mineral resources.

### 3.2.8 Noise

The analysis in the 2012 ASR Final EIR determined that, based on individual well location, noise impacts would be less than significant or potentially significant, or no impact would occur, with construction and operation of the Project. The analysis found that the ASR wells would not be located within an airport land use plan or in the vicinity of a private airstrip. During the 6-to 8week period of ASR well construction, 24-hour drilling operations may occur for 14 days, to prevent caving of boreholes and the possible loss of wells before completion. At some ASR well sites, construction noise levels may reach a maximum of 78 decibels (dB) equivalent noise level ( $L_{eq}$ ) at distances of 100 feet, which would exceed the City's nighttime noise level standard of 45 dB  $L_{eq}$ . The City's General Plan and Noise Ordinance allow an exception process for short-term construction; however, Project construction was expected to cause a substantial temporary increase in ambient noise levels in the vicinity of some of the ASR well sites. Mitigation Measure 4.3-1, "Use of Sound Attenuation during Well Drilling Operations," and Mitigation Measure 4.3-4, "Prior to Well Drilling the City Would Provide Notice to all Residents Subject to Noise Impacts," were determined to be required. However, even with mitigation, the potential would exist for noise impacts to exceed the City's interior noise standards. For those ASR well sites, the noise impact was found to be significant and unavoidable.

The 2012 ASR Program Final EIR found that noise levels from operation of ASR well pumps at some sites would exceed the City's nighttime noise level standard of 45 dB  $L_{eq}$ . Mitigation Measure 4.3-3, "Reduce Noise Levels Associated with the Well Pump by Providing a Full or Partial Enclosure," was determined to be required to mitigate the impact of pumping noise at those well locations to a less-than-significant level.

As described for the original Project in the 2012 ASR Program Final EIR, the modified Project is located within the Roseville city limits, and drilling and construction would occur under a similar schedule, using similar equipment. The modified Project would not be located within an airport land use plan or in the vicinity of a private airstrip. The locations of ASR Well 11–Pleasant Grove

(formerly known as “Well 11–Woodcreek West”) and ASR Well 13–Campus Oaks (formerly known as “Hewlett Packard”) were analyzed in the 2012 ASR Program Final EIR. ASR well sites “Marlin,” “Misty Wood,” “Maidu,” “Galilee,” “Vencil Brown,” and “Central Park,” where 24-hour drilling could occur for 14 days, are more than 150 feet from any sensitive receptor (e.g., residents). The City’s General Plan and Noise Ordinance would still be applicable to all sites. Mitigation Measures 4.3-1 and 4.3-4 would be implemented and potential impacts of the modified Project would be comparable to those of the original Project as identified in the 2012 ASR Program Final EIR. The noise impact at the location of ASR Well 13–Campus Oaks would still be significant and unavoidable, as described for the original Project in the 2012 ASR Program Final EIR. In addition, to mitigate potential operational noise impacts, the modified Project would implement Mitigation Measure 4.3-3, as applicable.

Therefore, the modified Project would not result in new or more severe potentially significant noise impacts, and the 2012 ASR Program Final EIR adequately addresses potential noise impacts.

### 3.2.9 Population and Housing

The analysis in the 2012 ASR Final EIR determined that population and housing impacts would be potentially significant with construction and operation of the Project.

As described in the 2012 ASR Program Final EIR (in the Initial Study and Section 5.2.3, *Growth-Inducing Impacts*), the Project’s improvement to water supply reliability was analyzed to determine whether it could be construed as a potential barrier removal that would spur growth.

The 2012 ASR Program Final EIR stated that the purpose of the Project was, among other things, to improve groundwater supply reliability during drier years, and not to increase the normal capacity of the distribution system. In addition, the ASR Program would not constitute a primary source of water supply, otherwise add infrastructure in direct support of new development, or include any housing element.

However, the 2012 ASR Program Final EIR conservatively determined any project that generates an increase in water supply reliability could be considered to cause an indirect growth-inducing impact. The Project could result in the following indirect growth inducement impacts:

- Land use changes (urban infill, increased density, annexations)
- Traffic impacts (new development, increased visitors)
- Biological resources impacts (conversion of undeveloped lands)
- Other impacts related to urban runoff, disturbance of cultural resources, noise impacts, visual resources, and consumption of energy and natural resources

However, the 2012 ASR Program Final EIR also determined that the potential growth-inducing impacts would be mitigated in part by compliance with the City’s growth management ordinance.

As described for the original Project in the 2012 ASR Program Final EIR, and again in Chapter 2, *Project Description*, of this Draft SEIR, the modified Project would help meet the City's water supply reliability needs. The same potential for indirect impacts related to growth inducement and the City's growth management ordinance is still applicable to the modified Project.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to growth inducement.

### 3.2.10 Public Services

The analysis in the 2012 ASR Final EIR determined that no impact on public services would occur with construction and operation of the Project. The analysis also found that the Project would not add new residents or change land uses, and therefore, would not generate any new demands for fire protection, police protection, schools, parks, or related services.

Similarly, the modified Project would not add new residents or changes in land uses, and therefore, would not generate any new demands for fire protection, police protection, schools, parks, or related services.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts on public services.

### 3.2.11 Recreation

The analysis in the 2012 ASR Final EIR determined that no recreation impact would occur with construction and operation of the Project. The analysis found that the Project would not add new residents or create new land uses that could affect recreational facilities. The Project would also not increase the use or cause the expansion of recreational facilities.

Similarly, the modified Project would not add new residents, cause changes in land uses that could affect recreational facilities, or preclude recreation activities at parks, including those designated as a park and recreation district. The modified Project would also not increase the use or cause the expansion of recreational facilities.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential recreation impacts.

### 3.2.12 Transportation and Traffic

The analysis in the 2012 ASR Final EIR determined that transportation and traffic impacts would be less than significant, or no impact would occur, with construction and operation of the Project. The analysis found that a very limited number of vehicle trips would be associated with the

Project, the Project would not affect air traffic patterns, and the application of existing Resolution 03-169 would address all of the Project's potential traffic impacts.

As described for the original Project in the 2012 ASR Program Final EIR, the modified Project would not have a substantive effect on transportation and traffic because the proposed changes consist largely of different well locations within the Roseville city limits. The modified Project would have the same limited number of vehicle trips as analyzed in the 2012 ASR Program Final EIR. In addition, the modified Project would not affect air traffic patterns, and the application of Resolution 03-169 would address all of the modified Project's potential traffic impacts.

Therefore, the modified Project would not result in additional potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to transportation and traffic.

### 3.2.13 Utilities and Service Systems

The analysis in the 2012 ASR Final EIR determined that impacts on utilities and service systems would be less than significant, or no impact would occur, with construction and operation of the Project. The analysis found that the Project would have no impact related to generation of wastewater, new water treatment facilities, or demand for water and/or wastewater. The Project was determined to have a relatively small footprint (less than 0.5 acres); thus, with adherence to the City of Roseville stormwater design requirements, the potential impact of the Project on stormwater drainage would be less than significant. Although some solid waste would be generated during construction only, the amount would be relatively minimal.

The ASR wells for the modified Project would be similar in size to those described for the original Project in the 2012 ASR Final EIR. The wells would not generate wastewater, require additional water treatment facilities, cause additional demand for water or wastewater, require new stormwater drainage facilities, or conflict with solid waste capacities or regulatory requirements.

Therefore, the modified Project would not result in new or more severe potentially significant impacts, and the 2012 ASR Program Final EIR adequately addresses potential impacts related to utilities and service systems.

### 3.2.14 Other CEQA Issues

Other CEQA issues were addressed in Chapter 5, *Other CEQA Issues*, of the 2012 ASR Program Final EIR. Other issues addressed included significant and unavoidable impacts, significant irreversible environmental effects, growth-inducing impacts (discussed above), and cumulative effects potentially caused by the Project.

The analysis in the 2012 ASR Final EIR determined that the Project would be implemented consistent with the Western Placer County Groundwater Management Plan's basin management objectives and the Water Forum Agreement EIR's mitigation measures, which are designed to sufficiently provide a sustainable, long-term source of water supply in the Project area and surrounding region.

Potential cumulative impacts of the modified Project on surface and groundwater hydrology and water quality, biological resources and cultural resources are discussed in Section 3.5 through 3.7. Other direct impacts of the modified Project would be limited, mitigable, or very localized, or would not cause or contribute to additional cumulative impacts beyond those described for the original Project in the 2012 ASR Program Final EIR.

Therefore, the modified Project would not result in additional cumulatively considerable impacts, and the 2012 ASR Program Final EIR adequately addresses potential cumulative impacts. In addition, the modified Project includes different locations for eight of the proposed ASR wells with six ASR wells to be constructed (as two of the eight wells are considered back-up sites). and would not cause any significant irreversible environmental changes beyond those identified for the original Project in the 2012 ASR Program Final EIR.

### 3.2.15 Aquifer Storage and Recovery Program Alternatives

This section briefly summarizes the alternatives considered in the 2012 ASR Program Final EIR, and discusses the potential for the modified Project to change the previous alternatives analysis. For the reasons described below, no additional analysis of these alternatives is warranted, and the alternatives analysis in the 2012 ASR Program Final EIR remains adequate.

#### **Alternative 1—No Project Alternative**

The analysis of the No Project Alternative, Alternative 1, in the 2012 ASR Program Final EIR evaluated what would reasonably have been expected to occur in the foreseeable future if the ASR Program had not been approved, based on plans available at that time and consistent with available infrastructure and public services.

With the No Project Alternative, the City would not implement General Plan policy directing the City to pursue ASR. Implementing the ASR Program would not be possible under this alternative, because no available surface water would be injected into the aquifer for later use. The modified Project would not change this conclusion. Thus, the modified Project would not alter any of the findings in the 2012 ASR Program Final EIR impact analysis for the No Project Alternative. No additional analysis is warranted, and the analysis of the No Project Alternative in the 2012 ASR Program Final EIR remains adequate.

#### **Water Supply Alternatives 2–5**

The 2012 ASR Program Final EIR also considered four additional alternatives:

- **Alternative 2—Upgrade Water Treatment Plant**, which included upgrades to ultraviolet and ozone with a separate water main.
- **Alternative 3—Surface Storage Alternative**, which entailed constructing a water basin or reservoir large enough to store excess raw water from the City’s entitled surface water allocation.

- **Alternative 4—Onsite Groundwater Treatment at ASR Wells**, which included adding onsite treatment facilities at well sites to improve the aesthetic qualities of groundwater before customer delivery.
- **Alternative 5—Pump ASR Extracted Groundwater to the East Side of Town to Blend with Treated Surface Water and Deliver Equally throughout the City**, which included a new pump station and pipelines extending from the ASR well sites to the east to Sierra College.

The modified Project would entail constructing and operating ASR well sites similar to those described for the original Project in the 2012 ASR Program Final EIR, but at different locations. Therefore, the alternatives evaluated and conclusions regarding the alternatives' ability to meet Project objectives, the consistency of the alternatives with the City's plans and policies, and their impacts compared to the Project impacts, as described in the 2012 ASR Program Final EIR, are still applicable with the modified Project.

Therefore, no additional analysis is warranted, and the analysis of Alternatives 2–5 presented in the 2012 ASR Program Final EIR is adequate.

### 3.3 Federal Requirements for State Revolving Fund Funding

As described in Chapter 1, *Introduction*, construction of the modified Project could be partially funded with a grant or loan from the State Water Resources Control Board (State Water Board) SRF program, which is partially funded by the U.S. Environmental Protection Agency.

SRF program requirements are associated with federal compliance (not CEQA compliance), and the 2012 ASR Program Final EIR did not describe how the ASR Program met federal requirements. However, the environmental analysis from the 2012 ASR Program Final EIR applies to the federal compliance analysis. Therefore, this Draft SEIR includes information from the 2012 ASR Program EIR, along with information regarding the modified Project, to address certain federal environmental regulations for the modified Project. Specifically, the following discussions address the regulations guiding the General Conformity Rule for the federal Clean Air Act, Executive Order No. 12898, the federal Endangered Species Act, and the National Historic Preservation Act.

#### 3.3.1 Clean Air Act

This section addresses federal air quality requirements under the federal Clean Air Act. For a discussion of the modified Project's CEQA compliance, see Section 3.2, *Environmental Issues and Alternatives Not Requiring Further Analysis*.

Construction-related air pollutant emissions were calculated as part of the 2012 ASR Program Final EIR and are presented in **Table 3-1**. These emissions were calculated in terms of pounds per day of each pollutant, as the applicable CEQA thresholds promulgated by the Placer County Air Pollution Control District use this metric. However, to assess applicability of a General

Conformity assessment under the Clean Air Act, a project's emissions are compared to the *de minimis* emission rates applicable to the given air basin, which are established in terms of tons per year. Therefore, annual emissions were calculated based on the daily emissions reported in the 2012 ASR Program EIR.

**TABLE 3-1**  
**DAILY CONSTRUCTION EMISSIONS AS ESTIMATED IN THE 2012 ASR PROGRAM FINAL EIR**

Pollutant	Emissions in pounds per day			
	Preliminary Staging	Well Construction	Pump Building and Piping	Restoration
Carbon monoxide	8	19	17	10
Reactive organic gases (ozone precursor) <sup>a</sup>	4	5	10	4
Oxides of nitrogen (ozone precursor)	18	60	41	36
PM <sub>10</sub>	14	3	11	13

NOTES:

2012 ASR Program Final EIR = Aquifer Storage and Recovery Program Draft and Final Environmental Impact Report; ASR = Aquifer Storage and Recovery; PM<sub>10</sub> = inhalable particulate matter 10 microns or less in diameter

<sup>a</sup> Reactive organic gases are equivalent to volatile organic compounds in the federal Clean Air Act.

SOURCE: City of Roseville 2009.

As described in Chapter 2, *Project Description*, this SEIR addresses the eight ASR wells that were either partially or not covered in the 2012 ASR Program Final EIR. Two of the eight ASR wells are considered “back-up” sites and will only be installed if other ASR well sites are not feasible. Therefore, the total amount of ASR wells evaluated under this Draft SEIR are eight with six ASR wells to be constructed in a given year. Each ASR well would require 6 to 8 weeks of construction. Based on these assumptions, the annual emissions from the modified Project were calculated and are compared to the *de minimis* levels established by the federal Clean Air Act Amendments (Code of Federal Regulations Title 40, Section 93.153(b)(1)). Emissions of fine particulate matter (PM<sub>2.5</sub>) were conservatively assumed to be equivalent to inhalable particulate matter (PM<sub>10</sub>) emissions.

## Comparison to Federal General Conformity De Minimis Levels

Construction emissions from the modified Project would result primarily from off-road equipment, vehicle use, and fugitive dust. The 2012 ASR Program EIR modeling results indicate that maximum annual emissions from construction would be approximately:

- 1.8 tons per year of volatile organic compounds (VOC);
- 12.4 tons per year of oxides of nitrogen (NO<sub>x</sub>);
- 4.3 tons per year of carbon monoxide (CO); and
- 3.3 tons per year of fine particulate matter of 2.5 microns or less (PM<sub>2.5</sub>).

Based on the Placer County's designation status as moderate nonattainment for the 2015 8-hour ozone standard, moderate nonattainment for the 2006 PM<sub>2.5</sub> standard, and maintenance for federal

CO standard, federal *de minimis* levels would be 100 tons per year each these pollutants or their precursors (ROG, NO<sub>x</sub>, PM<sub>2.5</sub>, and CO). A conformity determination would be required for each criteria or precursor exceeding the federal General Conformity *de minimis* level. Emissions of VOC, NO<sub>x</sub>, PM<sub>2.5</sub>, and CO from construction would be below the federal General Conformity *de minimis* levels pursuant to the 1990 amendments to the Federal Clean Air Act.

Operational emissions from the modified Project were determined to be negligible based on the fact that pumps would be electrically powered, therefore operational emissions would also be below the federal *de minimis* level of 100 tons per year for VOC, NO<sub>x</sub>, PM<sub>2.5</sub>, and CO. Therefore, the modified Project is exempt from General Conformity regulations.

**Table 3-2** presents the input relative to the Clean Air Act specified in the SRF Application Environmental Package. Note that Ozone is not directly emitted by typical sources but is formed in the atmosphere by its precursor compounds ROG/VOC and NO<sub>x</sub>.

**TABLE 3-2**  
**INPUT TERMS AND VALUES RELATIVE TO THE CLEAN AIR ACT SPECIFIED IN THE STATE REVOLVING FUND APPLICATION ENVIRONMENTAL PACKAGE**

Clean Air Act					
Name of Air Basin		Sacramento Metro			
Local Air District		Placer County Air Pollution Control District			
Pollutant	Federal Status	Nonattainment Rates	Threshold of Significance ( <i>de minimis</i> threshold in tons per year)	Estimated Construction Emissions (tons per year)	Estimated Operation Emissions (tons per year)
Ozone	Nonattainment	Moderate	NA (see precursors VOC and NO <sub>x</sub> below)	NA (see precursors VOC and NO <sub>x</sub> below)	NA (see precursors VOC and NO <sub>x</sub> below)
CO	Maintenance	NA	100	4.3	Negligible
NO <sub>x</sub>	NA	NA	100	12.4	Negligible
ROG	NA	NA	100	1.8	Negligible
VOC	NA	NA	100	1.8	Negligible
Lead	Unclassified/attainment	NA	NA	0	Negligible
PM <sub>2.5</sub>	Nonattainment	Moderate	100	3.3	Negligible
PM <sub>10</sub>	Unclassified	NA	NA	3.3	Negligible
SO <sub>2</sub>	Unclassified/attainment	NA	NA	NA	NA

NOTES: CO = carbon monoxide; NA = not applicable; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = particulate matter less than 2.5 microns in diameter; PM<sub>10</sub> = particulate matter less than 10 microns in diameter; ROG = reactive organic gases; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

SOURCE: Data compiled by Environmental Science Associates in 2020

Based on the analysis, the modified Project emissions are below the federal *de minimis* levels. Therefore, the modified Project is not subject to the General Conformity determination.

### 3.3.2 Endangered Species Act

A biological resources survey was completed for the modified Project in 2020 to comply with the federal Endangered Species Act. The survey results indicated that the modified Project (or proposed action) would have no effect on listed threatened or endangered species or critical habitat in the modified Project vicinity and is not likely to adversely affect vernal pool fairy shrimp and vernal pool tadpole shrimp associated with the Vencil Brown ASR well site. Implementing the conservation measures (installation of high-visibility fencing and silt fencing [or other erosion control measures]) before and during construction would avoid environmental consequences on habitat for these species during installation of the Vencil Brown ASR well site. No take of individuals would occur because of the modified Project. In addition, the modified Project would not result in the permanent or temporary loss of suitable habitat within or in the vicinity of the modified Project. Therefore, the proposed action would not jeopardize the continued existence of these species (see Appendix C).

### 3.3.3 Environmental Justice

Environmental justice must be addressed in a way that satisfies the requirements of Executive Order No. 12898 for SRF funding. Specifically, the document must address whether the proposed Project could do any of the following (State Water Board 2017):

- a. Create new disproportionate impacts on minority, low-income, or indigenous populations.
- b. Exacerbate existing disproportionate impacts on minority, low-income, or indigenous populations.
- c. Present opportunities to address existing disproportionate impacts on minority, low-income, or indigenous populations that are addressable through the project.

Based on demographic data provided by the U.S. Census Bureau, the percentage of people identifying as “American Indian and Alaska Native” in the affected area’s census tracts ranges from 0 to 0.4 percent. No issues have been identified that would affect these indigenous populations in a manner different from effects on other minority populations. Therefore, environmental effects on indigenous populations are addressed in combination with effects on minority populations in the analysis below.

Project impacts on sensitive receptors were analyzed in the 2012 ASR Program EIR and in this 2020 Draft SEIR for the modified Project. The modified Project’s impacts, considered together with existing or foreseeable environmental burdens on nearby populations, are analyzed throughout the Cumulative Effects analyses for each resource area.

### Potentially Affected Populations

The study area for environmental justice effects includes areas that may experience adverse human health or environmental effects as a result of construction and operation of the modified Project. This includes all census tracts in which the proposed well sites would be located.

## Minority Populations

According to the federal Council on Environmental Quality (CEQ) guidelines for environmental justice analyses (CEQ 1997), minority populations should be identified where either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is “meaningfully greater” than the majority population percentage in the general population or other appropriate unit of geographic analysis.

**Table 3-3** summarizes selected racial and ethnic characteristics of the census tracts potentially affected by the modified Project components. Information regarding racial and ethnic diversity in the study area was derived from the 2018 5-year American Community Survey administered and published by the U.S. Census Bureau, which provides estimates based on surveys conducted from 2014 to 2018. The final row in Table 3-3 presents the “total minority” population percentage, which for this analysis is considered to include all residents who reported their race and ethnicity to the U.S. Census Bureau as anything other than non-Hispanic white.

As shown in Table 3-3, none of the census tracts in the study area, nor Roseville or Placer County as a whole, has a minority population greater than 50 percent. CEQ guidance does not define the term “meaningfully greater”; however, the Federal Interagency Working Group on Environmental Justice NEPA Committee’s *Promising Practices for EJ Methodologies* (FIWGEJ 2016) suggests that such an approach “requires use of a reasonable, subjective threshold (e.g., ten or twenty percent greater than the reference community).” This analysis embraces the committee’s advice on this approach, selecting a threshold that provides a reasonable and meaningful basis for comparison.

Roseville as a whole has a total minority population of 19.6 percent, which is lower than that of Placer County. The city is used as the reference population. The use of either a 10 or 20 percent threshold has a “meaningfully greater” result than the City’s total minority population count, and would yield the same result: that Census Tracts 210.43 and 228 (the locations of the proposed Campus Oaks and Galilee ASR wells and the Central Park well, respectively) are considered minority populations based on this approach.<sup>1</sup>

## Low-Income Populations

This analysis uses two methods for identifying communities of concern related to income levels, based on two sets of guidelines: CEQ guidance and the California Regional Water Management Guidelines. Both methods are addressed below.

<sup>1</sup> A threshold of 10 percent greater than Roseville’s minority population would be  $19.6\% \times 1.10 = 21.6\%$ ; a threshold of 20 percent greater would be  $19.6\% \times 1.20 = 23.5\%$ .

**TABLE 3-3**  
**SUMMARY OF SELECTED RACIAL AND ETHNIC CHARACTERISTICS OF THE CENSUS TRACTS POTENTIALLY AFFECTED BY THE MODIFIED PROJECT COMPONENTS**

	<b>207.11 (Maidu)</b>	<b>207.13 (Marlin)</b>	<b>210.43 (Campus Oaks, Galilee)</b>	<b>210.40 (Pleasant Grove)</b>	<b>210.43 (Vencil Brown, Misty Woods)</b>	<b>228.00 (Central Park)</b>	<b>City of Roseville</b>	<b>Placer County</b>
Total Population	4,222	3,118	4,394	3,369	3,538	4,698	139,110	380,077
Hispanic or Latino (All Races)	10.6%	19.1%	11.4%	5.6%	11.2%	11.9%	14.2%	13.8%
White alone, not Hispanic or Latino	84.2%	82.0%	73.8%	90.9%	86.0%	69.7%	80.4%	73.2%
Black or African American alone, not Hispanic or Latino	0.6%	3.3%	0.5%	0.0%	0.0%	1.8%	1.6%	1.5%
Race, not including Hispanic or Latino Origin:								
White alone	79.0%	67.3%	66.5%	85.7%	80.2%	62.8%	69.7%	82.5%
Black or African American alone	0.6%	3.3%	0.5%	0.0%	0.0%	1.3%	1.6%	1.6%
American Indian and Alaska Native alone	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.1%	0.5%
Asian alone	6.7%	7.3%	15.0%	5.3%	6.0%	17.2%	9.5%	7.2%
Native Hawaiian and Other Pacific Islander alone	0.8%	0.0%	0.2%	0.4%	0.1%	0.8%	0.2%	0.2%
Some other race alone	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.1%	3.1%
Two or more races	2.3%	2.3%	7.4%	2.7%	2.5%	6.0%	4.6%	4.8%
<b>Total Minority (other than non-Hispanic/Latino White)</b>	<b>15.8%</b>	<b>18.0%</b>	<b>26.2%</b>	<b>9.1%</b>	<b>14.0%</b>	<b>30.3%</b>	<b>19.6%</b>	<b>26.8%</b>

The CEQ environmental justice guidance states that “... low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census’ Current Population Reports, Series P-60 on Income and Poverty” (CEQ 1997:25). U.S. Environmental Protection Agency guidance (EPA 1998) recommends the use of census data on poverty income as one indicator, as well as other available data.

Unlike the CEQ guidance on minority populations, none of the environmental justice guidance documents quantitatively identify the proportion of low-income individuals that defines a low-income population. The annual statistical poverty thresholds are based on family income. A threshold of 50 percent of individuals in families with incomes below the poverty threshold (similar to the 50 percent threshold used to identify a minority population) would be an overly restrictive threshold for identifying a low-income population, given the nature of the poverty thresholds, which are not adjusted for regional costs of living, and are below levels commonly considered low-income in many areas of California.

For the purposes of this environmental justice analysis, the method of identifying low-income populations in the study area must account for regional costs of living. Therefore, this analysis uses a comparative approach and identifies a low-income population if the proportion of people with family incomes below the poverty threshold is greater than that within the general population (i.e., the city of Roseville); in other words, if the percentage of such people in any of the communities considered is greater than 9.0 percent.

As shown in **Table 3-4**, Census Tracts 207.13, 207.15, and 210.40 have greater percentages of people with incomes below the poverty threshold than the city of Roseville as a whole. Therefore, these are considered low-income populations.

**TABLE 3-4**  
**INCOME AND POVERTY IN THE STUDY AREA (2014–2018)**

<b>Geography</b>	<b>Median Household Income</b>	<b>Individuals with Family Income below Poverty Threshold</b>
Placer County, CA	\$84,357	8.0%
City of Roseville	\$84,105	9.0%
CT 207.11 (Maidu)	\$78,404	7.6%
CT 207.13 (Marlin)	<b>\$52,500</b>	<b>13.7%</b>
CT 210.43 (Campus Oaks, Galilee)	\$110,128	4.1%
CT 210.40 (Pleasant Grove)	<b>\$45,865</b>	<b>12.8%</b>
CT 210.43 (Vencil Brown, Misty Woods)	\$120,990	6.0%
CT 228.00 (Central Park)	\$105,750	4.8%

NOTE: CT = census tract  
SOURCE: U.S. Census Bureau 2018.

Additionally, California’s Integrated Regional Water Management guidelines provide criteria for identifying “disadvantaged communities” during water resources planning efforts. Under the

California Water Code, a *disadvantaged community* is defined as one with an annual median household income that is less than 80 percent of the statewide median household income (California Water Code, Section 79505.5[a]). The statewide median household income for the period 2014–2018 was \$71,228. Therefore, the threshold of 80 percent of the statewide median is \$56,982. As shown in Table 3-4, Census Tracts 207.13 and 210.40 (the Marlin and Pleasant Grove ASR well locations) have median incomes below this figure, and are therefore identified as disadvantaged communities under this methodology. These already were identified as low-income populations above based on poverty thresholds.

These two approaches identify slightly different groups of census tracts as low-income. This may be related to different average household/family sizes (because poverty thresholds are based on family size, but median income is not) or other factors.

### **Environmental Justice Impact Analysis**

As identified previously, Census Tracts 207.13, 207.15, 210.43, 210.40, and 228 have been identified as minority or low-income populations compared to Roseville as a whole for the purposes of this analysis. These are the tracts in which Marlin, Campus Oaks, Galilee, Pleasant Grove, and Central Park wells would be constructed and operated.

As described in Section 3.2, which identifies existing information and analyses in the 2012 ASR Program Final EIR that are sufficient to evaluate the impacts of the modified Project, no additional environmental review is provided. A review of the environmental topics adequately addressed in the 2012 ASR Program Final EIR indicates that no impacts, less-than-significant impacts, or impacts that would be less than significant with mitigation incorporated would occur with respect to aesthetics, agricultural resources, air quality, cultural resources, geology and soils, land use and planning, mineral resources, public services, recreation, transportation and traffic, and utilities. Of the potential impacts in these categories, none could create new or exacerbate existing disproportionate impacts on minority or low-income populations. Impacts on hydrology and water quality and biological resources are discussed in the 2012 ASR Program Final EIR and in Draft SEIR Sections 3.5 and 3.6, respectively. However, these are not human health–related impacts and do not have the potential to create or exacerbate existing disproportionate impacts on minority or low-income populations.

Of the remaining environmental topics analyzed, the primary resource area in which the modified Project has the potential to create or exacerbate existing disproportionate impacts on minority or low-income populations is noise.

As explained in Chapter 1 of this Draft SEIR, potentially significant impacts from nighttime drilling operations were identified for short-term drilling noise levels during construction. The 2012 EIR analysis determined that drilling operations would exceed the City’s nighttime noise level standard and that noise levels would be substantial. Mitigation Measure 4.3-1, which includes incorporating sound attenuation measures during drilling, would help reduce noise levels, but drilling may still exceed the City’s interior noise standards, a significant and unavoidable impact.

With the exception of Census Tract 210.43, in which two wells would be constructed and which has been identified as a minority population, well construction would not be disproportionately distributed to minority or low-income census tracts compared to census tracts with lower minority population percentages or higher incomes. Although the Campus Oaks and Galilee wells are located in the same census tract, they are located approximately 1 mile apart; therefore, the significant and unavoidable construction noise impacts from these wells would not affect the same receptors, and no receptors would experience impacts from construction of more than one of the wells. Therefore, the modified Project would not create new disproportionate impacts on minority or low-income populations, nor would it exacerbate existing disproportionate impacts on minority or low-income populations.

### 3.3.4 National Historic Preservation Act

A cultural resources survey was completed for the modified Project in 2020 to comply with the National Historic Preservation Act. The survey results indicated that no cultural resources have been previously recorded in the modified Project's Area of Potential Effects, and the survey did not identify cultural resources or other evidence of past human use or occupation in the Area of Potential Effects (see Appendix B).

## 3.4 Additional CEQA Impact Analysis

### 3.4.1 Introduction to the Analysis

This EIR evaluates the physical environmental effects that have the potential to be affected by the implementation of the modified Project. In light of Section 3.2, *Environmental Issues and Alternatives Not Requiring Further Analysis*, this Draft SEIR considers the following CEQA resource areas in greater detail in a revised impact analysis:

- Hydrology and Water Quality
- Biological Resources

### Definitions of Terms Used in This SEIR

This SEIR uses a number of terms that have specific meaning under CEQA. Among the most important of the terms used are those that refer to the significance of environmental impacts. The following terms are used to describe environmental effects of the proposed modified Project:

- **Significance Criteria:** A set of criteria used by the lead agency to determine the level or threshold at which an impact would be considered significant. Standards of significance used in this SEIR include those standards provided by the City of Roseville. In determining the level of significance, the analysis assumes that the modified ASR Program would comply with relevant federal, state, and local regulations and ordinances.
- **Significant Impact:** The level of significance identified for an impact of the modified Project that would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by comparing the evaluation of a project-related physical change to specified significance criteria. A significant impact is defined as “a substantial, or

potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance” (CEQA Guidelines Section 15382).

- **Potentially Significant Impact:** The level of significance identified for an impact of the modified Project that may cause a substantial adverse change in the environment, depending on certain unknown conditions related to the modified Project or the affected environment. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- **Less-than-Significant Impact:** The level of significance identified when the physical change caused by the modified Project would not exceed the applicable significance criterion.
- **Significant and Unavoidable Impact:** The level of significance identified if the modified Project would result in a substantial adverse physical change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
- **Cumulative Impact:** As defined in CEQA, “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Like any other significant impact, a significant cumulative impact is one in which the cumulative adverse physical change would exceed the applicable significance criterion and the project’s contribution is “cumulatively considerable” (CEQA Guidelines Section 15130(a)).
- **Mitigation Measure:** An action that could be taken that would avoid or reduce the magnitude of a significant impact. CEQA Guidelines Section 15370 defines mitigation as:
  - Avoiding the impact altogether by not taking a certain action or parts of an action;
  - Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
  - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
  - Compensating for the impact by replacing or providing substitute resources or environments.

## Section Format

After this section, the remainder of Chapter 3 is divided into technical sections (e.g., Section 3.5, *Hydrology and Water Quality*) that present for each environmental resource issue area the physical environmental setting, regulatory setting, significance criteria, methodology and assumptions, and impacts on the environment. Where required, potentially feasible mitigation measures are identified to lessen or avoid significant impacts. Each section includes an analysis of Project-specific and cumulative impacts for each issue area.

The technical environmental sections each begin with a description of the modified Project’s **environmental setting** and the **regulatory setting** as it pertains to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the proposed modified Project. The environmental setting discussion addresses the conditions that exist before implementation of the modified ASR Program. This setting establishes the baseline by which the proposed modified Project are measured for environmental impacts. The regulatory setting

discussion presents relevant information about federal, state, regional, and/or local laws, regulations, plans, or policies that pertain to the environmental resources addressed in each section.

Next, each section presents **significance criteria**, which identify the standards used by the City of Roseville to determine the significance of effects of the proposed modified Project. The significance criteria used for this analysis were derived from Appendix G of the CEQA Guidelines. Note that the 2012 ASR Program Final EIR was published before the 2018 amendments to the guidelines. Thus, in accordance with CEQA Section 15007, this SEIR will only address changes to the 2012 ASR Program Final EIR and will not provide an update to reflect the 2018 CEQA Guidelines.

A **methods and assumptions** description in each section presents the analytical methods and key assumptions used in the evaluation of effects of the modified Project, and is followed by an **impacts and mitigation measures** discussion. The impacts and mitigation measures portion of each section includes impact statements, prefaced by a number in boldfaced type. An explanation of each impact is followed by an analysis of its significance. The subsection concludes with a statement that the impact, following implementation of the mitigation measure(s) and/or the continuation of existing policies and regulations, would be reduced to a less-than-significant level or would be significant and unavoidable.

The analysis of environmental impacts considers both the construction and operational phases of the modified Project. As required by CEQA Guidelines Section 15126.2(a), direct, indirect, short-term, long-term, onsite, and/or offsite impacts are addressed, as appropriate, for the environmental issue area being analyzed. Under CEQA, economic or social changes by themselves are not considered significant impacts, but may be considered in linking the implementation of a plan to a physical environmental change, or in determining whether an impact would be significant.

Where enforcement exists and compliance can be reasonably anticipated, this SEIR assumes that the modified Project would meet the requirements of applicable laws and other regulations.

Mitigation measures pertinent to each individual impact, if available, appear after the impact discussions. The magnitude of reduction of an impact and the potential effect of that reduction in magnitude on the significance of the impact is also disclosed.

## 3.5 Hydrology and Water Quality

This section discusses the potential for effects of the modified Project on hydrology and water quality, including effects on groundwater. Section 4.2, *Water Quality*, of the 2012 Aquifer Storage and Recovery (ASR) Program Final EIR described the applicable environmental and regulatory setting and standards of significance, which are incorporated by reference and summarized below as appropriate.

Several comments submitted by individuals during circulation of the Notice of Preparation (NOP) for the 2012 ASR Program Final EIR are relevant to hydrology and water quality. These comments include concerns regarding the antidegradation analysis conducted in accordance with Section 1300 of the Water Code; potential health effects on the elderly; sodium content; the characteristics and effects of hard water; the taste and odor of ASR water compared to existing surface water; and groundwater/aquifer contamination. All applicable comment letters are contained in the 2012 ASR Program Final EIR.

The analysis in this section was developed based on the construction and operational features of the modified Project, current regulatory requirements, and more recent reporting on groundwater conditions from the West Placer Groundwater Sustainability Agency (WPGSA).

### 3.5.1 Environmental Setting

This section briefly summarizes the environmental setting provided in the 2012 ASR Program Final EIR and adds more recent data from the WPGSA.

#### Regional Geology and Hydrology

The sites of the original and modified Projects and vicinity are located in the Sacramento Valley, which is drained by the Sacramento River and tributaries and makes up the northern portion of the Great Valley Geomorphic Province. The Great Valley is a structural trough characterized by thick continental and marine deposits. The Project vicinity consists of transitional formations between the alluvial deposits of the Great Valley and the granite materials of the Sierra Nevada Mountains to the east.

The vast majority of the city of Roseville, including all of the original and modified Project sites, is located in the North American Subbasin (NASb), a component of the larger Sacramento Valley Groundwater Basin<sup>1</sup>. This groundwater subbasin has been characterized by four main aquifers: the Shallow, Upper Mehrten, Lower Mehrten, and Ione Formation aquifers. The storage capacity of the NASb has been estimated at approximately 4.9 million acre-feet (DWR 2006). A large pumping depression started to form in the southwestern portion of western Placer County about 60 years ago, but has been more stable for the last 20 years as a result of groundwater management actions (GEI 2017). Groundwater generally flows toward the southwest. Natural groundwater recharge to the subbasin is restricted by the rocks of the Sierra Nevada to the east and by the hardpans (dense clay

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<sup>1</sup> A small area, the far north eastern portion of the City extends outside of the groundwater basin and consists of largely igneous formations that comprise the Sierra Nevada foothills. Groundwater found in this area consists of relatively very small volumes found in fractures between rocks.

deposits with little to no permeability) that restrict the downward movement of water over half the valley on the east side of the Sacramento River.

## Water Quality—Treated Surface Water

As discussed in the 2012 ASR Program Final EIR, the City's Barton Road Water Treatment Plant would be the source of water used for injection as part of the ASR Program. Surface water from Folsom Lake is conveyed to Barton Road Water Treatment Plant, where it receives conventional water treatment before being distributed through the City's existing distribution system. The City's surface water supply is of very high quality, with nearly all constituents of concern remaining at non-detectable levels and complying with all primary and secondary drinking water standards (i.e., maximum contaminant levels [MCLs]).<sup>2</sup>

## Regional Water Quality—Groundwater

Groundwater quality can vary across the NASb, with some areas of good quality and other areas of marginal quality. Within the subbasin, the former McClellan Air Force Base, the Aerojet site in Rancho Cordova, and the Union Pacific Rail Yard in Roseville have been identified with major sources of groundwater impairments. As indicated in the 2012 ASR Program Final EIR, groundwater from local wells in the subbasin is generally below primary and secondary MCLs. Total dissolved solids (TDS) were reported in the range of 300–550 milligrams per liter (mg/L), while the recommended secondary MCL is 500 mg/L. The Western Placer County groundwater study obtained 58 groundwater samples from across the subbasin and found some MCL exceedances (**Table 3.5-1**).

**TABLE 3.5-1**  
**CONSTITUENTS IN GROUNDWATER EXCEEDING MAXIMUM CONTAMINANT LEVELS IN WESTERN PLACER COUNTY**

Constituent	MCL	Range Detected	Samples Below MCL	Samples Exceeding MCL
Total Dissolved Solids	500 mg/L *	120–2,700	47	11
Chloride	250 mg/L *	6.7–1,400	50	8
Sulfate	250 mg/L *	<0.4–280	57	1
Nitrate (as nitrate)	45 mg/L	<0.44–82	57	1
Fluoride	2 mg/L	<0.042–3.6	57	1
Arsenic	10 µg/L	<1.2–32	57	1
Perchlorate	6 µg/L	<1.9	58	0
Manganese	50 µg/L *	<4.5–840	36	22
Iron	300 µg/L *	<14–450	52	6
Total Chromium	50 µg/L	<4.5–17	58	0
Other Metals	varies	varies	58	0
Volatile Organic Compounds	varies	varies	58	0

**NOTES:**

µg/L = micrograms per liter; MCL = maximum contaminant level; mg/L = milligrams per liter

<sup>a</sup> Total of 58 samples were analyzed for each constituent

\* Secondary MCL.

SOURCE: GEI 2017

<sup>2</sup> Primary MCLs are enforceable standards, set to protect public health; secondary MCLs are set for taste, odor, and aesthetics and are not enforceable.

### ***Total Dissolved Solids, Chloride, and Sulfate***

The elevated concentrations of TDS, chloride, and sulfate all appear to be related to brackish water contained in the Ione Formation that underlies most of the freshwater-bearing aquifers. Some of the freshwater-bearing aquifers in contact with the Ione Formation contain chemical evidence of the Ione-type water affecting the water quality. In the Mehrten Formation aquifer, 7 and possibly up to about 20 monitoring wells in the region are being affected by brackish Ione Formation water (GEI 2017).

### ***Nitrate, Fluoride, Arsenic, and Perchlorate***

High concentrations of nitrate, fluoride, and arsenic were few and random. Nitrate had measurable, low-level concentrations in both the shallow and deeper aquifers. The presence of nitrate at deeper locations could be attributable to the naturally interconnected aquifers or to wells allowing shallow water to recharge deeper aquifers. These connections allow deep percolation of agricultural applied water containing fertilizers, historic wastewater discharges, and septic systems, which then migrates into the aquifers (GEI 2017).

### ***Manganese and Iron***

Twenty-two wells had concentrations of manganese, a naturally occurring metal, that exceeded the MCL. Most of these wells are screened in Mehrten Formation aquifers and located in the western portion of western Placer County, where wells are generally not used for municipal drinking water (GEI 2017). Some high concentrations were detected near Sheridan, the city of Lincoln, and east of State Route 65, in the Mehrten Formation aquifers. Iron concentrations exceeded the MCL in six wells, but there was no discernible pattern to the occurrences.

### ***Total Chromium***

Chromium and hexavalent chromium (a variety of chromium that has a +6 oxidation state) can occur either naturally or as a result of human activities. Total chromium is regulated in California with a drinking water MCL of 50 µg/L. In 2014, an MCL of 10 µg/L was established for hexavalent chromium. The rule established exceedances of the MCL as a running average (average of the four most recent sample results). However, on August 8, 2017, the State Water Resources Control Board (State Water Board) removed (redacted) the MCL for hexavalent chromium in response to a judge's ruling that said the State of California had failed to consider economic feasibility in setting the rule (Regional Water Board, 2018). The State Water Board is to reevaluate the MCL rule with economic feasibility included. Until the State Water Board releases a new rule for hexavalent chromium, the MCL for total chromium is the only applicable standard. Of the 58 samples collected, only one monitoring well from the shallow aquifer had a concentration of hexavalent chromium exceeding 10 µg/L.

## **Local Groundwater Quality**

Groundwater quality in the upper aquifers of the Riverbank, Turlock Lake Laguna, and Mehrten formations is regarded as superior to that of the lower aquifers like the Ione. Data from the City indicate that the area's groundwater can contain higher levels of minerals and salts than surface

water, but generally low levels of metals. The City has monitored all its production wells for arsenic and nitrate and the levels are within drinking water standards. The City has also monitored for disinfection byproducts (DBPs), which can be created when disinfectant treatments react with naturally occurring organic matter present in water. In pilot testing, as reported in the 2012 ASR Program Final EIR, water quality samples were tested for DBPs and the results showed that concentrations decreased below detection limits within 4½ months and remained below the limits for the remaining testing period.

### 3.5.2 Regulatory Setting

The following federal, state, and local regulations would apply to the modified Project.

#### **Federal**

##### ***Safe Drinking Water Act***

The Safe Drinking Water Act was enacted by Congress in 1974 to protect public health by regulating the nation's public drinking water. This law applies to every public water system in the United States.

The U.S. Environmental Protection Agency (EPA) sets national standards for drinking water. Standards for a total of 81 individual constituents have been established under the Safe Drinking Water Act, as amended in 1996. EPA may add additional constituents in the future. The Safe Drinking Water Act includes the Wellhead Protection Program and the Underground Injection Control (UIC) Program to prevent degradation of groundwater supplies.

##### ***Wellhead Protection Program***

The Wellhead Protection Program is a pollution prevention and management program used to protect underground sources of drinking water. The federal program was established in 1986 by the Safe Drinking Water Act, and requires that all states have EPA-approved wellhead protection programs.

##### ***Underground Injection Control Program***

The federal UIC Program, administered by EPA under the Safe Drinking Water Act, regulates the construction, operation, permitting, and closure of injection wells that place fluids, including water, underground for storage or disposal. The UIC Program protects underground sources of drinking water from contamination or endangerment by setting minimum requirements for injection wells. All injection must be authorized under either general rules or specific permits. Injection well operators and owners may not site, construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity that endangers underground sources of drinking water. Generally, UIC requirements ensure that injected fluids stay within the well and intended injection zone, or mandate that injected fluids not cause a public water system to violate drinking water standards or otherwise adversely affect public health.

The UIC program in California is overseen by the EPA Region 9 Ground Water Office. ASR wells are ultimately regulated by EPA under the UIC Program as Class V injection wells.

## **State**

### ***Groundwater Ambient Monitoring and Assessment Program***

The Groundwater Ambient Monitoring and Assessment Program, administered by the State Water Board, is a recently enacted program that provides a comprehensive assessment of water quality in water wells throughout the state. The program has two main components: the California Aquifer Susceptibility Assessment and the Voluntary Domestic Well Assessment Project.

### ***Groundwater Quality Monitoring Act***

The Groundwater Quality Monitoring Act (Assembly Bill 599, Water Code Section 10780 et seq.) requires the State Water Board to develop a comprehensive monitoring program in a report to the California Legislature. Water Code Section 10781 states that, to improve comprehensive groundwater monitoring and increase the public availability of information about groundwater contamination, the State Water Board, in consultation with other responsible agencies, shall follow a list of actions such as forming an interagency task force.

### ***State Drinking Water Program***

The State Water Board's Division of Drinking Water (DDW) is responsible for state implementation of the federal Safe Drinking Water Act and California laws and regulations related to drinking water. This regulatory work was originally the responsibility of the California Department of Health Services (now known as the California Department of Public Health) as described, and effective at the time, in the 2012 ASR Program Final EIR. In 2014, responsibility of the Drinking Water Program (DWP) was transferred to the State Water Board and the DDW. DDW develops and implements the Drinking Water Source Assessment Program. The program describes DDW's procedures for conducting drinking water source assessments, such as location of the drinking water source, delineation of zones (based on readily available hydrogeologic information on groundwater flow, recharge, and discharge, and other information deemed appropriate by the state).

DDW regulates the operation of potable and recycled water systems, issues operating permits for these facilities, reviews plans and specifications for new facilities, enforces existing laws and regulations (e.g., Safe Drinking Water Act); and reviews water quality monitoring results. Furthermore, DDW conducts source water assessments, and evaluates projects using injection and extraction into potable groundwater basins.

### ***Sustainable Groundwater Management Act***

For a description of the Sustainable Groundwater Management Act and the status of the North American Subbasin Groundwater Sustainability Plan, see Chapter 2, *Project Description*.

## Local

### ***Central Valley Regional Water Quality Control Board***

The Central Valley Regional Water Quality Control Board (Regional Water Board) provides regulatory oversight of injection of water into water bodies of the state, including groundwater. In the mid-2000s, the City obtained temporary permits from the Central Valley Regional Water Board to conduct ASR testing. In 2013, the City obtained a full-scale permit from the Central Valley Regional Water Board to operate an ASR program based on the project description documented in the 2012 ASR Program Final EIR, which was finalized in 2013.

On September 19, 2012, the Central Valley Regional Water Board adopted General Order 2012-0010, which established general waste discharge requirements for ASR projects that inject drinking water into groundwater. On April 18, 2013, the City was granted a notice of applicability under General Order 2012-0010-DWQ-RB5S-0001 that allows the injection and extraction of water for Roseville's ASR Program. As part of the general order, Monitoring and Reporting Program R5-2013-0803 requirements were provided by the Central Valley Regional Water Board that describe the specific water quality plan (i.e., in addition to DDW requirements) to which the City adheres when operating the ASR Program. Data and information collected and analyzed in accordance with the Monitoring and Reporting Program is reported to the Central Valley Regional Water Board.

### ***Sacramento Groundwater Authority and Western Placer County Groundwater Sustainability Agency and Plan***

For descriptions of the Sacramento Groundwater Authority and Western Placer Groundwater Sustainability Agency, see Chapter 2, *Project Description*.

### ***City of Roseville Plans and Ordinances***

For a description of the City's Urban Water Management Plan and Water Conservation and Landscape Ordinances, and the City of Roseville General Plan, including the General Plan goals, policies, and implementation measures related to the City's ASR Program, see Chapter 2, *Project Description*.

## 3.5.3 Impact Analysis and Mitigation Measures

### **Significance Criteria**

For the purpose of this analysis, the relevant standards of significance from the 2012 ASR Program Final EIR have been used to determine whether implementing the modified Project would result in a significant impact. A hydrology or water quality-related impact is considered significant if implementation of the proposed modified Project would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would decline to a

level which would not support existing land uses or planned uses for which permits have been granted);

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted water;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

## Methodology and Assumptions

The following impact analysis considers the potential impacts of the proposed changes included in the modified Project, including changed circumstances and new information requiring additional environmental review. Where existing information and analysis in the 2012 ASR Program Final EIR is considered sufficient to evaluate the impacts of the modified Project, no additional environmental review is provided.

## Issues Not Analyzed Further in This SEIR

The 2012 ASR Program Final EIR determined that the Project would have either no impact or a less-than-significant impact with regard to each of the following criteria. The modified Project would not change the conclusions described below, and therefore, they are not analyzed further.

**Depletion of Groundwater Supplies.** The analysis in the 2012 ASR Program Final EIR determined that impacts of Project construction and operation related to depleted groundwater supplies would be less than significant. The ASR Program is designed to enhance groundwater resources, and the Project includes the ongoing use of groundwater monitoring wells and computer modeling to address the potential for depletion of groundwater supplies, interference with groundwater recharge, and lowering of the groundwater table. For the modified Project, there is no change from the groundwater analysis presented for the original Project in the 2012 ASR Program Final EIR. The modified Project would not result in the depletion of groundwater supplies.

Therefore, the modified Project would not result in new or more severe potentially significant impacts than the original Project. The 2012 ASR Program Final EIR adequately addresses potential impacts of the modified Project on groundwater supplies.

**Substantial Alteration of Drainage Causing Erosion or Flooding or an Exceedance of the Capacity of Stormwater Infrastructure.** The analysis in the 2012 ASR Program Final EIR determined that impacts of Project construction and operation related to erosion, flooding, or an exceedance of the capacity of stormwater infrastructure would be less than significant. The proposed ASR well sites are relatively small (approximately 50 feet wide by 100 feet long and 500 feet deep), and their operation would increase impervious surfaces only slightly, at locations dispersed throughout Roseville. In addition, the modified Project would comply with National Pollutant Discharge Elimination System (NPDES) permit requirements, the City's Urban Stormwater Quality Management and Discharge Ordinance, and required BMPs. For these reasons, there would be no substantial alteration to drainage patterns that would cause erosion, siltation, or flooding on- or off-site from the modified Project, or exceed the capacity of existing stormwater infrastructure.

The modified Project includes different locations for eight of the proposed ASR wells. However, the wells would be the same size as described for the original Project in the 2012 ASR Program Final EIR, and they would be constructed in accordance with applicable NPDES permit requirements and City ordinances.

Therefore, the modified Project would not result in new or more severe potentially significant impacts than the original Project. The 2012 ASR Program Final EIR adequately addresses potential impacts of the modified Project related to erosion.

**Placement of Housing in a Flood Hazard Area.** The analysis in the 2012 ASR Program Final EIR determined that Project construction and operation would result in no impacts related to placement of housing in a flood hazard area, because the Project does not include any housing.

Similarly, the modified Project would not include housing. Therefore, the modified Project would not result in new or more severe potentially significant impacts than the original Project. The 2012 ASR Program Final EIR adequately addresses potential impacts of the modified Project related to placement of housing in a flood hazard area.

**Placement of an Impediment in a Flood Hazard Area.** The analysis in the 2012 ASR Program Final EIR determined that impacts of Project construction and operation related to placement of structures within a 100-year floodplain would be less than significant. The analysis found that the Project would not place any structures in a 100-year floodplain, but that if it did, the Project would be constructed in compliance with the City's Flood Damage Prevention Ordinance (Roseville Municipal Code Chapter 9.80).

For the modified Project, there is no change from the floodplain analysis presented in the 2012 ASR Program Final EIR. The ASR wells for the modified Project would remain outside of the

100-year flood zones and thus would not impede or redirect flood flows. Therefore, the modified Project would not result in new or more severe potentially significant impacts than the original Project. The 2012 ASR Program Final EIR adequately addresses potential impacts of the modified Project related to placement of structures within a 100-year floodplain.

**Flooding from Failure of a Dam or Levee.** The analysis in the 2012 ASR Program Final EIR determined that Project construction and operation would result in no impacts related to flooding from failure of a dam or levee, because no levees or dams are located in the Project vicinity.

Similarly, no levees or dams are located in the vicinity of the modified Project. Therefore, the modified Project would not result in new or more severe potentially significant impacts than the original Project. The 2012 ASR Program Final EIR adequately addresses potential impacts of the modified Project related to flooding from failure of a dam or levee.

**Seiche, Tsunami, or Mudflow.** The analysis in the 2012 ASR Program Final EIR determined that Project construction and operation would result in no impacts related to seiche, tsunami, or mudflow, because the ASR wells are not in locations susceptible to seiche, tsunami, or mudflow.

Similarly, the ASR wells for the modified Project would not be in locations susceptible to seiche, tsunami, or mudflow. Therefore, the modified Project would not result in new or more severe potentially significant impacts than the original Project. The 2012 ASR Program Final EIR adequately addresses potential impacts of the modified Project related to seiche, tsunami, or mudflow.

## Issues Analyzed Further in This EIR Section

The analysis in the 2012 ASR Program Final EIR focused on three potential impacts related to the following issue areas:

- Groundwater quality
- Drinking water quality
- Potential health effects of sodium content, especially effects on the elderly
- Characteristics and effects of hard water
- Taste and odor of ASR-extracted water

The 2012 analysis based the standards of significance on consultation with the California Department of Public Health (now known as the Division of Drilling water) and the Central Valley Regional Water Board. The consultation resulted in a determination that a significant impact would occur if the proposed ASR Program (the original Project) would violate primary federal and state drinking water standards.

Additional analysis of potential effects of the modified Project on groundwater quality and drinking water quality, including health effects and aesthetic qualities (e.g., hard water characteristics and taste and odor), is presented below.

## Impacts and Mitigation Measures

### **Impact 3.5-1: The modified Project could cause changes to groundwater quality through injection of treated imported water.**

The 2012 ASR Program Final EIR discussed the primary concern of the Regional Water Board: the potential for adverse effects on water quality from disinfection byproducts (DBPs) and fluoride that would be used as part of the treatment process before injection. The injected water would have higher concentrations of DBPs and fluoride than the existing groundwater, and such concentrations would have the potential to adversely affect groundwater quality. As explained in the 2012 ASR Program Final EIR, the Barton Road Water Treatment Plant complies with all drinking water standards and the City's surface water supply is of very high quality. In addition, the levels of DBPs and fluoride in the injected water would be consistent with the state's antidegradation policy for the maximum benefit to the people of the state.

For the modified Project, there is no change from the groundwater quality analysis presented in the 2012 ASR Program Final EIR. The modified Project includes different locations for eight of the proposed ASR wells; these wells would not have any material effect on the concentrations of DBPs or fluoride of the treated water used for injection. Therefore, the potential impact on groundwater quality from the water injected for the modified Project would be **less than significant**.

**Mitigation:** None required.

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### **Impact 3.5-2: The modified Project could cause changes to the drinking water quality of extracted groundwater.**

The City currently provides treated surface water as a primary water supply source. Groundwater is used as a backup and for emergency purposes, typically during drier and driest years. Both surface water and groundwater are treated with disinfectant, chlorine, and fluoride before delivery. The treated water meets all federal and state drinking water standards, regardless of the sources. As discussed for the original Project in the 2012 ASR Program Final EIR, the water extracted as part of the modified Project would continue to meet all primary water quality standards, as confirmed by pilot testing.

For the modified Project, there is no change from the water quality analysis presented in the 2012 ASR Program Final EIR. The modified Project includes different locations for eight of the proposed ASR wells; the treatment programs and water quality standards required of the Project would not change. Therefore, the impact of the modified Project related to primary drinking water standards would be **less than significant**.

Secondary drinking standards are more subjective and are not enforceable. The 2012 ASR Program Final EIR discussed the aesthetic differences in the treated surface water and the existing groundwater where the surface water is considered "soft" and the groundwater "hard," because of

a higher mineral content that is generally aesthetically less desirable. Secondary drinking water standards are not enforceable, and therefore, are not considered significance thresholds under CEQA. However, the 2012 ASR Program Final EIR offered the context that injecting the surface water would provide for a blending of these aesthetic water qualities; once in operation, the ASR Program would access groundwater intermittently and should no longer require delivery of pure native groundwater, as can occur under existing conditions. Therefore, the switch to groundwater as a water supply source would likely be less noticeable than it is under existing conditions.

For the modified Project, there is no change from the drinking standard analysis presented in the 2012 ASR Program Final EIR. The modified Project includes different locations for eight of the proposed ASR wells and would not change the operational aspects of the ASR Program as analyzed in the 2012 ASR Program Final EIR. Therefore, potential impacts of the modified Project on groundwater quality, including the aesthetic qualities associated with secondary drinking water standards, would be **less than significant**.

**Mitigation:** None required.

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**Impact 3.5-3: The modified Project could cause health effects from changes in groundwater quality.**

During preparation of the 2012 ASR Program Final EIR, concerns were raised in the NOP scoping meetings regarding the health risks of sodium levels in groundwater. Doctors may have advised individuals with certain medical conditions (e.g., high blood pressure, kidney disease, or congestive heart failure) to limit their sodium intake. Sodium is a principal chemical in bodily fluids, and at normal levels of intake from combined food and drinking water sources, it is not considered harmful. However, increased intake of sodium in drinking water may be problematic for people who have been advised to follow a low-sodium diet.

Generally speaking, however, drinking water does not play a significant role in sodium exposure for most individuals, even though groundwater can commonly have a higher sodium content than surface water (EPA 2003). According to the City's 2019 Water Quality Report, the concentration in local groundwater of total dissolved solids—a common measure of water quality that indicates the presence of sodium, among other inorganic salts—generally ranges between 62 and 390 milligrams per liter (mg/L), while the recommended secondary drinking water standard is 1,000 mg/L (City of Roseville 2019). The surface water levels of total dissolved solids for Folsom Lake are reported at 39 mg/L. Sodium levels were reported to range from 12 to 86 mg/L in the groundwater and to measure 3.1 mg/L in the surface water (City of Roseville 2019). There is no specific secondary drinking water standard for sodium.

As discussed in the 2012 ASR Program Final EIR, the groundwater has a higher sodium content than the existing treated surface water; however, the total amount of sodium that would be consumed through drinking water sourced from groundwater would be relatively small compared to the sodium content of an average food diet. For individuals who have been prescribed a very-

low-sodium diet, 500 mg/L per day, the sodium content may have a higher percentage contribution. However, the number of individuals in Roseville with such a dietary restriction would be limited, and those individuals are more likely to already be drinking sodium-limited bottled water. In addition, the ASR Program, as discussed above, would blend the higher quality treated surface water with the groundwater, which would likely reduce the sodium concentration in the groundwater. Therefore, with the intermittent operational uses of groundwater and the relatively low contribution of sodium to a diet from drinking water, the potential impact would be less than significant.

For the modified Project, there is no change to the analysis of the sodium content of groundwater presented in the 2012 ASR Program Final EIR. The modified Project includes different locations for eight of the proposed ASR wells and would not change the operational aspects of the ASR Program as analyzed in the 2012 ASR Program Final EIR. Therefore, the modified Project would have a negligible effect on sodium concentrations. As a result, health effects of the modified Project related to sodium levels would be **less than significant**.

**Mitigation:** None required.

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## Cumulative Impacts

The following potential cumulative impacts were analyzed in Section 5.3.2 of the 2012 ASR Program EIR:

- Adverse effects on groundwater quality
- Adverse changes to groundwater elevations (lowering of the aquifer)
- Increased potential for surface subsidence
- Adverse effects on surface water flows

As discussed for the original Project in the 2012 ASR Program Final EIR, the modified Project would be operated consistent with the Western Placer Groundwater Management Plan and its component basin management objectives, as well as the Water Forum Agreement. The goal of these programs is to ultimately provide a long-term sustainable supply of quality groundwater. As a result, consistency with these programs inherently considers cumulative effects to ensure that on a basin-wide basis (the cumulative context for the modified Project), there would be no adverse effects on groundwater quality or quantity, or secondary effects including subsidence or effects on surface water flows.

In addition, after publication of the 2012 ASR Program Final EIR, the Sustainable Groundwater Management Act was enacted, requiring the formation of groundwater sustainability agencies to prepare a groundwater sustainability plan to sustainably manage the entire North American Subbasin. West Placer, Sacramento, South Sutter, Sutter County, and Recreation District 1001 have agreed to work together to prepare a plan that defines the basin's sustainable yield,

undesirable results, and the projects and actions (including monitoring) that will be implemented to ensure that the basin is managed to avoid undesirable results.

The ASR Program is anticipated to be one of the projects and management actions identified in the forthcoming groundwater sustainability plan for the subbasin. The existing and modified Project would help to ensure that no net impact on the aquifer would result from potential use during dry and drier years. Other ASR programs and related projects with groundwater supply components would also be required to be consistent with these basin-wide plans to prevent impacts from becoming cumulatively considerable. The proposed modifications would not have any material effects on the cumulative operational aspects of the ASR Program as analyzed in 2012 ASR Program Final EIR. The subsequent Sustainable Groundwater Management Act legislation further ensures that cumulative impacts would be less than cumulatively considerable.

## 3.6 Biological Resources

This section characterizes and discusses the biological resources that could be affected by the modified Project. Biological resources were not analyzed in the 2012 Aquifer Storage and Recovery (ASR) Program Final EIR because the original Project was found to have a less than significant impact on biological resources.

None of the comments submitted by individuals during circulation of the Notice of Preparation (NOP) for the 2012 ASR Program Final EIR are relevant to biological resources.

The analysis in this section was developed based on Project-specific construction and operational features that have been modified from those described in the 2012 ASR Program Final EIR; current regulatory requirements; and the results of the reconnaissance-level surveys conducted on February 25, May 8, and July 24, 2020 at eight well sites.

This biological resources section includes information that addresses the modified Project's federal Endangered Species Act (FESA) compliance for purposes of State Revolving Fund funding.

### 3.6.1 Environmental Setting

Land uses surrounding the ASR well sites include commercial, mixed-use, and residential development with ornamental landscape trees. The ASR well sites include annual grassland, developed, ruderal/disturbed, and oak woodland habitats. **Table 3.6-1** summarizes the habitat types at the well locations. The habitat summary includes trees that provide habitat for nesting birds or potentially occurring sensitive biological resources within 150 feet of the well locations. A comprehensive list of plants observed on the ASR well sites is provided in **Attachment B** of the Biological Resources Technical Memorandum, included as **Appendix C** to this SEIR. Photographs of the well locations are provided in **Attachment C** to SEIR **Appendix C**.

**TABLE 3.6-1**  
**HABITAT TYPE BY WELL LOCATION WITHIN THE AQUIFER STORAGE AND RECOVERY WELL SITES**

Well Location within the Project Site	Habitat Types at Each Well Location	Habitat Features within 150 Feet of Each Well Location
Pleasant Grove	Annual grassland, developed	Wetlands
Campus Oaks	Ruderal/disturbed associated with a graded road and earthmoving soils	Wetlands
Misty Woods	Annual grassland (includes valley oak trees)	Potential seasonal wetland swale and mature trees
Galilee (inaccessible)	Ruderal/disturbed grassland (includes small ornamental trees), developed	Ornamental trees
Vencil Brown	Ruderal/disturbed associated with a park lawn (includes mature ornamental trees), annual grassland, potential seasonal wetlands	Ornamental trees, riparian, drainage, and potential wetlands to the southeast
Central Park	Ruderal/disturbed associated with a park lawn (includes mature ornamental trees), developed	Ornamental trees
Marlin	Oak woodland	Oak trees
Maidu	Ruderal/disturbed associated with a park lawn (includes mature ornamental trees), developed	Ornamental trees

SOURCE: Data compiled by Environmental Science Associates in 2020

## Special-Status Species

Special-status species are legally protected under the California Endangered Species Act (CESA) and FESA or other regulations, or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species fall into the following categories:

1. Species listed or proposed for listing as threatened or endangered under FESA (Code of Federal Regulations Title 50, Section 17.12 [50 CFR 17.12] [listed plants], 50 CFR 17.11 [listed animals], and various notices in the *Federal Register* [FR] [proposed species]).
2. Species that are candidates for possible future listing as threatened or endangered under FESA (61 FR 40, February 28, 1996).
3. Species listed or proposed for listing by the State of California as threatened or endangered under CESA (California Code of Regulations Title 14, Section 670.5).
4. Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).
5. Animal species of special concern to the California Department of Fish and Wildlife (CDFW).
6. Animals fully protected under Fish and Game Code (California Fish and Game Code Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
7. Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380).
8. Plants considered by the California Native Plant Society (CNPS) and CDFW to be “rare, threatened or endangered in California” (California Rare Plant Ranks 1A, 1B, and 2).

Several species known to occur on or in the vicinity of the ASR well sites are protected by federal and/or state endangered species laws, or have been designated as species of special concern by CDFW. In addition, CEQA Guidelines Section 15380(b) provides a definition of rare, endangered, or threatened species that are not included in any listing. For example, vascular plants listed as rare or endangered or as List 1 or 2 by CNPS are considered to meet Section 15380(b) requirements. Species recognized under these terms are collectively referred to as “special-status species.”

The special-status species considered for this analysis are based on the California Natural Diversity Database (CNDDDB), CNPS, and U.S. Fish and Wildlife Service (USFWS) lists. A comprehensive list of the special-status plant and wildlife species considered in the analysis is provided in **Attachments A and B of Appendix C** of this SEIR. The list includes the common and scientific names for each species, regulatory status (federal, state, local, CNPS), habitat descriptions, and a discussion of the potential for occurrence on the ASR well sites. The following set of criteria has been used to determine the potential of each species to occur on the ASR well sites:

- *Present*: Species has been observed on the ASR well sites.
- *High*: Species is known to occur on or near the ASR well sites (based on CNDDDB records within 5 miles) and suitable habitat is present on the sites.

- *Moderate*: Species is not known to occur on or near the ASR well sites, but suitable habitat is present.
- *Low*: Species is known to occur in the vicinity of the ASR well sites and no or marginally suitable habitat is present on the sites.
- *None*: Species is not known to occur on or in the vicinity of the ASR well sites and no suitable habitat is present.

Species with no or low potential for occurrence are excluded from the discussion below.

### ***Special-Status Plants***

The ASR well sites provide little to no habitat for special-status plants.

### ***Special-Status Wildlife***

#### **Nesting Raptors**

Two non-listed raptors were observed foraging in the vicinity of the ASR well sites: red-tailed hawk (*Buteo jamaicensis*) and turkey vulture (*Cathartes aura*). No raptors were observed nesting during the February 25, 2020, and May 8, 2020, biological resources surveys; however, both non-listed and special-status raptors have the potential to nest on and in the vicinity of the ASR well sites during the nesting season. The state species of special concern burrowing owl (*Athene cunicularia*) has the potential to nest in the annual grassland and ruderal/disturbed areas. The state-listed threatened Swainson's hawk (*Buteo swainsoni*) and state fully protected white-tailed kite (*Elanus leucurus*) have the potential to nest in the ornamental landscape and mature oak trees. The generally accepted nesting season that encompasses the extent of all potentially nesting raptors extends from February 15 to September 15. (Swainson's hawk nests from March 1 through September 15; all other nesting raptors nest from February 15 through August 31.)

#### **Nesting Birds**

The following non-listed commonly occurring birds were observed foraging in the vicinity of the ASR well sites: northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), California scrub jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), rock pigeon (*Columba livia*), and black phoebe (*Sayornis nigricans*). No active nests were observed during the February 25, 2020, and May 8, 2020, biological resources surveys; however, the annual grassland and ornamental landscape and oak trees on and in the vicinity of the ASR well sites provide suitable nesting habitat for birds during the nesting season. The generally accepted nesting season that encompasses the extent of all potentially nesting birds extends from February 15 to September 15.

### ***Vernal Pool Fairy Shrimp***

Vernal pool fairy shrimp are federally listed as threatened. On August 11, 2005, revised critical habitat was designated for vernal pool fairy shrimp (USFWS 2005a), and it occurs directly north of the ASR well sites. This species is also addressed in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (USFWS 2005b).

Vernal pool fairy shrimp may occur in vernal pools, or in other ephemeral water bodies that have hydrology similar to vernal pools (USFWS 2005b). After early-winter rainfall, and when temperature conditions are appropriate, fairy shrimp hatch in pools. In larger pools, vernal pool fairy shrimp may have multiple hatching events in the same season (USFWS 2005b). The time to maturity and reproduction for this species is temperature dependent, varying between 18 days and 147 days, with a mean of 39.7 days. When the temporary pools dry, offspring persist in suspended development as desiccation-resistant embryos (commonly called “cysts”) in the pool substrate until the return of winter rains and appropriate temperatures allow some of the cysts to hatch (USFWS 2005b).

This small crustacean occurs in a variety of vernal pool habitats, ranging from small, clear pools in sandstone rock formations to large, turbid pools in annual grasslands. Although the species has been collected from large vernal pools, it is most frequently collected from smaller pools. Most commonly, pools occur in grass- or mud-bottomed swales, or in basalt flow depression pools in unplowed grasslands (USFWS 2007).

Vernal pool fairy shrimp typically occur at elevations from 10 to 1,220 meters (33 to 4,003 feet) and has been collected at water temperatures as low as 4.5 degrees Celsius (40 degrees Fahrenheit) and as high as 23 degrees Celsius (73 degrees Fahrenheit) (USFWS 2005b). This species is typically associated with smaller and shallower vernal pools with relatively short periods of inundation (USFWS 2007b).

Because vernal pool fairy shrimp are known to occupy a wide range of vernal pool types, their historic distribution likely coincided with the historic distribution of vernal pools in the Central Valley, Southern California, and southern Oregon. In California, populations currently inhabit 11 of the 17 vernal pool regions identified in California and are currently found in 28 counties across the state. A few additional isolated populations occur in Southern California, including locations in Los Angeles, Santa Barbara, and Ventura counties. The greatest number of known occurrences of the vernal pool fairy shrimp is found in the Southeastern Sacramento Vernal Pool Region, where it is found in scattered vernal pool habitats in Placer, Sacramento, and San Joaquin Counties; in the vicinity of Beale Air Force Base in Yuba County; and at a single location in El Dorado County. In the Solano-Colusa Vernal Pool Region, the vernal pool fairy shrimp is known from the vicinity of Jepson Prairie, and the cities of Vacaville and Dixon in Solano County. This species has a relatively wide distribution compared to other listed fairy shrimp species, but it is rarely abundant (USFWS 2005b). There are several CNDDB occurrences for these species within 5 miles of the ASR well sites.

The staging area for the Vencil Brown ASR well site may contain seasonal wetlands, which may be considered suitable habitat for vernal pool fairy shrimp. Additionally, seasonal wetlands may occur within 250 feet of the Vencil Brown well site. A seasonal wetland swale has the potential to occur within the 250-foot buffer from the Misty Woods ASR well site; however, the swale has formed from the runoff from irrigation water associated with a residential development, and

without the irrigation water, would likely return to uplands. The swale lacks a ponded area necessary for this species to inhabit.

### ***Vernal Pool Tadpole Shrimp***

The vernal pool tadpole shrimp was federally listed as endangered on September 19, 1994 (59 FR 48153). On August 11, 2005, final critical habitat was designated for this species (USFWS 2005a). This species is also addressed in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (USFWS 2005b).

Vernal pool tadpole shrimp is adapted to live in seasonal pools, but has a relatively long life span compared to other vernal pool crustaceans. After winter rains, vernal pool tadpole shrimp cysts may hatch in as few as 4 days. This species takes approximately 3 to 4 weeks to mature and does not reach reproductive status until its carapace is at least 10 millimeters in length. Vernal pool tadpole shrimp can deposit multiple clutches of eggs per season as long as their habitat remains inundated. This species grows throughout its life, periodically molting its carapace (USFWS 2005b).

Vernal pool tadpole shrimp have occurred in vernal pools ranging from 2 to 356,253 square meters (6.5 square feet to 88 acres) in surface area. They have been found in pools with water temperatures ranging from 10 to 29 degrees Celsius (50 to 84 degrees Fahrenheit). Although vernal pool tadpole shrimp have been found on a variety of geologic formations and soil types, there is some indication that they are more likely to occur on High Terrace landforms and Redding and Corning soils, and on the Riverbank formation (USFWS 2005b).

Vernal pool tadpole shrimp is currently distributed across California's Central Valley and in the San Francisco Bay Area. Where they do occur, they are uncommon. The largest concentration of vernal pool tadpole shrimp occurrences is found in the Southeastern Sacramento Vernal Pool Region, where the species occurs on a number of public and private lands in Sacramento County. In the Solano-Colusa Vernal Pool Region, the vernal pool tadpole shrimp occurs in the vicinity of Jepson Prairie, Travis Air Force Base, and near Montezuma in Solano County and on the Sacramento National Wildlife Refuge in Glenn County. They also occur in Yuba, Placer, Merced, Tulare, Kings, Merced, Fresno, Stanislaus, and Alameda Counties (USFWS 2005b).

The staging area for the Vencil Brown ASR well site may contain seasonal wetlands, which may be considered suitable habitat for vernal pool tadpole shrimp. Additionally, seasonal wetlands may occur within 250 feet of the Vencil Brown well site. A seasonal wetland swale has the potential to occur within the 250-foot buffer from the Misty Woods ASR well site; however, the swale has formed from the runoff from irrigation water associated with a residential development, and without the irrigation water, would likely return to uplands. The swale lacks a ponded area necessary for this species to inhabit.

## **Natural Communities including Waters of the United States and Waters of the State**

The Vencil Brown ASR well site may contain seasonal wetlands in the staging area. Seasonal wetlands, emergent wetlands, and/or drainages occur within 150 feet of the Pleasant Grove, Campus Oaks, Misty Woods, and Vencil Brown well sites. Riparian vegetation occurs within 15 feet of the Vencil Brown well site. These are considered sensitive natural communities, waters of the United States, and/or waters of the state.

### **Protected Trees**

The Marlin ASR well site contains several native interior live oak and valley oak trees. The Misty Woods well site contains approximately three valley oaks. Native oak trees with single or multiple trunks 6 inches in diameter at breast height or greater are considered protected. A permit is required for any regulated activity around a protected tree, as defined by the Roseville Municipal Code.

## **3.6.2 Regulatory Setting**

The following federal, state, and local regulations would apply to the modified Project.

### **Federal**

#### ***Federal Endangered Species Act***

FESA prohibits the unauthorized take of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. The term *take* is defined by FESA as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

#### ***Migratory Bird Treaty Act***

Federal law protects raptors, migratory birds, and their nests. The federal Migratory Bird Treaty Act (MBTA) (U.S. Code Title 15, Sections 703–711 [15 USC 703–711] and 16 USC 7.3, Supp. I 1989, 50 CFR 21, and 50 CFR 10), prohibits killing, possessing, or trading in migratory birds. Executive Order 13186 (January 11, 2001) requires that any project with federal involvement address the impact of federal actions on migratory birds.

#### ***Wetlands and Waters of the United States***

The federal government defines wetlands in Section 404 of the Clean Water Act (CWA) as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3[b] and 40 CFR 230.3). In 1986, the term “waters of the United States” was defined as follows (33 CFR 328.3(a)):

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) All interstate waters including interstate wetlands;*

- (3) *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;*
- (4) *All impoundments of waters otherwise defined as waters of the U.S. under the definition;*
- (5) *Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;*
- (6) *The territorial seas; and*
- (7) *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.*

CWA Section 401 gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the United States. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The regional water quality control boards (regional water boards) regulate activities under CWA Section 401(a)(1), which specifies that state certification is required for any applicant requesting a federal license or permit to conduct a construction activity or facility operation that may result in a discharge into navigable waters. The certification originates from the state or appropriate interstate water pollution control agency where the discharge originates or will originate. Any such discharge must comply with the applicable provisions of CWA Sections 301, 302, 303, 306, and 307.

## **State**

### ***California Endangered Species Act***

CESA prohibits the take of plant and animal species that the California Fish and Game Commission has designated as either threatened or endangered in California. *Take* in the context of CESA means to hunt, pursue, kill, or capture a listed species, and any other actions that may result in adverse impacts when a person is attempting to take individuals of a listed species. The take prohibitions also apply to candidates for listing under CESA.

### ***California Fish and Game Code***

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation under it. Section 3503.5 prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Code Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) allow the designation of a species as fully protected. This is a greater level of protection than that afforded by CESA. All take of fully protected species is prohibited except take related to scientific research.

### ***Waters of the State***

Most projects involving water bodies or drainages are regulated by the regional water boards, the principal state agencies overseeing water quality of the state at the regional and local levels.

Where waters of the state overlap with waters of the United States, pending verification from the U.S. Army Corps of Engineers (USACE), those waters would be regulated under CWA Section 401, as described in the *Wetlands and Waters of the United States* section of the federal regulatory setting discussion, above.

In the absence of waters of the United States, waters may be regulated under the Porter-Cologne Water Quality Control Act if project activities, discharges, or proposed activities or discharges could affect California's surface, coastal, or ground waters. The permit submitted by the applicant and issued by the regional water board is either a water quality certification (if waters of the United States are present) or a waste discharge requirement (in the absence of waters of the United States).

### **Local**

#### ***City of Roseville Tree Preservation***

Chapter 19.66, Tree Preservation, in Title 19 of the Roseville Municipal Code prohibits conducting any regulated activities within the protected zone of a protected tree, including harming, destroying, killing, or removing any protected tree, unless authorized by a tree permit. *Regulated activities* are any activity done within the protected zone of a native oak tree (with the exception of routine maintenance performed by or under the direct supervision of a certified arborist) that would adversely affect the health of a native oak tree, such as cutting, grading, irrigating, and trenching. Protected trees include native valley oak (*Quercus lobata*), blue oak (*Q. douglassi*), interior live oak (*Q. wislizeni*), or hybrids thereof with a trunk 6 inches or greater diameter at breast height, measured as a total of a single trunk or multiple trunks.

#### ***City of Roseville General Plan***

The following goals and implementation measure from the *Vegetation and Wildlife* section in the Open Space and Conservation Element of the City of Roseville General Plan are relevant to the modified Project:

**Goal 2:** Maintain healthy and well-managed habitat areas in conjunction with one another, maximizing the potential for compatible open space, recreation, and visual experiences.

**Goal 3:** Protect special-status species and other species that are sensitive to human activities.

**Implementation Measure 4:** Require preservation of contiguous areas in excess of the City's Regulatory Floodplain, as defined in the Safety Element, as merited by special resources or circumstances. Special circumstances may include, but are not limited to, sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities, and maintenance access requirements.

The modified Project and the ASR well locations are consistent with the relevant Open Space and Conservation Element goals and implementation measure, particularly Goal 2, which calls for maintaining healthy and well-managed habitat areas, and Goal 3, which calls for protecting special-status species.

### 3.6.3 Impact Analysis and Mitigation Measures

#### Significance Criteria

The relevant standards of significance from the 2012 ASR Program Final EIR have been used to determine whether implementing the modified Project would result in a significant impact. For purposes of this analysis, an impact on biological resources is considered significant if implementation of the proposed modified Project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

#### Methodology and Assumptions

The information in this section is based on data collected during a reconnaissance-level biological field survey conducted by Environmental Science Associates biologist Kelly Bayne on February 25, 2020, and on review of the following other relevant documentation for the ASR well sites and surrounding vicinity:

- The environmental commitments identified in the ASR Program Final EIR (City of Roseville 2012).
- A records search of CDFW's CNDDDB for the Roseville and eight surrounding U.S. Geological Survey quadrangles (CDFW 2020) (**Attachment A of Appendix C** of this SEIR).<sup>1</sup>

<sup>1</sup> The Roseville quadrangle was used as the center quadrangle because six of the eight proposed well locations occur within this quadrangle, and the records search includes the Citrus Heights quadrangle, which contains the remaining well locations.

- A species list for the ASR well sites from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation database (USFWS 2020) (**Attachment A of Appendix C** of this SEIR).
- A search of the CNPS Inventory of Rare and Endangered Plants Database for the Roseville and eight surrounding U.S. Geological Survey quadrangles (CNPS 2020) (**Attachment A of Appendix C** of this SEIR).

## Issues Not Analyzed Further in This SEIR

**Interference with the Movement of a Native Resident or Migratory Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors.** The ASR well sites for the modified Project are in developed areas supporting commercial, mixed-use, and residential development. As such, the proposed well sites are not part of any major or local wildlife corridor/travel routes and would not substantially reduce the number or restrict the range of any species. These issues are not discussed further.

**Conflict with an Adopted Habitat Conservation Plan or Natural Community Conservation Plan.** There are no existing or anticipated habitat conservation plans or natural community conservation plans in the vicinity of the ASR well sites; therefore, the modified Project would not conflict with any such plans. These issues are not discussed further.

## Impacts and Mitigation Measures

**Impact 3.6-1: The modified Project would have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.**

Implementation of the modified Project could result in the degradation of habitat and loss of several special-status species, including nesting birds, vernal pool fairy shrimp, and vernal pool tadpole shrimp. Special-status species are protected under FESA, CESA, the California Fish and Game Code, CEQA, and other regulations. Ground-disturbing activities during construction, such as grading and excavation, could result in substantial effects on these species.

### ***Nesting Birds***

Most birds are protected under the MBTA (16 USC 703–711) and all raptors, including common species not considered special-status, are protected under the California Fish and Game Code (Section 3503.5). Noise and disturbance from construction activities that occur during the breeding season (generally between February 15 and September 15) could disturb nesting activities if an active nest is located near these activities. Any disturbance that causes nest abandonment and subsequent loss of eggs or developing young at active nests would violate California Fish and Game Code Sections 2800, 3503, and 3503.5 and the MBTA. This impact would be **significant**. However, implementing **Mitigation Measure 3.6-1** and **Mitigation Measure 3.6-2** would reduce impacts on nesting birds to **less than significant**.

## Mitigation Measures

**Mitigation Measure 3.6-1:** If construction (including equipment staging) occurs during the breeding season for nesting birds and raptors (between February 15 and September 15), a qualified biologist shall conduct a preconstruction nesting bird and raptor survey before the onset of construction activities. The preconstruction nesting bird and raptor surveys shall be conducted within 14 days before the start of construction activities between February 15 and September 15. Surveys for raptor nests (excluding Swainson's hawk) shall extend 500 feet from the ASR well sites. In addition, a 0.25-mile windshield-level survey shall be conducted to determine whether Swainson's hawk nests occur in the vicinity. If no active nests are detected, a letter report documenting the results of the survey shall be submitted to the City and no additional mitigation is recommended as long as construction begins within 14 days of the survey and does not halt for more than 14 days.

**Mitigation Measure 3.6-2:** If MBTA-protected birds or raptors are found to be nesting on or adjacent to the ASR well sites, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nest area and to avoid take. The buffer shall be maintained around the nest area and monitored until the end of the breeding season, or until the biological monitor determines that the young have fledged and are foraging on their own or the nest is no longer active. The extent of these buffers shall be determined by the qualified biologist and shall depend on the species identified, the level of noise or construction disturbance, the line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Generally accepted avoidance buffers are 100 feet for nesting birds and 250–500 feet for nesting raptors. A letter report documenting the rationale for the established buffer and the results of monitoring shall be submitted to the City within 14 days of the date the biologist determines that the nest is no longer active and the avoidance buffer is no longer required.

## Significance after Mitigation

With implementation of **Mitigation Measure 3.6-1** and **Mitigation Measure 3.6-2**, this impact would be reduced to a less-than-significant level because preconstruction surveys would be conducted to identify active nests and measures would be taken to avoid or minimize the disturbance of active nests so that project construction would not result in nest abandonment and loss of eggs or young.

## *Vernal Pool Fairy Shrimp and Vernal Tadpole Shrimp*

The staging area for the Vencil Brown ASR well site may contain seasonal wetlands, which may be considered suitable habitat for vernal pool fairy shrimp and vernal tadpole shrimp. Additionally, seasonal wetlands may occur within 250 feet of the Vencil Brown well site. USFWS considers project activities within 250 feet of potentially suitable fairy shrimp habitat to result in an indirect effect.

Construction of the modified Project could result in impacts on these species through habitat loss if any suitable seasonal wetland habitat is present on the ASR well sites. Additionally, these species could be indirectly affected by project activities through sediment runoff or changes to hydrologic conditions if potentially suitable seasonal wetland habitat is present within 250 feet of the ASR well sites. The impact of habitat loss, habitat disturbance, and direct take of the listed

species or indirect effects on suitable habitat would be **potentially significant**. However, implementing **Mitigation Measure 3.6-3** would reduce the impact to **less than significant**.

### **Mitigation Measure**

**Mitigation Measure 3.6-3:** Following the results of the wetland verification or determination from USACE, and before the start of construction, silt fencing followed by straw wattles or other erosion control measures shall be placed around the edge of potentially occurring seasonal wetlands on the Vencil Brown ASR well site. In addition, silt fencing shall be placed at the edge of the well footprint between the well's work area and the potentially occurring seasonal wetlands, ephemeral drainage, and riparian area on the Vencil Brown well site. Silt fencing followed by straw wattles or other erosion control measures shall be placed at the edges of the Pleasant Grove, Campus Oaks, and Misty Woods ASR well sites to prohibit construction activities in waterways and riparian areas. Trucks and other vehicles shall not be allowed to park beyond the fencing, nor shall equipment be stored beyond the fencing. No vegetation removal or ground-disturbing activities shall be permitted beyond the fencing. The fencing shall remain intact for the duration of the construction activities.

### **Significance after Mitigation**

With the implementation of **Mitigation Measure 3.6-3**, this impact would be reduced to a **less-than-significant** level because vernal pool fairy shrimp and vernal pool tadpole shrimp habitat would be avoided.

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### **Impact 3.6-2: The modified Project could have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS.**

The ASR well sites may support sensitive natural communities, such as wetlands and other waters of the United States or waters of the state subject to USACE jurisdiction under CWA Section 404, or protected under the Porter-Cologne Water Quality Control Act or California Fish and Game Code Section 1600 et seq. CWA Section 404 requires that a permit be obtained from USACE before the discharge of dredged or fill materials into any waters of the United States, including wetlands. Section 404 permits generally require mitigation to offset losses of these habitat types, in accordance with Executive Order 11990, which is intended to result in no net loss of wetland values or acres. Activities for the modified Project could affect the seasonal wetlands, emergent wetlands, drainages, and riparian habitat within 150 feet of the Pleasant Grove, Campus Oaks, Misty Woods, and Vencil Brown ASR well sites. Additionally, project activities could affect the riparian vegetation occurring within 15 feet of the Vencil Brown well site. The impact of the potential loss of riparian habitat or other sensitive natural community would be **potentially significant**. Implementing **Mitigation Measure 3.6-3** would reduce the impact to **less than significant**.

### ***Significance after Mitigation***

With the implementation of **Mitigation Measure 3.6-3**, listed above, this impact would be reduced to a **less-than-significant** level because riparian habitat or other sensitive natural communities at the ASR well sites would be avoided.

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**Impact 3.6-3: The modified Project could have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

The ASR well sites may support occurring wetlands and other waters of the United States or waters of the state subject to USACE jurisdiction under CWA Section 404 or protected under the Porter-Cologne Water Quality Control Act or California Fish and Game Code Section 1600 et seq. CWA Section 404 requires that a permit be obtained from USACE before the discharge of dredged or fill materials into any waters of the United States, including wetlands. Section 404 permits generally require mitigation to offset losses of these habitat types, in accordance with Executive Order 11990, which is intended to result in no net loss of wetland values or acres. Project activities could affect the seasonal wetlands, emergent wetlands, drainages, and/or riparian habitat within 150 feet of the Pleasant Grove, Campus Oaks, Misty Woods, and Vencil Brown ASR well sites. The impact of the potential loss of wetlands and other waters of the United States and state protected waters/wetlands would be **potentially significant**. Implementing **Mitigation Measure 3.6-3** would reduce the impact to **less than significant**.

### ***Significance after Mitigation***

With the implementation of **Mitigation Measure 3.6-3**, listed above, this impact would be reduced to a **less-than-significant** level because wetlands, waterways, and riparian areas would be avoided.

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**Impact 3.6-4: The modified Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

As described above in Section 3.6.2, *Regulatory Setting*, Chapter 19.66, Tree Preservation, in Title 19 of the Roseville Municipal Code prohibits conducting any regulated activities within the protected zone of a protected tree, including harming, destroying, killing, or removing any protected tree, unless authorized by a tree permit.

The Marlin and Misty Woods ASR well sites contain native interior live oak and valley oak trees that are considered protected under the City's tree ordinance. Because of the potential for the modified Project's construction activities to harm, destroy, kill, or remove these protected trees, this impact would be **potentially significant**. Implementing **Mitigation Measure 3.6-4** would reduce the impact to **less than significant**.

### **Mitigation Measure**

**Mitigation Measure 3.6-4:** Before the start of construction, a permit shall be obtained for any regulated activity around a protected tree, as defined by the Roseville Municipal Code.

### ***Significance after Mitigation***

With the implementation of **Mitigation Measure 3.6-4**, listed above, this impact would be reduced to a **less-than-significant** level because the modified Project would comply with the requirements of the City's tree ordinance.

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### **Cumulative Impacts**

The impacts of the modified Project on biological resources must be analyzed in conjunction with past, present, and future development projects that, combined with the modified Project, could result in cumulative impacts. The geographic context for the cumulative analysis of biological resources is the city of Roseville.

**Impact 3.6-5: Implementation of the modified Project, in combination with other cumulative development, could have a substantial cumulative effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.**

Historic and ongoing loss of natural habitats suitable for nesting birds, as well as sensitive and/or protected bird species and more common migratory birds and raptors, has occurred as natural habitats have been converted to rural, urban, and agricultural development. Development is expected to continue in Placer County in the future. Projects within the Roseville city limits would be required to comply with local ordinances and policies, in addition to CESA, FESA, the CWA, the California Fish and Game Code, and other relevant regulations, permits, and requirements. Nevertheless, the loss of natural habitats for special-status bird species, other raptors, and nesting birds in the city of Roseville is a significant cumulative impact.

Development of the modified Project could directly affect special-status and protected bird species and their habitat, which would result in a considerable contribution to the cumulative loss within the city of Roseville. Therefore, this would be a **potentially significant cumulative impact**.

### ***Mitigation Measures***

Implement Mitigation Measure 3.6-1 and Mitigation Measure 3.6-2.

### ***Significance after Mitigation***

With the implementation of **Mitigation Measure 3.6-1** and **Mitigation Measure 3.6-2** and compliance with applicable federal, state, and local policies and regulations, the modified Project's contribution to the regional cumulative impact on nesting birds and their habitat would be less than considerable, and the impact would be reduced to a **less-than-significant** level.

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**Impact 3.6-6: Implementation of the modified Project, in combination with other cumulative development, could have a substantial cumulative effect on riparian habitat or another sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.**

As a result of human settlement and development, riparian habitats and sensitive natural communities were cleared and developed for farming, flood control, and urban development and thus have been reduced substantially from their native range. It is likely that future development would continue to affect these sensitive habitats. Because of the decline in riparian habitat and sensitive aquatic habitats in the city of Roseville, any loss of these sensitive habitat types would represent a considerable contribution to the loss of federally or state-protected wetlands and waters within the Roseville city limits. Therefore, this would be a **potentially significant cumulative impact**.

#### ***Mitigation Measure***

Implement Mitigation Measure 3.6-3.

#### ***Significance after Mitigation***

Implementation of **Mitigation Measure 3.6-3** would reduce impacts on federally and state-protected wetlands and waters on the ASR well sites. Because this measure would ensure that the modified Project would avoid waters of the United States and state-protected wetlands and waters, the contribution of the modified Project to the overall cumulative impact would be less than considerable, and thus, the impact would be reduced to a **less-than-significant** level.

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**Impact 3.6-7: Implementation of the modified Project, in combination with other cumulative development, could have a substantial cumulative effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

As a result of human settlement and development, wetland and other aquatic habitats were cleared and developed for farming, flood control, and urban development and thus have been reduced substantially from their native range. It is likely that future development would continue to affect these sensitive habitats. Because of the decline in wetland and sensitive aquatic habitats in the city of Roseville, any loss of these sensitive habitat types would represent a considerable contribution to the loss of federally or state-protected wetlands and waters within the Roseville city limits. Therefore, this would be a **potentially significant cumulative impact**.

#### ***Mitigation Measure***

Implement Mitigation Measure 3.6-3.

#### ***Significance after Mitigation***

Implementation of **Mitigation Measure 3.6-3** would reduce impacts on federally and state-protected wetlands and waters on the ASR well sites. Because this measure would ensure that the

modified Project would avoid waters of the United States and state-protected wetlands and waters, the contribution of the modified Project to the overall cumulative impact would be less than considerable, and thus, the impact would be reduced to a **less-than-significant** level.

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**Impact 3.6-8: Implementation of the modified Project, in combination with other cumulative development, could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

As a result of human settlement and development, protected trees were cleared and thus have been reduced substantially from their native range. It is likely that future development would continue to affect protected trees. Projects within the Roseville city limits would be required to comply with local ordinances and policies protecting biological resources, such as the City's tree ordinance. Nevertheless, because of the potential for the loss of protected trees in the city of Roseville, this would be a **potentially significant cumulative impact**.

***Mitigation Measure***

Implement Mitigation Measure 3.6-4.

***Significance after Mitigation***

Implementation of **Mitigation Measure 3.6-4** would reduce impacts related to a conflict with local policies and ordinances protecting biological resources. Because this measure would ensure that the modified Project would comply with the requirements of the City's tree ordinance, the contribution of the modified Project to the overall cumulative impact would be less than considerable, and thus, the impact would be reduced to a **less-than-significant** level.

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**Cumulative Impacts**

The geographic scope for cumulative effects on biological resources includes the immediate vicinity of locations where the modified Project could impact special-status species and habitat. Because the modified Project would not significantly affect biological resources, there would be no cumulative impact on special-status species and habitat. The potential impacts of the modified Project, when considered together with similar impacts from other probable future projects in the vicinity, could result in a significant cumulative impact on special-status species and habitat. However, measures such as the City of Roseville's Construction Standards would limit the impacts to biological resources. In addition, cumulative projects undergoing CEQA review would have similar types of mitigation measures as listed in this section. Therefore, the modified Project's contribution to cumulative impacts would not be considerable, and the impact would be less than significant.

## 3.7 Cultural Resources

This section characterizes and discusses the cultural resources that could be affected by the modified Project. Cultural resources include historical resources, archaeological resources, and human remains. Cultural resources were not analyzed in the 2012 Aquifer Storage and Recovery (ASR) Program Final EIR because the original Project was found to have a less than significant impact on cultural resources.

Comments relevant to the cultural resources analysis were submitted during circulation of the Notice of Preparation (NOP) for the 2012 ASR Program Final EIR. Among these were comments from the Native American Heritage Commission regarding impacts on historical and archeological resources. For information about tribal cultural resources and Assembly Bill 52 compliance, see Chapter 1, *Introduction*.

The analysis in this section was developed based on Project-specific construction and operational features that have been modified from those described in the 2012 ASR Program Final EIR; current regulatory requirements; and the results of the reconnaissance-level surveys conducted on February 25, May 8, and July 24, 2020 at eight well sites (ESA 2020; see Appendix B).

This cultural resources section addresses the federal requirement for the modified Project to comply with the National Historic Preservation Act for purposes of State Revolving Fund funding.

### 3.7.1 Environmental Setting

#### Natural Environment

The location of the modified Project is in the southern portion of the Sacramento Valley, in the northern portion of California's Great Valley Geomorphic Province. The Great Valley, also called the Central Valley, is a nearly flat alluvial plain between the Sierra Nevada on the east and the Coast Ranges on the west. Subdivided into the Sacramento Valley to the north and the San Joaquin Valley to the south, the Great Valley averages about 50 miles wide and is about 400 miles long (Bartow 1991; Norris and Webb 1990). The Sacramento Valley contains thousands of feet of accumulated fluvial, overbank, and fan deposits from erosion of the surrounding ranges (Hackel 1966). The sediments vary from a thin veneer at the edges of the valley to 50,000 feet in the west-central portion. The Sacramento River is the main drainage of the northern Sacramento Valley, flowing generally south from the Klamath Mountains to its discharge point into Suisun Bay in the San Francisco Bay Area.

The underlying surficial geology of the modified Project area consists of older Pleistocene age deposits that have been disturbed by historic-era and modern artificial fill and other development. This geologic framework has very low potential to contain archaeological resources buried by natural alluvial processes, because the geologic deposit was formed before humans occupied the area (Meyer and Rosenthal 2008). Prehistoric archaeological resources in this geologic context would be at or very close to the existing ground surface.

## Cultural Background

### ***Prehistoric Context***

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given time frame, thereby creating a regional chronology. Rosenthal et al. (2007) provide a framework for interpreting the Central Valley's prehistoric record. They have divided human history in the region into three basic periods: *Paleo-Indian* (11550 to 8550 B.C.), *Archaic* (8550 B.C. to A.D. 1100), and *Emergent* (A.D. 1100 to 1700). The Archaic period is subdivided into three sub-periods: *Lower Archaic* (8550 to 5550 B.C.), *Middle Archaic* (5550 to 550 B.C.), and *Upper Archaic* (550 B.C. to A.D. 1100) (Rosenthal et al. 2007). Economic patterns, stylistic aspects, and regional phases further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

### ***Ethnohistorical Context***

The modified Project area is within the lands occupied and used by the Nisenan, or Southern Maidu. The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was "the line in the Sierra Nevada mountains where the snow lay on the ground all winter" (Littlejohn 1928).

Nisenan settlement locations depended primarily on elevation, exposure, and proximity to water and other resources. Permanent villages were usually located on low rises along major watercourses. The Nisenan occupied settlements from which specific task groups set out to harvest the seasonal bounty of flora and fauna provided by the rich valley environment. The Valley Nisenan economy involved riparian resources, in contrast with the Hill Nisenan, whose resource base consisted primarily of acorns and game (Wilson and Towne 1978).

As with other California Native American groups, the Gold Rush of 1849 had a devastating effect on the Valley Nisenan. The miners who flooded the area in search of gold brought diseases that decimated the Nisenan population. Those who survived were subjected to violence and prejudice at the hands of the miners, and the Nisenan eventually were pushed out of their ancestral territory. Although this contact with settlers had a profound negative impact on the Nisenan population through disease and violent actions, the Nisenan people survived and continue to maintain strong communities and action-oriented organizations (Castillo 1978). The Strap Ravine Nisenan Maidu Indian Site, listed in the National Register of Historic Places (National Register) in 1973, is on the north side of Maidu Park. The adjacent Maidu Museum is dedicated to the history, education, and preservation of the indigenous people of the area.

### ***Historical Context***

The Spanish made forays into the Central Valley starting in the mid-18th century, and the earliest significant non-indigenous presence in the region began in 1808 when Gabriel Moraga led an expedition from Mission San Jose to the northern Sacramento Valley. However, the Sacramento

Valley was still predominantly occupied by Native Americans, with only the occasional Spanish expedition into the interior to search for mission sites or escaped neophytes. By the late 1820s, English, American, and French fur trappers, attracted by the valley's abundant animal life, had established operations throughout the region. The earliest Euro-American settlement of the area occurred in the 1840s with the establishment of land grants by the Mexican government (Kyle et al. 2002).

The Sacramento Valley remained relatively isolated and sparsely populated until the advent of the Gold Rush period. Given Sacramento's proximity to mining areas and accessibility to maritime traffic, the area quickly became a trading and economic center. Commerce along the Sacramento River encouraged continued population growth, with many of the miners and farmers settling along the river's natural levees. Settlers recognized that the active floodplain deposited fertile soils in the lands nearest to the river, which supported bountiful crops and provided easy access to transportation corridors along the river itself. Ranchers and farmers found economic success in providing food and supplies for the miners, although frequent flooding troubled settlers' agricultural efforts and additional settlement (Kyle et al. 2002).

With an excellent climate, rich soil, and an abundant water supply, as well as both river and railroad transportation access, the Sacramento Valley became one of California's principal agricultural regions. In the late 19th and early 20th centuries, urban development began to spread beyond Sacramento's original city limits.

## Cultural Resources

### *Records Search and Literature Review*

Environmental Science Associates (ESA) staff completed a records search at the North Central Information Center (NCIC) of the California Historical Resources Information System on February 24, 2020 (File No. PLA-20-19). The purpose of the records search was to:

- (1) Determine whether known cultural resources have been recorded within or within a half-mile radius of each of the modified project's ASR well sites.
- (2) Assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources.
- (3) Develop a context for the identification and preliminary evaluation of cultural resources.

The records search consisted of an examination of the following documents:

- **NCIC digitized base maps** (U.S. Geological Survey Roseville and Citrus Heights 7.5-minute topographic maps), to identify recorded archaeological sites and studies within a half-mile radius of each of the modified Project's ASR well sites.
- **NCIC digitized base maps** (U.S. Geological Survey Roseville and Citrus Heights 7.5-minute topographic maps), to identify recorded historic-era resources of the built environment (buildings, structures, and objects) within and adjacent to each of the modified Project's ASR well sites.

- **Resource Inventories:** *California Inventory of Historical Resources, California Historical Landmarks, Archaeological Determinations of Eligibility for Placer County* (through May 2012), and *Built Environment Resource Directory (BERD)* (through January 2020).

The results of the records search indicate that 22 cultural resources have been previously recorded within the half-mile records search radius. No cultural resources have been previously recorded on any of the modified Project's ASR well sites.

### ***Survey Methods and Findings***

ESA completed a field survey of each of the modified Project's ASR well sites on February 24 and May 15, 2020. Each ASR well site was walked in narrow transects where feasible or observed from vantage points to provide an overall assessment of site conditions. In areas of dense ground cover or landscaping, rodent holes or bare areas were observed and vegetation was periodically scraped back to expose the surface soils.

No cultural resources or other evidence of past human use or occupation was identified during the field survey.

## **3.7.2 Regulatory Setting**

### **Federal**

#### ***National Register of Historic Places***

Under the National Historic Preservation Act of 1966, as amended (U.S. Code Title 54, Section 306108) and its implementing regulations, a property is considered significant if it meets the criteria for listing in the National Register at Code of Federal Regulations Title 36, Section 60.4 (36 CFR 60.4), as stated below:

*The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:*

- A. Are associated with events that have made a significant contribution to the broad patterns of our history, or*
- B. Are associated with the lives of persons significant in our past, or*
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or*
- D. Have yielded, or may be likely to yield, information important in prehistory or history.*

If a federal action is required for implementation of a project, National Historic Preservation Act Section 106 requires federal agencies to consider the effects of the undertaking on historic properties (properties listed in or eligible for listing in the National Register), and to afford the

Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. The Section 106 review normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR 800):

- (1) Identify historic properties in consultation with the State Historic Preservation Office and interested parties.
- (2) Assess effects.
- (3) Consult with the State Historic Preservation Office and others to develop and execute an agreement regarding the treatment of historic properties.
- (4) Proceed with the project according to the agreement.

## State

### ***California Environmental Quality Act***

CEQA (Public Resources Code [PRC] Section 21000 et seq.) is the principal statute governing environmental review of projects occurring in California. CEQA requires lead agencies to determine whether a project would have a significant effect on historical resources, unique archaeological resources, or tribal cultural resources.

### **Historical Resources**

The CEQA Guidelines establish that a *historical resource* is any of the following:

- (1) A resource in the California Register of Historical Resources (California Register).
- (2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g).
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and CEQA Guidelines Section 15064.5 apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of PRC Section 21083, pertaining to unique archaeological resources.

### **Unique Archaeological Resources**

As defined in PRC Section 21083.2, a *unique archaeological resource* is an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;

- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The CEQA Guidelines note that if an archaeological resource is not a unique archaeological, historical, or tribal cultural resource, the effects of the project on those cultural resources shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064.5(c)(4)).

### **Tribal Cultural Resources**

Impacts on tribal cultural resources are also considered under CEQA (PRC Section 21084.2).

PRC Section 21074(a) defines a tribal cultural resource as any of the following:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - (a) Included or determined to be eligible for inclusion in the California Register; or
  - (b) Included in a local register of historical resources, as defined in PRC Section 5020.1(k).
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of [PRC] Section 5024.1. In applying these criteria, the lead agency would consider the significance of the resource to a California Native American tribe.

Pursuant to PRC Section 21074(a)(c), a historical resource, unique archaeological resource, or non-unique archaeological resource may also be a tribal cultural resource if it is included or determined eligible for the California Register, included in a local register of historical resources, or is determined to be such by a state lead agency. The provisions applicable to tribal cultural resources apply to any project for which an NOP, a Notice of Mitigated Negative Declaration, or a Notice of Negative Declaration is filed on or after July 1, 2015; therefore, these provisions do not apply to the modified Project.

### ***California Register of Historical Resources***

The California Register is “an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1(a)). The criteria for eligibility for the California Register are based on criteria for listing in the National Register (PRC Section 5024.1(b)). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a cultural resource must be significant at the federal, state, and/or local level under one or more of the following four criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

- (2) Is associated with the lives of persons important in our past;
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must be of sufficient age, and retain enough of its historic character or appearance (integrity), to convey the reason for its significance.

### ***California Public Resources Code Section 5097.99***

PRC Section 5097.99, as amended, states that no person shall obtain or possess any Native American artifacts or human remains that are taken from a Native American grave or cairn. Any person who knowingly or willfully obtains or possesses any such artifacts or human remains is guilty of a felony punishable by imprisonment. Any person who removes, without authority of law, any such items with intent to sell or dissect or with malice or wantonness is also guilty of a felony punishable by imprisonment.

### ***California Native American Historic Resource Protection Act***

The California Native American Historic Resources Protection Act of 2002 (PRC Section 5097.995 et seq.) imposes civil penalties, including imprisonment and fines up to \$50,000 per violation, for persons who unlawfully and maliciously excavate upon, remove, destroy, injure, or deface a Native American historic, cultural, or sacred site that is listed or may be listed in the California Register.

### ***California Health and Safety Code Sections 7050.5 and 7052***

California Health and Safety Code Section 7050.5 protects human remains by prohibiting the disinterment, disturbance, or removal of human remains from any location other than a dedicated cemetery. PRC Section 5097.98 (reiterated in CEQA Guidelines Section 15064.5(e)) also identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. Health and Safety Code Section 7052 states that the disturbance of Native American remains, or any other human remains, is a felony unless the disturbance has been lawfully authorized.

## **Local**

### ***Placer County General Plan***

The following goal and policies in the Placer County General Plan related to cultural resources are applicable to the modified Project.

**Goal 5.D:** To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

**Policy 5.D.1:** The County shall assist the citizens of Placer County in becoming active guardians of their community's cultural resources.

**Policy 5.D.2:** The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

**Policy 5.D.3:** The County shall solicit the views of the Native American Heritage Commission, State Office of Historic Preservation, North Central Information Center, and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

**Policy 5.D.6:** The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a Countywide cultural resource data base, to be maintained by the Division of Museums.

**Policy 5.D.7:** The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

**Policy 5.D.8:** The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

**Policy 5.D.10:** The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.

### ***City of Roseville Construction Standards***

The City of Roseville has construction standards specific to the protection of cultural resources discovered during project implementation. Section 21-2(E) of the City's Construction Standards requires the following:

*The Contractor shall stop construction if cultural resources are discovered during excavation operations. It is possible that previous activities have obscured surface evidence of cultural resources.*

*If signs of an archeological site, such as any unusual amounts of stone, bone, or shell are uncovered during grading or other construction activities, work shall be halted within 100 feet of the find and the Roseville Community Development Department shall be notified immediately. A qualified archaeologist shall be consulted for an on-site evaluation. Additional mitigation may be required by the archaeologist.*

### 3.7.3 Impact Analysis and Mitigation Measures

#### Significance Criteria

The relevant standards of significance from the 2012 ASR Program Final EIR have been used to determine whether implementing the modified Project would result in a significant impact. For purposes of this analysis, an impact on cultural resources is considered significant if implementation of the proposed modified Project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resources pursuant to CEQA Guidelines Section 15064.5; or
- Disturb any human remains, including those interred outside of dedicated cemeteries.

#### Methodology and Assumptions

##### ***Architectural Resources***

Potential impacts on architectural resources are assessed by identifying any activities (during either construction or operations) that could affect resources identified as historical resources for the purposes of CEQA. Once a resource has been identified as a CEQA historical resource, it then must be determined whether the project's impacts would "cause a substantial adverse change in the significance" of the resource (CEQA Guidelines Section 15064.5(b)).

A *substantial adverse change* in the significance of a historical resource means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historic resource would be materially impaired" (CEQA Guidelines Section 15064(b)(1)). A historical resource is materially impaired through the demolition or alteration of the resource's physical characteristics that convey its historical significance and that justify its inclusion in the California Register (CEQA Guidelines Section 15064.5(b)(2)(A)).

##### ***Archaeological Resources***

Archaeological resources can include historical resources according to CEQA Guidelines Section 15064.5 as well as unique archaeological resources as defined in PRC Section 21083.2(g). The significance of most prehistoric and historic-era archaeological sites is usually assessed under California Register Criterion 4. This criterion stresses the importance of the information potential contained within the site, rather than its significance as a surviving example of a type or its association with an important person or event.

Archaeological resources also may be evaluated under California Register Criteria 1, 2, and/or 3. Under CEQA, archaeological resources may also be assessed as *unique archaeological resources*, defined as archaeological artifacts, objects, or sites that contain information needed to answer important scientific research questions.

Impacts on unique archaeological resources or archaeological resources that qualify as historical resources are assessed pursuant to PRC Section 21083.2, which states that the lead agency shall determine whether the project may have a significant effect on archaeological resources. As with architectural resources described above, it must be determined whether the project's impacts would "cause a substantial adverse change in the significance" of the resource (CEQA Guidelines Section 15064.5(b)).

### ***Human Remains***

Human remains, including those buried outside of formal cemeteries, are protected under several state laws, including PRC Section 5097.98 and Section 7050.5 of the California Health and Safety Code. This analysis considers impacts on human remains including intentional disturbance, mutilation, or removal of interred human remains.

### **Issues Not Analyzed Further in This SEIR**

There are no architectural resources or known archaeological resources at the modified Project's ASR well sites. Therefore, this section assesses potential impacts on previously unrecorded archaeological resources, both as historical resources as defined in CEQA Guidelines Section 15064.5 and unique archaeological resources as defined in PRC Section 21083.2(g). Human remains, including those buried outside of formal cemeteries, are protected under several state laws, including PRC Section 5097.98 and Health and Safety Code Section 7050.5.

### **Impacts and Mitigation Measures**

#### **Impact 3.7-1: The modified Project could cause a substantial adverse change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5.**

Based on the results of the records search and surveys, the paucity of nearby archaeological sites, previous disturbance, and the environmental context described in Section 3.7.1, *Environmental Setting*, the modified Project has a low potential to affect archaeological resources. Despite the low potential, the discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted.

Compliance with Section 21-2(E) of the City's Construction Standards would reduce impacts on historical or archaeological resources to a **less-than-significant** level. The Construction Standards require that if any cultural materials are identified during construction, work shall halt within 100 feet of the find until a qualified archaeologist is consulted and makes additional mitigation recommendations, as required.

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#### **Impact 3.7-2: The modified Project could disturb human remains, including those interred outside of dedicated cemeteries.**

There is no indication from the archival research or survey effort that any part of the modified Project area has been used for human burial purposes in the recent or distant past. Therefore, it is

unlikely that human remains would be encountered during construction of the modified Project. Despite the low potential, the possibility of inadvertent discovery cannot be entirely discounted.

Compliance with the applicable state regulations would reduce impacts on human remains to a **less-than-significant** level. PRC Section 5097.98 requires that activities within 100 feet of the find halt until the county coroner has been contacted to determine that no investigation of the cause of death is required. The county coroner will then contact the Native American Heritage Commission within 24 hours if it is determined that the remains are Native American. The Native American Heritage Commission will identify the most likely descendant of the deceased Native American. The most likely descendant will make recommendations for the appropriate means of treating the human remains and any associated funerary objects according to CEQA Guidelines Section 15064.5(d).

---

## Cumulative Impacts

The geographic scope for cumulative effects on cultural resources includes the immediate vicinity of locations where the modified Project could disturb historical resources, unique archaeological resources, and/or human remains. Because the modified Project would not affect historical resources of the built environment, there would be no cumulative impact on historical resources. Like the modified Project, cumulative projects in the vicinity could have a significant impact on previously undiscovered archaeological resources, including human remains interred outside of formal cemeteries, during ground-disturbing activities. The potential impacts of the modified Project, when considered together with similar impacts from other probable future projects in the vicinity, could result in a significant cumulative impact on buried archaeological resources or human remains. However, measures such as the City of Roseville's Construction Standards would require that work halt in the vicinity of a find until it is evaluated by a qualified archaeologist, and in the case of human remains, the Placer County Coroner according to the regulations of PRC Section 5097.98. In addition, cumulative projects undergoing CEQA review would have similar types of inadvertent-discovery measures. Therefore, the modified Project's contribution to cumulative impacts would not be considerable, and the impact would be less than significant.

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# CHAPTER 4

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# **CHAPTER 5**

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Appendix A  
**Water Forum Agreement**  
**Purveyor-Specific Agreement**





# WATER FORUM AGREEMENT



January 2000  
Updated October 2015



Dear Water Forum signatories and stakeholders,

I'm pleased to present this updated version of the Water Forum Agreement. Your staff have worked diligently to include amendments, updates, and minor corrections so the Agreement will remain relevant and useful.

Your staff at the Water Forum Successor Effort have done our best to include the following types of updates in this copy of the Agreement:

Amendments – These are changes to the Agreement and have been approved by the Water Forum decision process. An amendment is an official change to the wording and intent of that part of the Agreement. Amendments are presented in this version using red-line and strikeout text with the approval date of the amendment provided, like this:

~~Old text.~~ New text.

*Water Forum Successor Effort approved: June 2003*

Status Updates – These are information items provide the reader with context. The status updates do not change the Agreement, but provide clarity. The status updates are presented using blue-line text inside a blue box, like this:

Update – Update text.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

Minor edits – These are grammatical corrections or name changes that do not affect the Agreement. These are provided in blue-line and strikeout text, like this

Department of Fish and ~~Game~~ Wildlife

As new amendments to the Agreement are approved, we will insert them into this version. Likewise, we will strive to keep the status updates current with the most recent developments. If you find that any part of this document is out of date or incorrect, please contact us and we'll address the issue.

Although we have endeavored to preserve the original text in this version, you may find the original document useful. You can find the original Agreement at [Water Forum Agreement January 2000](#).

Best regards,



Tom Gohring  
Executive Director

# **WATER FORUM AGREEMENT**

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## CHAPTER 1 ~~SECTION ONE:~~

### MEMORANDUM OF UNDERSTANDING FOR THE *WATER FORUM AGREEMENT*

The stakeholder representatives have concluded that the best form of the *Water Forum Agreement* is a Memorandum of Understanding (MOU) among all signatories to the Agreement. By memorializing the substance of the Agreement, this MOU creates the overall political and moral commitment to the *Water Forum Agreement*.

All signatories agree that by signing the MOU, they agree to carry out all the actions specified for them in the *Water Forum Agreement*.

#### A. Preamble

A diverse group of business and agricultural leaders, environmentalists, citizen groups, water managers, and local government has carefully reviewed the region's water future. They found that unless we act now, our region is looking at a future with water shortages, environmental degradation, contamination, threats to groundwater reliability and limits to economic prosperity. Well-intentioned but separate efforts by individual stakeholders have left everyone in gridlock.

Joining together as the Water Forum, these community leaders from Sacramento along with water managers from Placer and El Dorado counties have spent thousands of hours researching the causes for this gridlock, agreeing on principles to guide development of a regional solution, and negotiating the *Water Forum Agreement*.

This diverse group agrees that the only way to break the gridlock is to implement a comprehensive package of linked actions that will achieve two coequal objectives:

**Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;**  
**and**  
**Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.**

#### B. Recitals

1. *Whereas*, a reliable water supply is needed by current and future residents, businesses and agriculture; and
2. *Whereas*, the lower American River is recognized as an important natural resource which should be protected and preserved for future generations by all Water Forum stakeholders; and

3. **Whereas**, the Sacramento region has groundwater contamination in some areas and groundwater decline in other parts of the region, both of which could have an impact on future water supply; and

4. **Whereas**, water purveyors and others have for years sought to develop additional safe, reliable water supplies with little success; and

5. **Whereas**, the environmental community and others in the region have for years sought to restore the fishery, wildlife, recreational, and aesthetic values of the lower American River; and

6. **Whereas**, all signatories now recognize the potential benefits of mutually supporting each other's goals and working together, as well as the collective risk of pursuing independent objectives; and

7. **Whereas**, the framework of an interest-based negotiation process which cannot provide exactly equivalent benefits for all but in most cases does make it possible for stakeholders to get what they really need in a *Water Forum Agreement*; and

8. **Whereas**, the City of Sacramento and the County of Sacramento have prepared and certified an Environmental Impact Report (EIR) analyzing the impacts of the *Water Forum Agreement*;

***Now, Therefore Be It Resolved That:***

1. All signatories to this Memorandum of Understanding (MOU) agree that participation in the *Water Forum Agreement* is in the best interest of water consumers and the region as a whole. Participation in the *Water Forum Agreement* is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases, lower American River habitat management, and a reliable dry year supply are in the public interest and represent reasonable and beneficial use of the water resource.

2. All signatories will endorse and, where indicated, participate in implementing the attached *Water Forum Agreement*, including the seven linked elements:

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation
- Groundwater Management
- Water Forum Successor Effort

3. All signatories agree that, based on existing analyses, successful implementation of the *Water Forum Agreement* will meet the Water Forum’s two coequal objectives:

**Provide a reliable and safe water supply for the region’s economic health and planned development through to the year 2030;**

**and**

**Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.**

4. All signatories will endorse the diversions and facilities agreed to for each purveyor as specified in the Purveyor Specific Agreements (PSAs) and subject to the caveats in [Chapter 4, Section I ~~Section Four, I~~](#), “Assurances and Caveats,” of the attached *Water Forum Agreement*. The diversions are also summarized in Table 0.2 ~~the chart entitled “1995 and Proposed Year 2030 Surface Water Diversions”~~ in [Chapter 3, Section I ~~Section Three, I~~](#) of the attached *Water Forum Agreement*.

5. Purveyors will implement actions in the drier and driest years to meet their customers’ water needs in order to reduce impacts of diversions. These are fully described in the PSAs ([Chapter 5 ~~Section Five~~](#), of the attached *Water Forum Agreement*) and are summarized in Table 0.2 ~~the chart entitled “1995 and Proposed Year 2030 Surface Water Diversions”~~ in [Chapter 3, Section I ~~Section Three, I~~](#) of the attached *Water Forum Agreement*.

6. All signatories will endorse implementation of an improved pattern of fishery flow releases from Folsom Reservoir while recognizing over time that this improved pattern will be refined to reflect updated understandings of the fishery. This is fully described in [Chapter 3, Section III ~~Section Three, III~~](#) of the attached *Water Forum Agreement*.

7. All signatories will endorse, and where appropriate, financially participate in the lower American River HME. This is fully described in [Chapter 3, Section IV ~~Section Three, IV~~](#) of the attached *Water Forum Agreement*.

8. All signatories will endorse and, where appropriate, implement the Water Conservation Element. This is fully described in [Chapter 3, Section V ~~Section Three, V~~](#) of the attached *Water Forum Agreement*.

9. All signatories will endorse, and where appropriate, participate in the Groundwater Management Element. This is fully described in [Chapter 3, Section VI ~~Section Three, VI~~](#) of the attached *Water Forum Agreement*.

10. All signatories will continue their support for the *Water Forum Agreement* through participation in the Water Forum Successor Effort to maintain communication among stakeholders, facilitate implementation of this *Agreement*, and allow it to adapt to changing conditions. This is fully described in [Chapter 3, Section VII ~~Section Three, VII~~](#) of the attached *Water Forum Agreement*.

11. All signatories to the *Water Forum Agreement* agree that an environmentally upgraded Sacramento River diversion to serve the north Sacramento county area and Placer County would provide important benefits to the region. All signatories to the *Water Forum Agreement* agree to work in good faith to develop a project consistent with the provisions and conditions described in [Chapter 4, Section III](#) ~~Section Four, III~~ of the *Water Forum Agreement*.

12. All signatories intend that land-use decisions dependent on water supply from the American River or the three groundwater sub-basins in Sacramento County be consistent with the limits on water supply from the American River and the estimated average annual sustainable yields for those three groundwater sub-basins as negotiated for the *Water Forum Agreement*. Beyond these agreements, limits on water from other sources have not been negotiated as part of the *Water Forum Agreement*. Signatories retain the right to support or oppose water projects that would use water from sources that have not been negotiated as part of the *Water Forum Agreement*.

In Sacramento County only, signatories retain the ability to support or oppose water facilities that would serve new development outside the Urban Services Boundary that was defined in the Sacramento County General Plan, December 1993. All parties also retain the right to support or oppose the sizing of water-distribution facilities that would allow service to new development outside of the Urban Services Boundary.

It is recognized that the *Water Forum Agreement* focuses on providing a reliable and safe water supply and protecting the lower American River. As such it is not an agreement on land use planning. Therefore all signatories retain the ability to support or oppose land use decisions on any basis except water supply availability insofar as these decisions are consistent with the *Water Forum Agreement*.

These agreements are fully described in [Chapter 4, Section IV](#) ~~Section Four, IV~~ of the attached *Water Forum Agreement*.

13. All signatories agree to support, and where appropriate, financially participate in the Folsom Reservoir Recreation Program. This is fully described in [Chapter 4, Section V](#) ~~Section Four, V~~ of the attached *Water Forum Agreement*.

14. All signatories agree that any solution that provides for our future needs will have costs. New diversion, treatment and distribution facilities, wells, conservation programs, required environmental mitigations, and continuation of the Water Forum will be needed to ensure successful implementation of the *Water Forum Agreement*.

15. All signatories agree that the *Water Forum Agreement* is the least costly method for providing a safe and reliable water supply and preserving the lower American River.

16. All signatories agree to work in good faith with those organizations whose issues were not fully resolved by the effective date of this initial *Water Forum Agreement* to

negotiate mutually acceptable agreements to resolve remaining issues. As soon as there is agreement on these remaining issues, the *Water Forum Agreement* will be amended to include them. This is fully described in [Chapter 4, Section VI](#) ~~Section Four, VI~~ of the attached *Water Forum Agreement*.

17. All signatories will participate in education efforts and advocate the *Water Forum Agreement* to regulatory agencies, other state and federal agencies, and where appropriate, to the stakeholders' boards.

18. All signatories to the *Water Forum Agreement* agree to assign any of their rights and/or obligations pursuant to the *Agreement* to any future successor or assignee.

### C. Assurances and Caveats

[Chapter 4, Section I](#) ~~Section Four, I~~ of the *Water Forum Agreement* describes assurances needed to ensure that future actions will occur. Some of the assurances will require approvals or implementation by local, state or federal agencies.

One of the most important assurances is an updated lower American River flow standard. All signatories agree they will recommend to the State Water Resources Control Board ([SWRCB](#)) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for the U.S. Bureau of Reclamation ([Reclamation](#)) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed-upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry-year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The *Water Forum Agreement* also includes caveats describing actions or conditions that must exist for the Agreement to be operative. Major caveats include:

1. Each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Water Forum Agreement* for all of its facilities and entitlements as shown on Table 0.1 ~~the chart~~ ["Major water supply projects that will receive Water Forum support upon signing the Water Forum Agreement,"](#) (Chapter 3, Section I) ~~(Section Three, I)~~ and if it

receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Diversion restrictions or other actions to reduce diversion impacts in drier years as specified in its PSA;

and,

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on Table 0.1 ~~the chart “Major water supply projects that will receive Water Forum support upon signing the *Water Forum Agreement*,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the agreement that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on adequate assurances, including:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, Federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of the Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of Reclamation~~; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third-party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if

Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in the lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **D. Term of the Memorandum of Understanding**

This MOU shall remain in force and effect until December 31, 2030.

#### **E. Legal Authority**

Nothing in this MOU or attached *Water Forum Agreement* is intended to give any signatory, agency, entity or organization expansion of any existing authority.

#### **F. Non-Contractual Agreement**

This MOU and attached *Water Forum Agreement* are intended to embody general principles agreed upon between and among the signatories but they are not intended to, and do not, create contractual relationships, rights, obligations, duties or remedies enforceable in a court of law by, between, or among the signatories or any third parties.

As described in the attached *Water Forum Agreement*, additional assurances will be provided through an updated lower American River flow standard, legally enforceable contracts, joint powers authorities, and commitments in project-specific environmental documentation.

**G. Changed conditions and amendments to this Memorandum of Understanding and the attached *Water Forum Agreement***

Given the complexity of issues, level of detail, number of signatories, duration of the *Water Forum Agreement*, and changed circumstances that will undoubtedly occur between now and the year 2030, some changes may call for renegotiation of some terms of the *Water Forum Agreement*. However, a request for renegotiation does not necessarily mean the *Water Forum Agreement* will be revised. The *Water Forum Agreement*, including specific agreements, can be changed or modified only with the expressed approval and consent of the signatories to the *Water Forum Agreement*.

Any proposal to amend this MOU or the attached *Water Forum Agreement* would be considered in the context of both of the Water Forum's coequal objectives. Specific procedures for amending the *Water Forum Agreement* consistent with the collaborative decision-making process will be developed by the Water Forum Successor Effort within the first year of its operation.<sup>1</sup>

**H. In witness thereof the undersigned parties have executed this MOU this 24<sup>th</sup> day of April, 2000.**

_____ Name	_____ Stakeholder Organization
_____ Name	_____ Stakeholder Organization
_____ Name	_____ Stakeholder Organization
_____ Name	_____ Stakeholder Organization
_____ Name	_____ Stakeholder Organization

---

<sup>1</sup> See Chapter 3, Section VII – Water Forum Successor Effort – for description of the subsequently developed Decision-making Process.

# Memorandum of Understanding for the Water Forum Agreement

Whereas, we have come together as a diverse group to  
Provide a reliable and safe water supply for the region's economic health  
and planned development through to the year 2030;

and

Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River;

Now, therefore, be it resolved that

All signatories agree that participation in the Water Forum Agreement is in the best interest  
of water consumers and the region as a whole.

In witness thereof the undersigned parties have executed this Memorandum of Understanding  
this 24th day of April, 2000.

Bruce Arcade Water District

Name Organization

John A. Co. Sutter Col. Water Co/HCS

Name Organization

Tony Grassi Associated Homebuilders of CA

Name Organization

Robert Spence Citizens Utilities Company of CA

Name Organization

James R. Ho City of Sacramento

Name Organization

Henry J. Ingram Citizen Heights Water District

Name Organization

Bryce Hoyer Fox Lake Water District

Name Organization

Henry J. Ingram Sacramento Metropolitan Water Authority

Name Organization

Leo VanBuren GALT Irrigation Dist.

Name Organization

Kathy A. Sorensen League of Women Voters

Name Organization

Michael J. Wilson Naterras Mutual Water Company

Name Organization

Pauline Racusci Placer County Water Agency

Name Organization

James F. Lenz RAUCHO MURIELA CSD

Name Organization

William H. Harty SACRAMENTO ASSOCIATED & RETIRED

Name Organization

Bill Miller SCAN

Name Organization

Edward A. Schreiner Orchard National Water District

Name Organization

Ron Miller SAN JUAN WATER

Name Organization

Alan D. Wade South American River Association

Name Organization

Vicki Lee Sierra Club

Name Organization

William S. Bradley El Dorado County Water Agency

Name Organization

Sharon H. Gentry Building Industry of Sutter California

Name Organization

John A. Co. Corvida Water District

Name Organization

Charles Sarnes City of Roseville

Name Organization

John A. Co. City of Roseville

Name Organization

William A. Smith Long Water District

Name Organization

Roger Kelle Sacramento County

Name Organization

John A. Co. PLP-30 Mono Water

Name Organization

John A. Co. Environmental Council of Sacramento

Name Organization

John A. Co. Sutter County

Name Organization

William A. Smith Roads Section District

Name Organization

John A. Co. Friends of the River

Name Organization

John A. Co. Longlake District Public Utility Dist

Name Organization

John A. Co. Northridge Water Dist

Name Organization

John A. Co. Orangevale Water Co

Name Organization

John A. Co. Rio Linda Water District

Name Organization

John A. Co. Sacramento County Farm Bureau

Name Organization

John A. Co. California Medical Association

Name Organization

John A. Co. Sacramento Municipal Utility District

Name Organization

John A. Co. Sacramento County Taxpayers League

Name Organization

John A. Co. Sacramento-Sutter Building Contractors Guild

Name Organization

Following is a list of the Water Forum signatories as of January 2016:

### BUSINESS

AKT Development  
Associated General Contractors  
North State Building Industry Association  
Sacramento Association of Realtors  
Sacramento Metropolitan Chamber of  
Commerce  
Sacramento Sierra Building & Construction  
Trades Council

Orange Vale Water Company  
Placer County Water Agency  
Rancho Murieta Community Service District  
Regional Water Authority  
Rio Linda/Elverta Community Water  
District  
City of Roseville  
Sacramento County Farm Bureau  
Sacramento Suburban Water District  
San Juan Water District

### ENVIRONMENT

Environmental Council of Sacramento  
Friends of the River  
Save the American River Association Inc.  
Sierra Club Mother Lode Chapter

### PUBLIC

League of Women Voters of California  
City of Sacramento  
County of Sacramento  
Sacramento County Taxpayers League  
Sacramento Municipal Utility District

### WATER

California-American Water Company  
Carmichael Water District  
Citrus Heights Water District  
Clay Water District  
Del Paso Manor Water District  
El Dorado County Water Agency  
El Dorado Irrigation District  
Florin County Water District  
City of Folsom  
Galt Irrigation District  
Georgetown Divide Public Utility District  
Golden State Water Company (Arden-  
Cordova Water District)  
Natomas Central Mutual Water Company  
Omochumne-Hartnell Water District

## **PROCEDURAL AGREEMENTS FOR THOSE NOT IN THE INITIAL WATER FORUM AGREEMENT**

### **A. Background**

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as the effective date of this initial *Water Forum Agreement*. However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

Therefore this section of the *Water Forum Agreement* describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

### **B. Specific Agreements**

1. All signatories to the *Water Forum Agreement* commit to work in good faith with organizations whose issues were not fully resolved by the effective date of this initial *Water Forum Agreement*. Their goal will be to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.
2. Mutually agreed upon Water Forum Successor Effort expenses related solely to converting that purveyor's procedural agreement into a specific agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a specific agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.
3. Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:
  - a. Amending the *Water Forum Agreement*;
  - b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum EIR; and
  - c. Decisions regarding expenditures of Habitat Management Funds.
4. Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

5. Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty day notice to the other party.

_____ Name	_____ Stakeholder Organization	_____ Date
_____ Name	_____ Stakeholder Organization	_____ Date
_____ Name	_____ Stakeholder Organization	_____ Date
_____ Name	_____ Stakeholder Organization	_____ Date

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## CHAPTER 2 ~~SECTION TWO:~~

### SUPPORT FOR INTEGRATED PACKAGE OF AGREEMENTS

#### A. Intent

**In order to achieve the Water Forum's two coequal objectives -- providing reliable and safe water supply and preserving the values of the lower American River -- all signatories need to support and, where appropriate, participate in each of the seven complementary elements of the *Water Forum Agreement*.**

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to support all seven elements. For instance, in order for environmentalists to get purveyors' support for an improved pattern of fishery flow releases, actions to meet customers' needs in drier years while reducing diversion impacts, the lower American River Habitat Management Element (HME), and the Water Conservation Element, the environmentalists need to support the purveyors' increased surface water diversions.

Conversely, in order for purveyors to obtain environmentalists' support for its increased surface water diversions, the purveyors need to support an improved pattern of fishery flow releases, develop actions to meet customers' needs in drier years while reducing diversion impacts, participate in the lower American River HME, and the Water Conservation Element.

The business and citizen interests need both the reliable water supply and preservation of the lower American River. Therefore, just as is the case for the purveyors and environmentalists, business and citizen groups need implementation of all seven elements for their needs to be met.

#### B. Specific Agreement to Support the Integrated Package of Agreements

As part of the *Water Forum Agreement* all stakeholder organizations will endorse and, where appropriate, participate in all seven elements of the *Water Forum Agreement*.

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## CHAPTER 3 ~~SECTION THREE~~

### SEVEN MAJOR ELEMENTS OF THE WATER FORUM AGREEMENT

#### I. INCREASED SURFACE WATER DIVERSIONS

##### A. Intent

One of the Water Forum's two coequal objectives is to:

***“Provide a reliable and safe water supply for the region’s economic health and planned development through the year 2030.”***

This element provides for increased surface water diversions that will be needed even with active conservation programs and sustainable use of the groundwater resource.

Population is projected to increase by one million in the Sacramento area over the next 30 years. Unless adequate water supplies are made available, many residents, businesses, and farmers will continue to suffer shortages during California's periodic droughts. This would limit our economic development and planned growth.

In this region the biggest stumbling block to balanced water solutions has been that individual groups —water purveyors, environmentalists, business groups, local governments, and citizens groups—have been independently pursuing their own water objectives—without much success. Even though millions of dollars had been spent in the past decade pursuing single purpose solutions, there was little to show for these fragmented efforts. In response to this gridlock, the Water Forum has developed a balanced program which includes increased surface water diversions.

The intent of the *Water Forum Agreement* is to have all signatories endorse the agreed upon diversions. Active endorsement from signatories will include endorsement for all entitlements, and facilities needed to divert, treat, and distribute the water. In this way the region's need for a reliable water supply will be achieved. [Chapter 5, Section I, ~~Section Five, I,~~](#) Purveyor Specific Agreements (PSAs), includes the details of entitlements and major diversion and treatment facilities needed for each purveyor to meet its customers' needs through the year 2030.

Table 0.1 ~~The chart entitled “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ on the following pages lists projects that Water Forum signatories will support.

## **B. Summary of Surface Water Diversions**

Each purveyor has its own water-supply needs and opportunities. Stakeholder representatives have spent thousands of hours reviewing the needs and opportunities of each purveyor.

Table 0.2 ~~The chart, “1995 and Proposed Year 2030 Surface Water Diversions,”~~ on the following pages summarizes the agreed upon diversions for each purveyor to meet its customers’ needs to the year 2030. The column, “1995 Baseline,” reflects the historic maximum amount of water that purveyors diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in its specific agreement.

The column, “2030 Diversion (~~wet and average years wet/ave years~~)” reflects the agreed upon amount of surface water that purveyors will need to divert in most years to meet their projected needs in the year 2030. This column specifies how much water will be diverted in average and wetter years.

The last two columns, “2030 Diversion (drier years)” and “2030 Diversions (driest years),” describe the amount of diversions in drier and driest years. How purveyors would continue to meet its customers’ needs in the drier and driest years is described in [Chapter 3, Section II](#) ~~Section Three, II~~, Actions to Meet Customers’ Needs While Reducing Diversion Impacts in Drier Years.

## **C. Wholesaling of Water**

Some purveyors signatory to the *Water Forum Agreement* plan to wholesale water to other purveyors within the region. Environmental signatories’ support for those wholesale water deliveries is contingent on the purveyors that receive the water signing and implementing their commitments under the *Water Forum Agreement*.

## **D. Federal or State Legislation for Funding for Water Supply Projects**

All signatories to the *Water Forum Agreement* retain the right to support or oppose federal or state legislation for funding of water supply facilities. If requested by an organization signatory to the *Water Forum Agreement*, the Water Forum Successor Effort will expeditiously meet in good faith to determine if that legislation will receive support from organizations signatory to the *Water Forum Agreement*.

## **E. Specific Surface Water Diversion Agreement**

As part of the *Water Forum Agreement*, all signatories will support the diversions agreed to for each purveyor as specified in [Chapter 5, Section I](#), ~~Section Five, I~~, PSAs and summarized in

Table 0.2~~the chart~~ on the following pages. ~~“1995 and Proposed Year 2030 Surface Water Diversions”~~. They would also support all facilities as specified in each PSA needed to divert, treat and distribute this water. Additionally, signatories’ support for diversions and facilities is subject to the caveats in [Chapter 4, Section I](#) ~~Section Four, I~~ (Assurances and Caveats) of the *Water Forum Agreement*. This support is linked to the purveyors’ support and, where appropriate, participation in each of the seven elements of the *Water Forum Agreement*.

**Table 0.1 Major water supply projects with Water Forum Support as part of the *Water Forum Agreement* (a).**

(Note: This is a partial list of projects which will be needed to accomplish the recommended diversions. Additional facilities may be needed and would be supported to the extent they are consistent with the *Water Forum Agreement*.)

Update- The following table was changed to reflect the status of the projects. The original table showed all of these projects as pending.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2009

Water Purveyor/Water Right Holder	Project(s) Identified in Water Forum Agreement	Project Status and New Projects
CARMICHAEL WD	Completed Actions	<ul style="list-style-type: none"> <li>Phase 1 surface water microfiltration treatment plant completed in 2001 with initial capacity of 17 mgd expandable to 22 mgd.</li> <li>Bajamont Water Treatment Plant's production capacity has increased to 22 million gallons per day. Expansion project completed in April 2008. Full production test was completed in May 2008.</li> </ul>
	<ul style="list-style-type: none"> <li>Treatment plant, diversion modifications, pumps station and piping.</li> <li>Expansion of microfiltration plant to offset the loss of groundwater supplies.</li> </ul>	
	On-going/Pending Actions	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li></li> </ul>	
CALIFORNIA AMERICAN WATER SERVICE COMPANY (formerly CITIZENS UTILITIES COMPANY of CALIFORNIA)	Completed Actions	<ul style="list-style-type: none"> <li>Approval of change of Place of Use with SWRCB for using PCWA water in the Lincoln Oaks/Royal Oaks Service Areas within Sacramento County.</li> </ul>
	<ul style="list-style-type: none"> <li>Approval of wholesale agreements w/City of Sacramento Change of Place of Use with PCWA.</li> </ul>	
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>Negotiate and implement wholesale water agreement for purchase of surface water through Cooperative Transmission Pipeline/Northridge Transmission Pipeline.</li> <li>Possible need for reallocation of surface water supplies to serve California American in the wet</li> </ul>
	<ul style="list-style-type: none"> <li>Wholesale water agreement for purchase of surface water from Sacramento Suburban Water District.</li> </ul>	

Water Purveyor/Water Right Holder	Project(s) Identified in Water Forum Agreement	Project Status and New Projects
		years.
CITY OF FOLSOM	Completed Actions	<ul style="list-style-type: none"> <li>Completed expansion of water treatment plant to 50 million gallons per day (mgd). Completed in 2004.</li> <li>Completed expansion of diversion facility at Folsom Reservoir.</li> <li>Completed relocation and enlargement of raw water conveyance pipeline. Completed in 2000.</li> <li>Approval of Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for Public Law (PL) 101-514 (Fazio water) transfer and delivery of 7,000 AF/year of the Sacramento County Water Agency's Central Valley Project (CVP) contract water. Completed in 1998.</li> <li>Completed water transfer of 5,000 acre-feet (AF) from Arden Cordova Water Service (a service area of the Golden State Water Company). Completed in 1994.</li> </ul>
	<ul style="list-style-type: none"> <li>Relocate &amp; replace raw water conveyance pipeline.</li> <li>Diversion facility at Folsom Reservoir</li> <li>Approval of PL 101-514 contract and change in place of use</li> <li>Expansion of water treatment plant.</li> </ul>	
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>Negotiate expansion of City of Folsom Sphere of Influence and related water supply projects to meet increased water demands south of Highway 50 along the El Dorado/Sacramento county line. SOI annexation completed in 2012.</li> <li>Continue to negotiate with and educate stakeholders in the need for a raw water pipeline under new flood control channel.</li> <li>Possible need for reallocation of surface water supplies in order to bank groundwater in areas served by Cooperative Transmission Pipeline/Northridge Transmission Pipeline in the wet years.</li> </ul>
	<ul style="list-style-type: none"> <li>Expansion of Sphere of Influence south of Highway 50.</li> <li>Construction of raw water pipeline under new flood control channel for Folsom Reservoir.</li> <li>Reallocation of existing surface water supplies to support conjunctive use in the North Basin.</li> </ul>	

CITY OF SACRAMENTO	Completed Actions	<ul style="list-style-type: none"> <li>• Expansion/rehabilitation of the Sacramento River and E.A. Fairbairn Water Treatment Plants as well as rehabilitation (upgrade fish screens) of the diversion structures for both facilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Obtained approval of diversion point for American River water at the Sacramento River diversion facility. Completed 2002.</li> <li>• Entered into water wheeling agreement with the Sacramento County Water Agency (SCWA) to serve Zone 40.</li> <li>• Entered into a water wholesale and wheeling agreement with SCWA to serve the Airport and Metro Air Park.</li> <li>• Entered into water wholesale contract with SSWD for the SSWD Arcade service area.</li> <li>• Entered into a water wholesale contract with California American Water to serve three areas that are within the City's American River Place of Use Boundary.</li> <li>• Sacramento River Water Treatment Plant Upgrade. Completed in 2005..</li> <li>• New diversion structure and fish screens for Sacramento River water completed. USBR grant in 2000. Completed in 2003.</li> <li>• .</li> </ul>
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• The capacity of the Fairbairn Water Treatment Plant was increased to 200 mgd.</li> <li>• Develop a water supply plan that is consistent with the Water Forum objectives of pursuing a Sacramento River diversion to meet the water supply needs of the Placer-Sacramento region and promoting ecosystem preservation along the lower American River.</li> </ul>
CITY OF ROSEVILLE	Completed Actions		<ul style="list-style-type: none"> <li>• Completed major pipeline infrastructure. Done</li> </ul>

	<ul style="list-style-type: none"> <li>• Long term wheeling agreement with Reclamation (PCWA water) – Signed November 2006</li> <li>• Renegotiation of Reclamation contract – In progress. Third Interim Renewal Contract in place expires 2017.</li> <li>• Raw water supply project – Completed in 2001.</li> <li>• Water treatment plant expansion – Expansion to 100 MGD completed in 2008.</li> </ul>	<p>over multiple years from 1995 through mid 2000's.</p> <ul style="list-style-type: none"> <li>• Completed raw water conveyance pipeline.</li> <li>• Completed expansion of diversion facility at Folsom Reservoir. Reclamation pumping plan expansion and parallel raw waterline completed.</li> <li>• Completed reclaimed water treatment plant construction. Pleasant Grove Regional Wastewater Plant completed in early 2000's.</li> <li>• Two water transfers have been executed between San Juan and the City of Roseville transferring 4,000 AF/year of Placer County Water Agency's (PCWA's) Middle Fork Project (MFP) water. Completed in 2004.</li> </ul>
	<p>On-going/Pending Actions</p> <ul style="list-style-type: none"> <li>• Assist in the completion of the Sacramento River Diversion Study EIS/EIR (a.k.a. the Sacramento River Water Reliability Study) for the proposed Elkhorn diversion, water treatment plant and conveyance infrastructure. See <b>Appendix A</b> for complete description of project and cost sharing partners. City is pursuing a diversion of up to 7,100 acre-feet per year. Roseville is partnering with other area agencies on River Arc project.</li> <li>• Reallocation of existing surface water supplies to support conjunctive use in the North Basin including Placer County.</li> </ul>	<ul style="list-style-type: none"> <li>• Agreements with USBR for transfer of CVP water to the Sacramento River pending successful completion of the multi-agency Sacramento River Water Reliability Study (SRWRS).</li> <li>• Develop a water supply plan that is consistent with the Water Forum objectives of pursuing a Sacramento River diversion to meet the water supply needs of the Placer-Sacramento region and promoting ecosystem preservation along the lower American River.</li> <li>• Obtain approvals for construction of the proposed joint Sacramento River diversion and water treatment plant project.</li> <li>• Negotiate need for reallocation of water supplies in the region to maximize use of surface water in the wet years, thus allowing in-lieu storage of groundwater for use in the dry and critical years.</li> </ul>

COUNTY OF SACRAMENTO (includes a portion of the ELK GROVE WATER SERVICE COMPANY), SACRAMENTO COUNTY WATER AGENCY (SCWA)	Completed Actions	<ul style="list-style-type: none"> <li>• 22,000 AF/year PL 101-514 contract – completed in April 1999, and in the process of reassigning 7,000 AF/year to the City of Folsom - and SMUD water transfers (30,000 AF/year) have been approved – completed in June 2006.</li> <li>• Point of diversion and diversion structure, and raw water conveyance of Sacramento County Water Agency (SCWA) and East Bay Municipal Utilities District (EBMUD) diversion project were approved as part of the Freeport Regional Water Project (FRWP) currently under construction – completed in April 2010.</li> <li>• CEQA review for the SCWA Vineyard Surface Water Treatment Plant completed as part of the FRWP – completed in March 2006.</li> <li>• Entered into water wheeling agreement with City of Sacramento – completed in April 2000.</li> <li>• Partnered with East Bay Municipal Utility District and the City of Sacramento to form the Freeport Regional Water Authority to provide a Sacramento River water supply – completed in February 2002.</li> <li>• Zone 40 Water Supply Master Plan and FEIR approved – completed in February 2006. A Master Plan amendment for Cordova Hills was approved in March 2013. Master Plan amendment drafts for Newbridge, Jackson Township and West Jackson was completed in February 2016 and will likely be adopted when the projects are approved by the Board. A Master Plan update is scheduled for 2017.</li> <li>• Received approval for agreement with The Nature Conservancy and Southeast Sacramento County Agricultural Water Authority (SSCAWA) to benefit the Cosumnes River –</li> </ul>
	<ul style="list-style-type: none"> <li>• Wholesale water agreement with the City of Sacramento to treat up to 7 mgd of SCWA’s surface water supplies.</li> <li>• Support expansion of Sacramento River diversion and treatment facilities; expansion of E.A. Fairbairn treatment facilities to treat SCWA water diverted from at or near the confluence or from the Sacramento River</li> <li>• Approval of PL 101-514 contract and change in place of use and point of diversion.</li> <li>• Approval of SMUD entitlement transfers</li> </ul>	

		<ul style="list-style-type: none"> <li>completed in February 2005.</li> </ul>
	On-going/Pending Actions	
	<ul style="list-style-type: none"> <li>Reallocation of existing surface water supplies to support conjunctive use in the Central Basin including County – on-going.</li> <li>Negotiate transfer of treated groundwater at Aerojet/Boeing for use in the Central Basin – completed in May 2010.</li> <li>Identify and present a proposal to achieve pre-wetting water supplies to the Cosumnes River – on-going.</li> </ul>	<ul style="list-style-type: none"> <li>Negotiate need for reallocation of water supplies in the region to maximize use of surface water and associated infrastructure in the wet years, thus allowing in-lieu storage of groundwater for use in the dry and critical years – on-going and currently looking for opportunities and working with RWA to foster these efforts.</li> <li>Develop the project description for the “Full</li> </ul>

		<p>Optimization of the FRWA Pipeline Project” and identify the potential project alternatives and associated stakeholders – completed and will consider project proponents use of FRWA facilities.</p> <ul style="list-style-type: none"> <li>Continue to work with Aerojet, Boeing, the Bureau of Reclamation, Golden State Water Company, and the Sacramento Municipal Utilities District on the transfer and conveyance of treated groundwater supplies (a.k.a. Replacement Water Supply Project) that are discharged to the American River – completed in May 2010.</li> </ul>
NATOMAS CENTRAL MUTUAL WATER COMPANY	Completed Actions	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Not available</li> </ul>	
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>Currently working with USBR and proponents of the Sacramento River Reliability Study on future diversion and fish screens in Sacramento River Diversion.</li> </ul>
	<ul style="list-style-type: none"> <li>Construct new diversion on Sacramento River north of the confluence with the American River.</li> <li>Assist in the completion of the Sacramento River Diversion Study EIS/EIR (a.k.a. the Sacramento River Water Reliability Study) for the proposed Elkhorn diversion, water treatment plant and conveyance infrastructure. See <b>Appendix A</b> for complete description of project and cost sharing partners. Natomas Mutual is pursuing only a raw water diversion for agricultural uses within their service area.</li> </ul>	
SACRAMENTO SUBURBAN WATER DISTRICT (formerly NORTHRIDGE WATER DISTRICT)	Completed Actions	<ul style="list-style-type: none"> <li>Projects and agreements for transfer of PCWA MFP water (up to 29,000 AF/year) completed. Completed June 1, 2000. Agreement amended in 2008.</li> <li>Entered into a wholesale surface water contract with the City of Sacramento for the former Arcade Water District Town &amp; Country service area. Completed January 20, 2004.</li> </ul>
	<ul style="list-style-type: none"> <li>Construct Cooperative Transmission Pipeline Completed in late- 1990’s.</li> <li>Obtain Water Rights from PCWA’s Middle Fork Project for service to areas of Sacramento County. Completed June 1, 2000. Agreement amended in</li> </ul>	

	<p>2008.</p> <ul style="list-style-type: none"> <li>Construct necessary infrastructure and enter into agreements with the City of Sacramento for use of surface water in the City's Place of Use for American River water diverted at the Fairbairn Water Treatment Plant. Agreement executed January 20, 2004. Infrastructure completed in 2006.</li> </ul>	<ul style="list-style-type: none"> <li>Cooperative Transmission Pipeline/Northridge Transmission Pipeline. Completed in late-1990's.</li> </ul>
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>Agreements with USBR for transfer of CVP water to the Sacramento River pending successful completion of the multi-agency Sacramento River Water Reliability Study (SRWRS).</li> <li>Develop a water supply plan that is consistent with the Water Forum objectives of pursuing a Sacramento River diversion to meet the water supply needs of the Placer-Sacramento region and promoting ecosystem preservation along the lower American River.</li> <li>Obtain approvals for construction of the proposed joint Sacramento River diversion and water treatment plant project.</li> <li>Negotiate need for reallocation of water supplies in the region to maximize use of surface water in the wet years, thus allowing in-lieu storage of groundwater for use in the dry and critical years.</li> <li>Enter into wholesale agreements with adjacent water purveyors (Del Paso Manor, California American, etc) for use of surface water in the wet years.</li> </ul>
	<ul style="list-style-type: none"> <li>Assist in the completion of the Sacramento River Diversion Study EIS/EIR (a.k.a. the Sacramento River Water Reliability Study) for the proposed Elkhorn diversion, water treatment plant and conveyance infrastructure. See <b>Appendix A</b> for complete description of project and cost sharing partners. Sacramento Suburban's proposed a diversion is for up to 29,000 acre-feet per year.</li> <li>Reallocation of existing surface water supplies to support conjunctive use in the North Basin including Placer County.</li> </ul>	
GOLDEN STATE WATER COMPANY (formerly SOUTHERN CALIFORNIA WATER COMPANY)	Completed Actions	<ul style="list-style-type: none"> <li>Entered into interim replacement water supply agreement with Sacramento Municipal Utility District (SMUD). This agreement expired in 2012. A new agreement was entered into with the City of Folsom to lease 5,000 AFY of our</li> </ul>
	<ul style="list-style-type: none"> <li>Obtain additional surface water supplies to compensate for lost groundwater supplies due to contamination.</li> </ul>	

	<ul style="list-style-type: none"> <li>Enter into interim water supply agreements with SMUD.</li> </ul>	<ul style="list-style-type: none"> <li>co-tenancy water rights.</li> <li>Completed water transfer of 5,000 AF to City of Folsom</li> <li>Entering into negotiations to obtain capacity from a third party to treat discharged GET water and convey said water back to our water system.</li> </ul>
	On-going/Pending Actions <ul style="list-style-type: none"> <li>Not available</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
PLACER COUNTY WATER AGENCY – Support is subject to resolution of remaining issues. See footnote (a)	Completed Actions	<ul style="list-style-type: none"> <li>PCWA’s American River Pump Station Project located in Auburn Canyon is complete. Change in place of use for CVP contract water pending.</li> </ul>
	<ul style="list-style-type: none"> <li>Permanent pumping plant at Auburn Canyon</li> <li>Change in point of delivery for USBR water</li> </ul>	
	On-going/Pending Actions <ul style="list-style-type: none"> <li>Assist in the completion of the Sacramento River Diversion Study EIS/EIR (a.k.a. the Sacramento River Water Reliability Study) for the proposed Elkhorn diversion, water treatment plant and conveyance infrastructure. See <b>Appendix A</b> for complete description of project and cost sharing partners. Sacramento Suburban’s proposed a diversion is for up to 35,000 acre-feet per year.</li> <li>Reallocation of existing surface water supplies to support conjunctive use in the North Basin including Placer County.</li> <li>Pursue American River diversion if SRWRS is not successful.</li> </ul>	<ul style="list-style-type: none"> <li>Sacramento River Water Reliability Study (SRWRS) has been changed to the RiverArc project; twelve partners have signed an MOU agreeing to share development costs of the project.</li> <li>Embarking on CEQA documentation in 2017.</li> <li>Obtain approvals for construction of the proposed RiverArc project in 2020.</li> <li>Completed a water supply plan that is consistent with the Water Forum objectives of pursuing a Sacramento River diversion to meet the water supply needs of the Placer-Sacramento region and promoting ecosystem preservation along the lower American River.</li> <li>Negotiate need for reallocation of water supplies in the region to maximize use of surface water in the wet years, thus allowing in-lieu storage of groundwater for use in the dry and critical years.</li> <li>Develop a statutory groundwater bank a joint</li> </ul>

		project with other partners in the region.
SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)	Completed Actions	<ul style="list-style-type: none"><li>• Two CVP water transfers (totaling 30, 000 AF/year) for SCWA and change in point of delivery have been executed for SCWA’s diversion at the FRWP. Completed 2006.</li><li>• Completed phase I of the Cosumnes Power Plant. Online and operational 2006.</li><li>• Completed environmental documentation and received approval for assignment of 30,000 AF of CVP Contract water to the Sacramento County Water Agency (SCWA). Completed 2004.</li><li>• Entered into interim replacement water supply agreement with Golden State Water Company (formerly Southern California Water Company) for its Arden Cordova Water Service area. Agreement initiated 2008. Agreement terminated 2001.</li><li>• Future potential transfer to South Sacramento Agriculture pending successful negotiation of a governance structure through the Southeast Sacramento County Agricultural Water Authority (i.e., a Water Forum Successor Effort sponsored negotiation). Ongoing effort.</li></ul>
	<ul style="list-style-type: none"><li>• Approval of surface water transfers to other agencies.</li></ul>	
For each SRWRS	Original project called for a diversion of up to 58,000 acre-feet per year including a proposed Elkhorn diversion, water treatment plant, and conveyance infrastructure. Project cooperators produced a draft EIS/EIR in 2007 for a project referred to as the Sacramento River Water Reliability Study (SRWRS). The SRWRS project was suspended in 2007. In 2015 project cooperators renewed their study of this potential project.	

	On-going/Pending Actions	<ul style="list-style-type: none"> <li>• Future agreements will be required.</li> <li>• SMUD Board and Regional Sanitation Board have agreed to execute the agreement. On hold until resolution of water quality issues. Expected completed 2016.</li> </ul>
	<ul style="list-style-type: none"> <li>• Continue to support pre-wetting project for the Cosumnes River.</li> <li>• Recycled Water Purchase Agreement with Sacramento Regional County Sanitation District</li> </ul>	
SAN JUAN FAMILY (includes CITRUS HEIGHTS WD, FAIR OAKS WD, ORANGEVALE WC)	Completed Actions	<ul style="list-style-type: none"> <li>• Completed raw water conveyance pipeline and expansion of diversion facility at Folsom Reservoir.</li> <li>• Approval of PL 101-514 CVP contract.</li> <li>• Change in Place of Use with the State Water Resources Control Board to serve Sacramento Suburban Water District.</li> </ul>
	<ul style="list-style-type: none"> <li>• Diversion facility at Folsom Reservoir</li> <li>• Approval of PL 101-514 contract</li> <li>• Water Treatment Plant expansion</li> <li>• Change of Place of Use with PCWA</li> </ul>	
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>• Negotiate need for reallocation of water supplies in the region to maximize use of surface water in the wet years, thus allowing in-lieu storage of groundwater for use in the dry and critical years.</li> </ul>
	<ul style="list-style-type: none"> <li>• Participate in regional conjunctive use studies and projects. Explore in-basin groundwater transfers to urban service areas to the east.</li> </ul>	
SOUTHEAST SACRAMENTO COUNTY AGRICULTURAL WATER AUTHORITY (includes GALT I.D., CLAY WD, OMOCHUMNE-HARTNELL WD, FARM BUREAU)	Completed Actions	<ul style="list-style-type: none"> <li>• Memorandum of Understanding and cost share approvals have been executed between the California State Department of Water Resources, the Southeast Sacramento County Agricultural Water Authority, the City of Galt, Rancho Murieta Community Services District, The Nature Conservancy, and the SCWA.</li> </ul>
	<ul style="list-style-type: none"> <li>• MOU for creation of groundwater governance structure and a groundwater management plan.</li> </ul>	
	On-going/Pending Actions	<ul style="list-style-type: none"> <li>• Water Forum Successor Effort is co-sponsoring the creation of the South Area Water Council for a negotiated groundwater governance structure that SMUD can contract with for the long term conjunctive use of surface water and groundwater in the South Sacramento Groundwater Basin.</li> <li>• SMUD transfers are pending a successful negotiation and an adopted groundwater management plan.</li> </ul>
	<ul style="list-style-type: none"> <li>• Convene an interest-based negotiation for a groundwater governance structure in the South Basin.</li> <li>• Adopt a South Basin Groundwater Management Plan and implement Basin Management Objectives.</li> <li>• Approval of SMUD entitlement or other transfer and Folsom South Canal Diversions</li> </ul>	

- a. Note: All suppliers having contracts for Central Valley Project (CVP) water will be renegotiating those contracts when the Central Valley Program Improvement Act (CVPIA) Programmatic Environmental Impact Statement (EIS) is complete.
- b. Support for PCWA major water supply projects is subject to resolution of these remaining issues: 1) environmentalists' support for PCWA pumps at Auburn (completed), 2) how water conservation Best Management Practice (BMP) #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented (completed), and 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

Update - These issues have all been successfully resolved.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

**Table 0.2** 1995 and proposed year 2030 surface water diversion. ~~Note:~~ The diversions described below, combined with the dry year actions, will meet each supplier's customer needs to the year 2030.

Amendment - The agreements involving Arcade and Northridge Water Districts were incorporated into the Sacramento Suburban Water District's Purveyor Specific Agreement.

*Water Forum Successor Effort approved: June 2003*

Since the *Water Forum Agreement* was signed, Golden State Water Company (formerly Arden Cordova Water Services) executed its PSA. As such, the diversion values for these entities are contained in the tables below

*Water Forum Successor Effort approved: March 2000*

Water Supplier/ Organization	American River diversions — upstream of Nimbus Dam			
	1995 Baseline (1)	2030 Diversion ( <del>wet and average</del> wet/ave years)	2030 Diversion (drier years)	2030 Diversion (driest years ) (2)
City of Folsom	20,000 AF (19)	34,000 AF (3)	Decreasing from 34,000 to 20,000 AF (4)	20,000 AF (5)
Sacramento Suburban Water District (formerly Northridge Service Area) (17)	0 AF	29,000 AF (9)	0 AF (10)	0 AF
Sacramento Suburban Water District (Arcade Service Area)	3,500 AF	11,200 AF	11,200 AF	3,500 AF
Placer County Water Agency (6) (7) [Subject to resolution of remaining issues (21)]	8,500 AF	35,500 AF (3)	Continue to divert 35,500 AF, with a replacement to the river equivalent to its drier diversions above baseline. The drier the year, the more water would be replaced up to 27,000AF (4) (20)	Continue to divert 35,500 AF, with a replacement of 27,000 AF to the river. (20)

City of Roseville (7)	19,800 AF	54,900 AF (3)	Decreasing from 54,900 AF to 39,800 AF with a replacement to the river equivalent to its drier diversions above baseline. The drier the year, the more water would be replaced up to 20,000 AF (4)	Continue to divert 39,800 AF, with a replacement of 20,000 AF to the river.
Golden State Water Company	5,000 AF	5,000 AF	5,000 AF	5,000 AF

	<b>American River diversions — upstream of Nimbus Dam - <i>continued</i></b>			
Water Supplier/ Organization	1995 Baseline (1)	2030 Diversions ( <i>wet and average wet/ave</i> years)	2030 Diversions (drier years)	2030 Diversions (driest years ) (2)
San Juan WD and Consortium in Sacramento County (Citrus Heights WD, Fair Oaks WD, Orange Vale Water Co.)	44,200 AF (8)	57,200 AF (3)	Decreasing from 57,200 to 44,200 AF (4)	44,200 AF
San Juan WD (Placer County)	10,000 AF	25,000 AF (3)	Decreasing from 25,000 to 10,000 AF (4)	10,000 AF
South Sacramento County Agriculture (includes Clay WD, Omochumne-Hartnell WD, Galt ID and Sacramento County Farm Bureau)	0 AF	35,000 AF (9)	0 AF (10)	0 AF
SMUD	15,000 AF (11)	30,000 AF (3)	Decreasing from 30,000 to 15,000 AF (4)	15,000 AF

	<b>American River diversions—between Nimbus and the Mouth</b>			
Water Supplier/ Organization	1995 Baseline (1)	2030 Diversi ( <del>wet and average</del> <del>wet/ave</del> years)	2030 Diversi (drier years)	2030 Diversi (driest years ) (2)
Carmichael WD (18)	12,000 AF	12,000 AF	12,000 AF	12,000 AF
City of Sacramento	50,000 AF	310 CFS (12) (13)	90,000 AF (15)	50,000 AF

	<b>Sacramento River diversions</b>			
Water Supplier/ Organization	1995 Diversions	2030 Diversi ( <del>wet and average</del> <del>wet/ave</del> years) (14)	2030 Diversi (drier years) (14)	2030 Diversi (driest years ) (14)
City of Sacramento	45,000 AF	290 CFS (13)	290 CFS (13)	290 CFS (13)
County of Sacramento	0 AF	up to 78,000 AF (16)	up to 78,000 AF (16)	up to 78,000 AF (16)
Placer County Water Agency (6) [Subject to resolution of remaining issued (21)]	0 AF	35,000 AF	35,000 AF	35,000 AF
Natomas Central Mutual Water Co. within Sacramento County	53,000 AF	45,600 AF	45,600 AF	45,600 AF

**Notes:** 1995 and proposed year 2030 surface water diversions

1. Baseline: Baseline means the historic maximum amount of water that suppliers diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a purveyor's specific agreement. Clarifications pertaining to the San Juan Water District, SMUD and the City of Folsom are noted in footnotes 8, 11, and 19.
2. Driest years (i.e. conference years): Years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.

3. ~~Wet and average years~~ ~~Wet/Ave Years~~: As it applies to these diverters (City of Folsom, City of Roseville, Placer County Water Agency, San Juan Water District and SMUD), years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.
4. Drier years: As it applies to these diverters (City of Folsom, City of Roseville, Placer County Water Agency, San Juan Water District and SMUD), years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF.
5. In the conference years the City of Folsom would reduce diversions by an additional 2,000 AF below its baseline to 18,000 AF through additional conservation to achieve recreational benefits to Folsom Reservoir and fishery benefits to the lower American River.
6. PCWA would receive support for an American River diversion of 35,500 AF (8,500 AF existing and 27,000 AF additional) in wetter and average years and a new Sacramento/Feather diversion of 35,000 AF. PCWA is willing to exchange 35,000 AF of its American River water for Sacramento and/or Feather River water provided the terms of such exchange do not result in any diminution of PCWA's water supply or an increased cost to PCWA.
7. For these suppliers (Placer County Water Agency and City of Roseville), some or all of its water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from the Middle Fork Project Reservoirs (MFP) by re-operating those reservoirs. Re-operation of the MFP reservoirs causes the reservoirs to be drawn down below historical operational minimum pool volumes.
8. The baseline for San Juan Water District (SJWD) and its wholesale service area within Sacramento County is the full amount of its entitlements (CVP contract and water rights) which they exercised in 1995.
9. ~~Wet and average years~~ ~~Wet/Ave Years~~: As it applies to ~~SSWD~~ diverters, years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 AF.
10. Drier years: As it applies to ~~South Sacramento County Agriculture~~ diverters, years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 1,600,000 AF.
11. The baseline for SMUD is the 1995 diversion amount which reflects the shut down of Rancho Seco Power Plant.
12. ~~Wet and average years~~ ~~Wet/Ave Years~~: As it applies to the City of Sacramento, time periods when the flows bypassing the E. A. FWTP diversion exceed the "Hodge flows."
13. For modeling purposes, it is assumed that the City of Sacramento's total annual diversions from the American and Sacramento River in year 2030 would be 130,600 AF for use within the City limits.
14. As it applies to (City of Sacramento, Sacramento County, Placer County Water Agency and Natomas Central Mutual Water Company) diverters, there is no Water Forum limitation to diversions from the Sacramento River.
15. Drier years: As it applies to the City of Sacramento, time periods when the flows bypassing the City's E. A. FWTP diversion do not exceed the "Hodge flows." Within its existing capacity, the City can divert from the American River 155 cfs in June, July and August, 120 cfs in January through May and September and 100 cfs in October through December.

16. The total for the County of Sacramento (78,000 AF) represents 45,000 AF of firm entitlement and 33,000 AF of intermittent water. The intermittent supply is subject to reduction in the drier and driest years. To reduce reliance on intermittent surface water, the County of Sacramento intends to pursue additional firm supplies.
17. [Sacramento Suburban Water District \(SSWD\)](#) (formerly [Northridge Water District](#)) ~~Northridge Water District (NWD)~~ and other signatories have agreed that for an interim ten-year period ([ending in January 2010](#)), ~~SSWD NWD~~ would be able to divert PCWA water in years when the projected March-through-November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF. After the ten-year period, unless the State Water Resources Control Board (SWRCB) issues a subsequent order, ~~SSWD NWD~~ will divert up to 29,000 AF of water from Folsom Reservoir under the ~~SSWD NWD~~ -PCWA contract only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 AF.
18. Carmichael Water District (CWD) will divert and use up to its license amount of 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to its historic baseline level of 12,000 AF by implementation of [a water conservation program](#) ~~Urban Water Conservation BMPs~~. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity it has foregone delivery and/or diversion of under this *Agreement*, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the improved pattern of fishery flow releases, for diversion or re-diversion at, near, or downstream of the confluence of the lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of Federal and State law.
19. This is an agreed-upon amount which is within the historic diversion data and is equivalent to Folsom's treatment capacity as of 1999.
20. Replacement of water to the river as a dry-year action as provided in PCWAs specific agreement is contingent on PCWAs ability to sell this water to the Department of the Interior to meet Anadromous Fishery Restoration Program ([AFRP](#)) goals for the lower American River or to other parties for their use after it flows down the lower American River.
21. Remaining issues which are being negotiated are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation BMP #5 (Large Landscape Water Audits and Incentives for Commercial, Industrial, Institutional and Irrigation Accounts) will be implemented, 3) environmentalists' support for conditions related to release of replacement water in drier and driest years.

[Update- These issues have all been successfully resolved.](#)

[- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.](#)

To meet requirements of the [California Environmental Quality Act \(CEQA\)](#), the Water Forum Programmatic EIR assessed impacts of all reasonably foreseeable diversions that may occur in the watershed. For the Water Forum EIR, potential diversions of the purveyors shown in [Table 3.3](#) ~~the chart~~ below were modeled as specific part of the Water Forum Proposal based on preferences communicated by representatives of [those](#) purveyors listed [below](#). ~~on this chart~~.

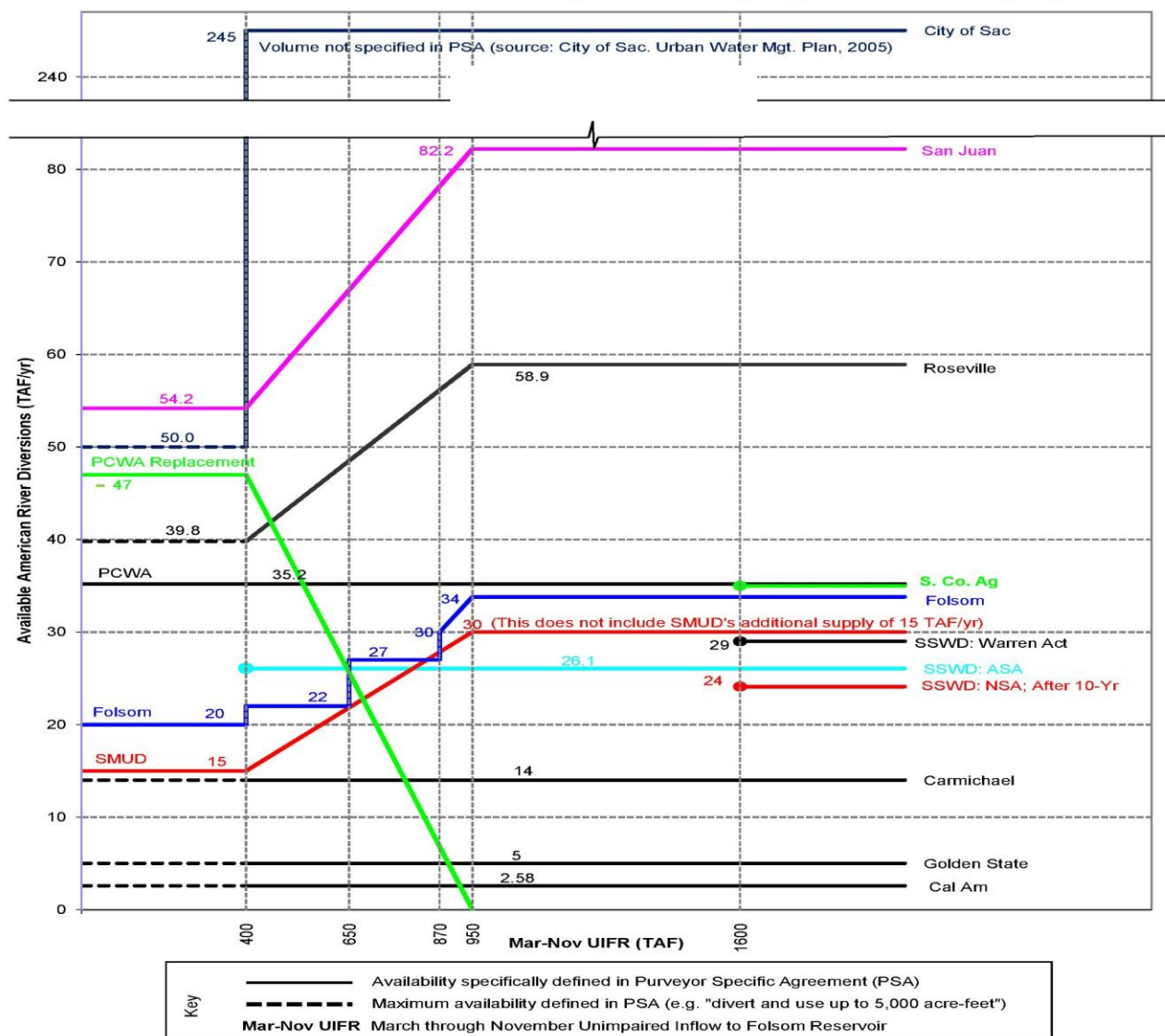
However, mutually acceptable agreements ~~had have~~ not been reached [at the time the Water Forum Agreement was executed](#) on how ~~Arcade Water District~~, Rancho Murieta CSD, El Dorado Irrigation District, and the Georgetown Divide PUD would participate in all elements of the *Water Forum Agreement*. These suppliers ~~had have~~ entered into Procedural Agreements with the Water Forum to negotiate mutually acceptable agreements in the future. ~~In addition, Arden Cordova Water Services has decided not to participate in the Water Forum Agreement.~~

Since the *Water Forum Agreement* was signed, Golden State Water Company (formerly Arden Cordova Water Services) executed its PSA. Similarly, in 2002, Arcade Water District merged with Northridge Water District to become Sacramento Suburban Water District, which executed its PSA in 2003. As such, the diversion values for these entities are contained in the table below (modeling assumptions) and Table 0.2.

Update- Dry Year actions from Table 0.2 represented graphically.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

# Water Forum Dry-Year Actions (Range: 191 to 645 TAF/year)



Water Forum Dry Year Procedures

Revised: 4/9/15

Modeling does not imply that there is agreement on diversions described below. Nor does it imply that all stakeholder representatives believe that all of these diversions will necessarily occur. Diversions shown on this [table chart](#) will be included as part of the *Water Forum Agreement*, only if there are mutually acceptable agreements.

**Table 0.3** Draft EIR modeling assumptions for American River diversions for purveyors that have not concluded their negotiations

Water Supplier/ Organization	1995 Baseline (1)	2030 Diversion ( <del>wet and average</del> <del>wet/ave</del> years)	2030 Diversion (drier years)	2030 Diversion (driest years ) (2)
<del>Arcade Water District</del>	<del>3,500 AF</del>	<del>11,200 AF</del>	<del>11,200 AF</del>	<del>3,500 AF</del>
Golden State Water Company Arden <del>Cordova Water Service</del>	3,500 AF	5,000 AF (3)	5,000 AF (4)	5,000 AF
El Dorado ID	20,000 AF	48,400 AF (3)	Decreasing from 48,000 to 38,900 AF (4)	38,900 AF
Georgetown Divide PUD (5)	10,000 AF	18,700 AF (3)	Decreasing from 18,700 to 12,500 AF (4)	12,500 AF
Rancho Murieta CSD	0 AF	1,500 AF (6)	1,500 AF (6)	0 AF

Footnotes (Assumptions included in these footnotes are for EIR modeling purposes only. Modeling these diversions does not imply there is agreement on these assumptions):

1. Baseline: As it applies to these diversions, Baseline means the historic maximum amount of water that suppliers diverted annually from the American River through the year 1995.
2. Driest years (i.e. conference years): For purposes of the *Water Forum Agreement*, years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. ~~Wet and average years~~ ~~Wet/Ave Years~~: As it applies to these diverters, years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.
4. Drier years: As it applies to these diverters, years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF.

5. For this supplier, some or all of its water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from PCWAs MFP Reservoirs by re-operating those reservoirs.
6. As it applies to this diversion, water in ~~wet and average years~~ ~~Wet/Ave Years~~ and drier years is diverted at the mouth of the American River or from the Sacramento River.

## **II. ACTIONS TO MEET CUSTOMERS' NEEDS WHILE REDUCING DIVERSION IMPACTS IN DRIER YEARS**

### **A. Intent**

This element is to ensure that sufficient water supplies will be available to customers in drier years as well as wetter years. The regional economy is dependent on a reliable water supply being available for our businesses and homes in all years. The intent of this element of the agreement is that purveyors continue to meet its customers' needs to the year 2030 while minimizing diversion impacts in drier and driest years.

It is envisioned that American River diversions by purveyors in the region in average and wetter years above H Street would increase from the current level of 216,500 acre-feet annually (AFA) to about 481,000 AFA by the year 2030.

With adequate mitigation, these diversions in average and wetter years can be accomplished while still preserving the fishery, wildlife, recreational and aesthetic values of the lower American River.

However, the river is already stressed in drier years. The health of the fishery would degrade if lower American River flows were decreased by these amounts in drier years.

Considerable effort has been taken to identify how purveyors diverting from the American River can implement specific actions to meet their customers' needs in drier and driest years with reduced diversions. Actions include: conjunctive use of groundwater basins consistent with the sustainable yield objectives, utilizing other surface water resources, reservoir re-operation, increased conservation during drier and driest year,; and reclamation.

It is recognized that over time changes might be appropriate in the mix of dry-year actions selected.

### **B. Dry Year Actions**

In addition to extraordinary conservation in drier and driest years, the *Water Forum Agreement* includes three alternative ways for purveyors to accomplish this objective.

The first is by purveyors limiting their additional American River diversions in drier and driest years. The drier the year, the more the purveyors would limit their American River diversions. By the driest years, purveyors would limit their American River diversions to baseline amounts. "Baseline amount" means the historic maximum amount of water that a purveyor diverted from the American River in any one year through the year 1995 or in certain appropriate instances other amounts specified in a Purveyor Specific Agreement (PSA). Purveyors would continue to

meet their customers' needs in drier and driest years through supply alternatives such as increased use of groundwater.

There is a second method by which some purveyors who currently divert upstream from Folsom Reservoir could meet their customers' needs and minimize impacts on Folsom Reservoir inflows and lower American River fisheries. The signatories to the *Water Forum Agreement* would provide their support to a purveyor that chooses to continue its increased American River diversions in drier or driest years, if in the drier years there was a release of replacement water upstream of Folsom Reservoir. The drier the year, the greater the amount of water that would be replaced. By the driest years the amount of water replaced would be equivalent to the purveyor's increased diversions over baseline or, in certain appropriate instances, other amounts specified in the PSA.

One source of this replacement water in drier or driest years would be water not normally released in those years from the PCWA MFP<sup>2</sup>. Adequate assurances that the replacement water will be released are specific to each purveyor and are included in the specific agreements for any purveyors intending to use this method. Any other method of replacing water consistent with the two coequal goals of the Water Forum would be considered.

The third way that purveyors could meet at least a portion of their needs is by diversions from the Sacramento River. Any Sacramento River diversion would avoid direct impacts on the American River.

Table 0.2 ~~The chart in Section Three, I entitled, "1995 and Proposed year 2030 Surface Water Diversions"~~ summarizes the proposed drier and driest year diversions for each purveyor. Specific information for each purveyor is found in ~~Chapter 5, Section I Section Five, I,~~ PSAs.

### **C. Specific Agreement on Actions to Meet Customers' Need While Reducing Diversion Impacts in Drier Years**

Purveyors will implement actions in drier and driest years to meet their customers' water needs while at the same time reducing diversion impacts. Specific diversion amounts for each purveyor are found in ~~Chapter 5, Section I Section Five, I,~~ PSAs and are summarized in Table 0.2. ~~the chart in Section Three, I entitled, "1995 and Proposed Year 2030 Surface Water Diversions."~~

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<sup>2</sup> For the initial *Water Forum Agreement*, this dry year action applies to the City of Roseville and PCWA. A mutually agreed upon assurance related to this dry year action for the City of Roseville is contained in its PSA. The assurance for this dry year action as it applies to PCWA is a remaining issue.

### III. SUPPORT FOR IMPROVED PATTERN OF FISHERY FLOW RELEASES FROM FOLSOM RESERVOIR

#### A. Intent

This element supports needed assurances for continued implementation of a pattern of water releases from Folsom Reservoir that more closely matches the needs of anadromous fish, in particular fall-run Chinook salmon.

Since construction of Folsom Dam and Reservoir, the [U.S. Bureau of Reclamation \(Reclamation\)](#) has made releases legally constrained only by the outdated fish flow requirements of SWRCB Decision 893. It allows flows in the river during dry years to be as low as 250 cfs, although ~~Reclamation the Bureau~~ releases greater amounts. Since the standard was adopted and Folsom and Nimbus dams were constructed, the fishery has significantly declined.

Until recently ~~Reclamation the Bureau~~ made relatively higher releases in the summer and reduced releases in the fall. This does not match the life cycle needs of fall-run Chinook salmon which need more cool water in the fall and are not present in the summer.

An extensive hydrological and biological analysis found that with the historic pattern of releases from Folsom Reservoir, increased diversions envisioned by the Water Forum would have unacceptable impacts on the lower American River fishery.

Beginning in December 1994, the Water Forum convened a fish biologists working session of fish experts with special knowledge of the lower American River. Its charge was to develop recommendations on an improved pattern of releases. Participants included representatives from the U.S. Fish and Wildlife Service ([USFWS](#)), California Department of Fish and [Wildlife \(CDFW\)](#) ~~California Department of Fish and Game (CDFG)~~, SWRCB ~~State Water Resources Control Board~~, ~~Reclamation U.S. Bureau of Reclamation~~ and representatives from the Water Forum.

After several months, participants in the fish biologists working session came to general agreement regarding which fish species should be given priority when there are constraints in water availability. They also developed an improved pattern by which available water can be released from Folsom Reservoir in a “fish-friendly” manner consistent with the reservoir’s flood control objectives.

This improved pattern of fishery flow releases from Folsom Reservoir will somewhat reduce summer flows to conserve water to allow increased releases in the fall. Their conclusion is that this improved pattern will maximize in-stream flows and temperature conditions for fall-run Chinook salmon in the lower American River.

In 1998, steelhead was listed under the Endangered Species Act as threatened. Therefore ~~Reclamation the Bureau~~ is required to operate Folsom Dam in a way that does not jeopardize the continued existence of these fish.

It is recognized that as additional information becomes available in the future it could be beneficial to further refine this improved pattern. In addition there needs to be flexibility in implementing an improved pattern to reflect real-time ecological considerations. This is sometimes referred to as “adaptive management.”

It is the intent of the signatories to the *Water Forum Agreement* that an improved pattern of fishery flow releases from Folsom Reservoir be permanently implemented recognizing that over time this improved pattern may be refined to reflect updated understanding of the fishery. One way this will be implemented will be an updated ~~SWRCB State Water Resources Control Board~~ flow standard for the lower American River. It is also the intent that there be flexibility (adaptive management) in the implementation of an improved pattern to reflect real-time ecological considerations.

In the future there will also be transfers of water among signatories to the *Water Forum Agreement* and conceivably to other organizations that are not signatories. It is the intent that any transfers of American River water be delivered in a manner consistent with an improved pattern of fish-flow releases. The Water Forum Successor Effort will develop guidelines for determining consistency.

## **B. Improved Pattern of Fishery Flow Releases from Folsom Reservoir**

The CVPIA was passed in 1992. This law authorized fish and wildlife restoration as an additional purpose of the CVP. It also required the federal government to develop an AFRP plan including implementation of an improved pattern of fishery flow releases from Folsom Reservoir to benefit anadromous fish.

Since 1996 ~~Reclamation the Bureau~~, in consultation with the ~~USFWS U.S. Fish and Wildlife Service~~ and the ~~CDFW CDFG~~, has attempted to release water from Folsom Reservoir in a manner consistent with the flow objectives for the lower American River to the extent Reclamation’s available water supply has permitted it to do so. Its AFRP flow objectives for the lower American River are set forth in the November 20, 1997 “Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water.” They are essentially the same as the improved pattern of fishery flow releases developed by the fish biologists working session which was convened by the Water Forum. It is recognized that in the process of updating the lower American River standard it will be necessary to make some corrections to the AFRP flow objectives for the lower American River. These corrections include some typographic corrections as well as inclusion of target carryover storage amounts for Folsom Reservoir.

For purposes of the *Water Forum Agreement*, the improved pattern of fishery flow releases is defined as a release pattern consistent with the corrected version of the AFRP flow objective for the lower American River as set forth in the November 20, 1997 “Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water” (see Appendix I of this *Water Forum Agreement*).

[Reclamation the Bureau](#) is working to formalize this improved pattern of fishery flow releases through both the Operating Criteria and Plan (OCAP) for the CVP and the AFRP of the CVPIA. OCAP and AFRP are the federal government’s rules for how the CVP will be operated.

The increased diversions in the *Water Forum Agreement* would be permanent. Therefore it is essential that an improved pattern also be implemented by [Reclamation the Bureau](#) on a permanent basis. Therefore one of the essential requirements of the *Water Forum Agreement* is that the [SWRCB](#) update the lower American River flow standard.

### **C. Specific Agreement on Support for Improved Pattern of Fishery Flow Releases from Folsom Reservoir**

As part of the *Water Forum Agreement* all stakeholders will actively endorse permanent implementation of an improved pattern of fishery flow releases from Folsom Reservoir while recognizing that over time this improved pattern may be refined to reflect updated understandings of the fishery. It is also agreed that there will be flexibility (adaptive management) in the implementation of an improved pattern to reflect real-time ecological considerations.

The *Water Forum Agreement* is based on the expectation that the improved pattern of fishery flow releases would be implemented consistent with the AFRP lower American River flow objectives in the November 20, 1997 Final Administrative Proposal with some corrections. Therefore, if the Department of the Interior substantially changes the AFRP flow objectives for the lower American River, it would be considered a changed circumstance that would have to be considered by the Water Forum Successor Effort.

The signatories’ support for the increased diversions is dependent on adequate assurances of [Reclamation’s the Bureau’s](#) permanent implementation of an improved pattern as described above. One form of assurance will be an updated SWRCB flow standard for the lower American River. Other assurances will be in the form of participation in the OCAP process; and participation in the [Central Valley Project Improvement Act Environmental Impact Statement \(CVPIA EIS\)<sup>3</sup> \(PEIS\)](#). Adequate forms of assurance are more fully described in the Assurances and Caveats section of the *Water Forum Agreement* ([Chapter 4, Section I Section Four, I](#)).

It is further agreed that any transfers of American River water by signatories be delivered in a manner consistent with an improved pattern of fishery flow releases as described above.

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<sup>3</sup> OCAP and CVPIA EIS were used at the time of preparing this agreement. Current assurance process include....

One of the functions of the Water Forum Successor Effort will be to ensure that an improved pattern as described above is permanently implemented recognizing that over time that this improved pattern may be refined to reflect updated understanding of the fishery.

For a description of work accomplished on this element, please see Chapter 4, Section I, (Schedule for Updating the lower American River Flow Standard).

## IV. LOWER AMERICAN RIVER HABITAT MANAGEMENT ELEMENT

### Habitat Management Element Update

The River Corridor Management Plan (RCMP) is an action plan to protect and enhance fisheries and in-stream habitat, vegetation and wildlife habitat; improve the reliability of the flood control system; and enhance the lower American River's wild and scenic recreation values. It was developed jointly by the Water Forum, Sacramento Area Flood Control Agency (SAFCA) and Sacramento County Regional Parks through the Lower American River Task Force (LARTF). Funding was provided by a grant from the CALFED Bay-Delta Program. In December 2001, over 30 government, public interest and environmental organizations endorsed the RCMP and in 2002 the Fisheries and In-Stream Habitat (FISH) and Recreation plan components of the RCMP were accepted by the Water Forum Successor Effort as implementation agents for the HME.

May 2012

### A. Intent

The Habitat Management Element (HME) for the lower American River, combined with other elements of the *Water Forum Agreement*, is intended to fulfill one of the Water Forum's two coequal objectives:

***Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.***

The HME is necessary to comply with the CEQA's requirement to avoid or lessen, to the extent reasonable and feasible, all significant impacts to the lower American River resulting from future increased surface-water diversions identified in the *Water Forum Agreement*. The HME has been incorporated into the Water Forum EIR.

The HME is also an important issue for another reason. In 1998, steelhead on many rivers, including the American, were listed as threatened under the federal Endangered Species Act. As purveyors proceed with their diversion projects, they will have to consult with resource agencies. Under the Endangered Species Act, projects can move forward only if the resources agencies find that they will not jeopardize the continued existence of the species.

The HME will be implemented for the term of the *Water Forum Agreement* — to the year 2030.

### B. Lower American River Habitat Management Element

The lower American River HME will contain five programmatic components that together will address flow, temperature, physical habitat, and recreation issues for the lower American River:

Habitat Management Plan (HMP), habitat projects that benefit the lower American River ecosystem, monitoring and evaluation, project-specific mitigation, and lower American River recreation.

1. The lower American River Habitat Management Plan will include detailed descriptions of all reasonable and feasible projects that could be implemented to avoid and/or offset potential impacts to lower American River fishery and riparian resources due to the increased surface-water diversions defined under the *Water Forum Agreement*.

The plan will also identify and define:

- a. Performance standards to be used as indicators of the health of the lower American River (e.g. flows, temperatures, etc.)
- b. The conceptual (e.g., mitigation banking or other) and technical framework for the HMP;
- c. Schedule and technical assistance required for development, implementation, and monitoring of the HMP;
- d. How the HMP will be coordinated with other programs, plans, initiatives, and/or mandates that affect the lower American River ecosystem;
- e. Logistics and responsibilities associated with administering the HMP;
- f. Implementation priorities, strategies, and schedules for the proposed projects;
- g. Lead organizations for implementation of each project;
- h. How the HMP could serve as the framework for addressing any Endangered Species Act requirements; and
- i. Cost-sharing obligations and specific funding commitments.

Moreover, the HMP will outline protocols for plan updating, and will clearly identify the type, amount, and costs for all technical assistance that will be required to develop/update, administer, implement, and monitor the HMP.

Consultant services and other technical assistance will be acquired to: 1) effectively develop, implement, administer, and monitor the success of the HMP; and 2) provide input to federal and state agencies for actions that will contribute to the preservation of the values of the lower American River. This will ensure that there is effective advocacy to achieve a “fair share” of Central Valley Project Improvement Act (CVPIA) Restoration Funds allocated to lower American River improvements, real-time implementation of the improved fishery flow pattern releases (focusing on the volume, temperature, and timing of flows), and preservation of riparian habitat.

Within the first 12 months after the *Water Forum Agreement* is signed, the HMP will be completed and adopted.

2. Projects that benefit the lower American River ecosystem have been identified by the CALFED American River Technical Team. Currently, 22 potential projects/studies have been identified for the lower American River. Those that could be appropriately

supported through the Water Forum Successor Effort are identified in Table 0.4 [Table 1](#). Additional projects that could be supported by other agencies are identified in Table 0.5 [Table 2](#). The projects/studies identified in Table 0.4 [Table 1](#) are strictly potential candidates for inclusion, and should not be considered as a final array of management elements to be adopted by the Water Forum.

3. Monitoring and evaluation will: 1) establish baseline conditions for future reference and assess the health of the lower American River as diversions increase; and 2) assess the response of fish, wildlife, and riparian communities to the management/restoration projects implemented under the HMP, as well as the increased diversions. Monitoring and evaluation will also meet the CEQA requirement to have a mitigation monitoring plan.

Real-time monitoring and regular evaluation are also necessary components of the adaptive management approach for the ongoing implementation of the *Water Forum Agreement*. Real-time monitoring will be particularly useful to the Folsom Reservoir Operations Group as it makes monthly flow and temperature decisions.

Every five years the Water Forum Successor Effort will review the comprehensive evaluation of the health of the lower American River ecosystem.

Regular evaluations conducted every five years will allow the Water Forum Successor Effort to comprehensively review the overall impacts of the *Agreement* on the health of lower American River.

Specifics on the monitoring and evaluation program will be included in the Water Forum EIR.

4. Project-specific mitigation will be required of each purveyor to mitigate any site-specific impacts associated with its diversion. An example of such site-specific mitigation would be installing fish screens for new diversions or, potentially, improving existing diversion screens.

5. Lower American River recreation: This component is intended to address effects on recreation along the lower American River. Two components of the *Water Forum Agreement* have an effect on the recreational flows for the lower American River. First, the improved pattern of fishery flow releases results in lower summer time releases so that cold water can be conserved in Folsom Reservoir to benefit the fall run Chinook salmon. Second, the increased surface-water diversions result in less water being available to flow down the entire length of the lower American River.

In order to reduce the impacts of reduced recreational flows on the lower American River an initial list of projects has been developed. [These are summarized in Table 3 below](#). This list of projects will be refined over time.

Consideration will be given to locating projects in the service areas of purveyors contributing to the lower American River HME. Preference will be given to those projects having the greatest nexus to the recreational impacts on the lower American River resulting from implementation of the *Water Forum Agreement*.

Funding for recreation projects is included in the HME Cost Allocation Principles. Contributions to the HME would be for both habitat and recreational projects, with the Water Forum Successor Effort deciding on annual expenditures.

### **Lower American River Habitat Management Element (HME)**

The HME is intended as a means of preserving the fishery, wildlife, recreational and aesthetic values of the LAR, one of the two co-equal objectives of the Water Forum Agreement. It is funded by the cost allocation in Chapter 3, section IV B of the agreement. Funding amounts are annually adjusted for inflation. The HME has been guided by the Fisheries and In-Stream Habitat Plan (FISH Plan), the Recreation Plan, and the Water Forum Coordinating Committee. Following is an abbreviated list of HME projects conducted by the Water Forum.

- Approximately yearly salmonid restoration work in the LAR consisting of:
  - Intensive restoration construction between 5 and 18 acres
  - Monitoring success and design
  - Otolith research aimed at better understanding how operations and restoration projects influence out-migration in the LAR
  - Genetic research focused on comparing the reproductive success between restored sites and unrestored sites
  - Research focusing on understanding steelhead life cycle and use of side channels
- Developing a flow standard has been largely funded by the HME fund
- Developed modeling tools to simulate:
  - Salmonid mortality model in the LAR
  - Redd dewatering
  - Sub daily temperatures using HEC RAS
  - Dam operations on the LAR for educational purposes (LAROPS)
- Convening Fish and In-Stream Habitat (FISH) group
- Co-Convening Lower American River Task Force
- Temperature Control Device engagement- participated in value planning session in August 2013
- Developing temperature and stage data which is collected regularly
- In-river real-time temperature management during 2015 drought to assess Reclamation with operations
- Contribute to invasive species removal with American River Natural History Association (ARNHA), Sacramento County Parks, American River Parkway Foundation (ARPF)
- Contribute to water related education at Effie Yeaw nature center and Soil Born Farms

Proposed projects and studies for which the Water Forum could be a cost-share partner. [Table 3.4 Table 1](#) contains preliminary, rough cost estimates for years 2-4 and annual costs thereafter for the life of the *Water Forum Agreement*. Estimated costs can be expected to change and are provided here for discussion purposes only. In the first year up to \$340,000 of Water Forum funding will be used to: prepare the HMP; provide technical assistance; and develop and begin implementing the monitoring program. Amounts shown for contributions by other agencies represent the Water Forum's preliminary estimate of the funding that will be requested from those agencies. No commitments have yet been made by those external agencies.

Update- The potential projects and funding sources listed in Table 0.4 were provided in 2000 as guidance to WFSE staff. Since then, WFSE staff has used funding provided by Water Forum signatories to leverage other funding sources such as the USFW, Reclamation, and the State of California to perform HME projects. The River Corridor Management Plan (January 2002) and its updates provides a list of priority HME projects.  
 - This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

**Table 0.4 Table 1.** Water Forum cost-sharing for lower American River habitat projects.

PROJECT/STUDY	AGENCY	ANNUAL COST	
		Years 2-4	Ongoing
Wetland/Slough Complex	SAFCA	Unknown	To be determined
	CALFED <sup>4</sup>	Unknown	
	Water Forum	\$25,000	
Shaded Riverine Aquatic Habitat	SAFCA	Unknown	To be determined
	CALFED	Unknown	
	Water Forum	\$25,000	
Tailrace Habitat Utilization Study	CALFED	\$15,000	Study Complete
	Water Forum	\$15,000	
Thermal Refugia Utilization Study	CALFED	\$25,000	Study Complete
	Water Forum	\$25,000	
Off-site Mitigation (if required)	Water Forum	Unknown	Unknown
Monitoring and Evaluation	SAFCA	\$100,000	\$100,000
	Water Forum	\$100,000	\$100,000

<sup>4</sup> CALFED – a state and federal program for...

	CVPIA	\$100,000	\$100,000
Plan Development, Updating and Technical Assistance	SAFCA	\$150,000	\$70,000
	CALFED	\$150,000	\$70,000
	CVPIA	\$150,000	\$70,000

**Table 0.5 Table 2.** Additional lower American River habitat projects. **These are additional projects and studies that would be carried out by other organizations.**

<b>Habitat projects that benefit the lower American River ecosystem</b>				
<b>Priority</b>	<b>Actions</b>	<b>Study or Project</b>	<b>Possible Funding Source(s)</b>	<b>Lead Organization</b>
High	New Flow Standards	Project	City of Sacramento	City of Sacramento
High	Flow Fluctuation Criteria	Project	CVPIA	Reclamation USBR
High	Dry Year Flow Augmentation	Project	CVPIA	PCWA Reclamation USBR /USFWS
High	Folsom Temperature Control Device (TCD)	Project	Reclamation USBR	Reclamation USBR
High	Folsom Reservoir Cold Water Pool Management	Project	SCWA Folsom SJWD Reclamation USBR	Reclamation USBR
High	In Stream Cover (Woody Debris)	Project	Corps SAFCA	Corps SAFCA
High	Flood Control Channel Improvement	Project	SAFCA Corps	SAFCA
High	Spawning Habitat Management/Maintenance	Study, Project	CVPIA CALFED	CDFW CDFG USFWS
High	Hatchery Temperature Control	Project	Reclamation USBR	Reclamation USBR
High	Hatchery Management Practices	Project	Reclamation USBR	Reclamation USBR
Moderate	Fire Management	Project	Sacramento County	Sacramento County
Low	Increase Artificial Production of Salmonids	Project	Reclamation USBR	CDFW CDFG
Low	Angling Regulations	Project	CDFW CDFG	CDFW CDFG

<b>Project-Specific Mitigation</b>				
<b>Priority</b>	<b>Actions</b>	<b>Study or Project</b>	<b>Possible Funding Source (s)</b>	<b>Lead Organization</b>
	Fish Screen Improvement	Project	Water Forum purveyors with fish screens	Water Forum Purveyors

			CVPIA	
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It is also recognized that the State steelhead restoration plan includes a study of the feasibility of reintroduction of steelhead above Folsom Dam. Water Forum water purveyors are concerned that reintroduction not impose Endangered Species Act requirements on diversions upstream of Folsom Dam.

After the technical team prepared this list, an additional potential project was identified by the ~~CDFW~~ ~~CDFG~~. It would be beneficial to tag steelhead to determine the extent of natural spawning in the lower American River.

#### ~~LEGEND:~~

~~CORPS—Army Corps of Engineers~~

~~CVPIA—Central Valley Project Improvement Act~~

~~Folsom—City of Folsom~~

~~PCWA—Placer County Water Agency~~

~~SAFCA—Sacramento Area Flood Control Agency~~

~~SCWA—Sacramento County Water Agency~~

~~SJWD—San Juan Water District~~

~~USBR—United States Bureau of Reclamation~~

~~USFWS—United States Fish and Wildlife Service~~

Update- the American River Parkway Plan was updated in 2006 and adopted as an element of the Sacramento County General Plan in 2008 and by the State of California in the Urban River Parkway Preservation Act of 2008. The Parkway Plan serves as a guide to land-use decisions affecting the parkway. The update Plan includes chapters on recreational uses and public access and trails. In addition, it includes comprehensive area plan updates to sub-units of the Parkway that are used to indicate what facilities, activities, and uses may be permitted or encouraged in a given area, including Discovery Park, site of the Uruttia property. The Water Forum Successor Effort participated in the Project Management Team and provided funding for the planning process.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

**Table 3.6 Table 3. Initial listing of potential projects to address effects on lower American River recreation**

<b>Project</b>	<b>Potential Funding Source(s)</b>	<b>Lead Organization(s)</b>
Update Recreation Element of the lower American River Parkway Plan	Water Forum HME and Sacramento County	Water Forum Successor Effort, Sacramento County
Increase access to American River	Water Forum HME, Sacramento County, City of	Water Forum Successor Effort, Sacramento County

	<del>Sacramento</del>	
<del>Trails adjacent to waterways</del>	<del>Water Forum HME, Sacramento County, City of Sacramento</del>	<del>Water Forum Successor Effort, Sacramento County</del>
<del>Purchase and develop Uruttia property for recreational and environmental values</del>	<del>Sacramento County, Sacramento City, and Water Forum HME</del>	<del>Sacramento County and Sacramento City</del>

### **C. Relationship to a Coordinated Multi-Agency lower American River Ecosystem Habitat Management Plan (HMP)**

Update- The activities described in this section have been undertaken for the most part by WFSE staff. For example, the WFSE currently co-convenes the LARTF with SAFCA; and the WFSE has successfully partnered with SAFCA, USFWS, and Reclamation on several habitat enhancement projects.

Some of the items described have been executed with alternative means. For example, the HMP (listed above) was not completed. Rather the RCMP and its subsidiary document, the Fish and Instream Habitat plan were co-authored by the WFSE and SAFCA to cover these topics.

Although an MOU was not executed, the WFSE has worked and is currently working collaboratively with SAFCA, Reclamation, USFWS, NMFS, CDFW, and Sacramento County Parks on HME project planning and implementation.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

The lower American River ecosystem is also affected by agencies outside the Water Forum. Many agencies have some type of jurisdiction over decisions that affect the ecosystem. Several outside agencies have responsibility and financial resources to benefit the lower American River.

It is also recognized that the Water Forum Successor Effort will not by itself have sufficient funding to implement all the actions necessary to fully preserve the lower American River ecosystem. Therefore it is intended that the Water Forum HME be undertaken as part of a coordinated multi-agency lower American River HMP through the currently established LARTF. It is proposed that this partnership be formalized by a Letter of Intent among:

- The Water Forum Successor Effort (administered by the Sacramento City-County Office of Metropolitan Water Planning);
- Sacramento Area Flood Control Agency (SAFCA);
- CALFED (or its successor);

- ~~Reclamation U.S. Bureau of Reclamation~~ (CVP and CVPIA);
- U.S. Fish and Wildlife Service;
- National Marine Fisheries Service;
- California Department of Fish and ~~Wildlife Game~~;
- Sacramento County Parks Department

The ~~LARTF Lower American River Task Force~~ will provide a forum through which the partnering agencies can pursue key objectives from other ongoing or planned state and federal initiatives involving the agencies identified above, including:

- The Water Forum Habitat Management Element;
- The American River component of CALFEDs Ecological Restoration Program Plan (ERPP);
- SAFCAs emerging floodway management plan (FMP);
- Sacramento County's American River Parkway Plan (ARPP); and
- The Federal ~~Anadromous Fish Restoration Program (AFRP)~~ of the CVPIA

The ~~LARTF Lower American River Task Force~~ will also draw upon the expertise of groups such as the Folsom Reservoir Operations Work Group.

Membership on the ~~LARTF Lower American River Task Force~~ will be expanded to include a Water Forum environmental representative and a representative from the Sacramento County Water Agency representing purveyors who contribute to the Water Forum HME.

The ~~LARTF Lower American River Task Force~~ will oversee development of the detailed lower American River HMP which will identify priorities for environmental restoration and enhancement.

Although each agency/organization represented on the ~~LARTF Lower American River Task Force~~ will retain autonomy over its own budget, the ~~LARTF Lower American River Task Force~~ will coordinate opportunities for cost sharing. Through the integration of ongoing and planned management/restoration efforts, the most effective program for the lower American River will be developed, thereby providing maximum benefits to the river ecosystem. Moreover, through cooperation and cost-sharing, the cost to each organization for developing, implementing, and monitoring the program will be minimized.

The Water Forum Successor Effort will informally evaluate this arrangement in six months with a formal evaluation at the end of one year to determine if the Water Forum should continue using the ~~LARTF Lower American River Task Force~~ as the vehicle to develop and implement the lower American River HMP.

## D. Water Forum Cost Allocation Principles

1. Proposed lower American River habitat projects and studies that could be supported by the Water Forum HME are shown in Table 0.4~~Table 1. The initial listing of potential projects to address effects on lower American River recreation that could be supported by the Water Forum HME is shown in Table 3.~~
2. Cost-Sharing Among Water Forum Purveyors

- a. The City of Sacramento and the Sacramento County Water Agency (through Zone 13) will commit to a combined total of \$375,000 annually to the HME (including an estimated, but not ~~designated earmarked~~, \$35,000 annually for recreational projects).

The City of Sacramento and Sacramento County Water Agency (SCWA) will commit to funding their share of the HME starting when they sign the *Water Forum Agreement*. Their contributions will fund the majority of the Water Forum's share of the core program, especially real-time monitoring, evaluation, and planning. The City of Sacramento will contribute \$125,000 annually and SCWA will contribute \$250,000 annually using Zone 13 funds.

- b. Sacramento County Water Agency Zone 13 funds will be used to meet the HME obligations for the purveyors serving the unincorporated areas of Sacramento County and in the City of Citrus Heights.

Property owners in the unincorporated areas of Sacramento County and in the City of Citrus Heights are assessed in their property taxes for county-wide water management expenses that could include many of the real time monitoring, evaluation and planning activities in the HMP.

Therefore SCWAs Zone 13 contribution to the HME will cover the financial obligations of these water users serving the unincorporated area of Sacramento County and the City of Citrus Heights: Carmichael Water District, Citrus Heights Water District, ~~California-American Water Company Citizens Utilities~~ in Sacramento County, Clay Water District, Del Paso Manor Water District, Fair Oaks Water District, Florin County Water District, Galt Irrigation District, Natomas Mutual Water District, ~~Sacramento Suburban Water District Northridge Water District~~, Omochumne-Hartnell Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, Sacramento Municipal Utility District and San Juan Water District in Sacramento County.

- c. Contributions from other Purveyors.

Other purveyors signatory to the *Water Forum Agreement* that divert from the American River are the City of Folsom, Placer County Water Agency<sup>5</sup>, City of Roseville and San Juan Water District in Placer County.

(1) Central Valley Project water. A portion of its increased diversions will be CVP water for which these purveyors contribute into the Central Valley Project Restoration Fund. The Water Forum Successor Effort will work to ensure that a fair share of those restoration funds will be spent on improvements to the lower American River.

Therefore, these purveyors will not be contributing to the Water Forum HME for increased diversions of CVP water. If for any reason, the purveyors do not contribute to the CVP Restoration fund for increased diversions of CVP water over their baseline amounts (i.e. historic maximum amount of water diverted in any one year through the year 1995 or, in certain appropriate instances, other amounts identified in a purveyor's specific agreement), they would contribute to the HME as set forth below.

(2) Non-Central Valley Project water. Some purveyors will also be increasing their diversions of non-CVP water. For increased diversions of non-CVP water from the American River, purveyors would pay \$3 per acre-foot when they divert the water. Increases are defined as amounts above their baseline (i.e. historic maximum amount of water diverted in any one year through the year 1995 or, in certain appropriate instances, other amounts identified in a purveyor's specific agreement). If a purveyor exchanges current CVP water deliveries with non-CVP water they will pay \$3 per acre-foot for the water they exchange.

It is specifically recognized that PCWA would only contribute to the HME for increased American River diversions of non-CVP water used by PCWA. Contributions to the HME for PCWA water used by San Juan Water District, City of Roseville, ~~SSWD Northridge Water District~~ and any other purveyors are not the responsibility of PCWA.

AMENDMENT – This paragraph has been added to reflect the updated agreement with Golden State Water Company.

*Water Forum Successor Effort approved: September 2002*

(3) Golden State Water Company has experienced a loss in groundwater supplies due to contamination since the signing of the *Water Forum Agreement* in 2000. In 2002, following negotiations with WFSE signatories, Golden State agreed to make an annual contribution to the

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<sup>5</sup> PCWA's contribution to the HME is subject to resolution of the remaining issues identified in its PSA.

HME for the amount of water purchased from SMUD as replacement water. Golden State agreed to pay \$3 per acre-foot of SMUD water purchased and has done so in each successive year.

### 3. Cost Cap

The City of Sacramento, Sacramento County Water Agency and other Water Forum signatories' commitments to financially contribute to the HME are capped at the dollar amounts shown in sections a, b, and c above, adjusted only for inflation as set by the January issue of the "*Engineering News Record*" published Construction Cost Indexes for U.S. - 20 Cities Average and for the San Francisco Bay Area. The annual adjustment index would be calculated using the average of the cost indexes for these two areas.

If the Water Forum balance in the HME fund exceeds \$1 million of ~~undesignated un-~~  
~~earmarked~~ funds, annual contributions would be reduced or deferred until the  
~~undesignated un-earmarked~~ balance went below \$1 million.

Every five years the Water Forum Successor Effort will review the evaluation of the health of the lower American River ecosystem. At those times, any signatory to the *Water Forum Agreement* can request that the Water Forum Successor Effort re-negotiate the Cost Cap to increase or decrease the amount based on the needs at that time. Any increase or decrease would have to be approved by the signatories to the *Water Forum Agreement*.

4. Through the multi-agency effort, agencies in addition to the Water Forum Successor Effort and its signatory agencies will be requested to contribute to the lower American River HMP budget. Total costs shared by all partners, (including Water Forum and requested cost-sharing from SAFCA, ~~Reclamation U.S. Bureau of~~  
~~Reclamation~~ and CALFED) for each of the two years after development of the HMP are estimated to be approximately \$915,000. Annual costs thereafter for monitoring, evaluation, plan updating and technical assistance are estimated to be approximately \$510,000. Additional funding will be needed for projects identified in the HMP and recreational projects.

This program assumes significant financial contributions from other members of the multi-agency lower American River HMP. If that does not occur, it would be considered a changed circumstance requiring re-negotiation.

The first *State of the River Report* was published in 2005 and is viewable online at <http://waterforum.org/wp-content/uploads/2015/09/State-of-the-River-2005.pdf>

### 5. Project-Specific Mitigation.

Any project-specific habitat mitigation, (e.g., fish screens at diversion facilities) or recreation mitigation is the responsibility of individual purveyors. Costs for project-specific mitigation are not eligible for funding under the HME.

## **E. Adaptive Management**

The HMP is based on the principal of “adaptive management,” which allows for flexibility in making future resource-management decisions as additional data become available. Information collected under the on-going monitoring and evaluation will be fed back into the management decision making process on a real-time basis.

It is recognized that monitoring and evaluation may identify adverse impacts not currently anticipated. If the unanticipated impacts are significant, this would be considered a changed condition. The Water Forum Successor Effort would meet and confer on options for mitigating these unanticipated impacts.

Options include additional habitat measures to reduce or eliminate the adverse impacts. Funding could come from the purveyors signatory to the *Water Forum Agreement* or other partners in the multi-agency lower American River HMP. If unanticipated significant adverse impacts cannot be mitigated, this would be considered a changed circumstance requiring renegotiation of the relevant portions of the *Water Forum Agreement*.

If the lower American River is designated as critical habitat for an endangered or threatened species, the Endangered Species Act may require a higher level of mitigation than that anticipated to be paid from the HME. Thus, if the lower American River is designated as critical habitat, it may be considered a changed condition to be addressed by the Water Forum Successor Effort.

## **F. Specific Agreement for the lower American River Habitat Management Element**

All signatories will support and where appropriate, participate in the lower American River HME as set forth above.

## V. WATER CONSERVATION ELEMENT

AMENDMENT – This section has been changed to reflect the updated Water Conservation Element. These changes were the result of a multi-year negotiation among Water Forum members.

Water Forum Successor Effort approval: May 14, 2009

### A. Introduction

*The Water Conservation Element of the Water Forum Agreement is essential to meeting both of the co-equal objectives of the Water Forum. It helps meet the region's water-supply needs, and minimizes the need for increased groundwater pumping and increased use of surface water, including diversions from the American River. Each water supplier in the region is committed to implementing a comprehensive water conservation plan.*

Continued commitment to water conservation will benefit water purveyors, customers, and the environment because it:

- Reflects growing public support for the conservation of limited natural resources and adequate water supplies.
- Allows water districts to optimize the use of existing facilities.
- Delays or reduces the capital investments required for capacity expansion of water and wastewater treatment facilities even though the service area may grow.
- Is essential for the state and federal agency approvals which will be required for specific projects.

### MUNICIPAL AND INDUSTRIAL WATER CONSERVATION

### B. Intent

Water Forum water signatories have generally agreed upon the following broad objectives for water conservation in the region:

- All parties seek to maximize water conservation in a way that is accountable, easy to monitor and track and are effective.
- A water conservation program has merit and all Water Forum purveyor signatories agree to implement a water conservation program that is consistent with the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding (Council MOU).
- Recognizing that many of our purveyors are not yet fully metered, there may need to be flexibility in how purveyors implement certain water conservation actions.

- While we are seeking a broad “universal” solution that applies to all purveyors, we recognize that each purveyor has unique water sources, decision-makers and structures, and constraints/opportunities.

### C. Key Elements

1. Water Forum signatories agree to update the Water Conservation Element of the *Water Forum Agreement* by replacing current water conservation plans with the “California Urban Water Conservation Council Memorandum of Understanding Regarding Urban Water Conservation in California,” (Council MOU) including its Best Management Practices (BMPs), schedules, targets, procedures and requirements. Variations from the Council practices are noted in the following text.
2. Water Forum signatories agree that in replacing their 2000 Water Conservation Plans with Council MOU, they are agreeing to changes and modifications to Council processes and BMPs as they evolve over time, including the 2008 revisions and subsequent revisions. Water Forum signatories further agree that signatory purveyors without land use authority can not be required to implement programs or processes that they do not have legal authority to implement (i.e. landscape requirements).
3. Water Forum signatories are encouraged to become members of the Council in order to be actively engaged in discussions regarding revisions to the MOU and the BMPs, and to take advantage of the Council’s resources and expertise.
4. Water Forum signatories recognize that the Council has existing procedures in place to enable members to request exemptions from BMPs. Water Forum signatories agree that this process does not result in a clear decision and does not ensure full compliance of BMPs. To address this shortcoming, the Water Forum will use its own procedure for considering BMP modifications known as deferrals.
5. Consistent with the Assurances and Caveats listed in [Chapter 4 Section Four](#) of the *Water Forum Agreement*, it is recognized that over time there will be changed circumstances that are not currently foreseen. Therefore, signatories agree when the need arises to meet and confer on how best to respond.

### D. Pre-Determined Deferrals on Meter-Based BMPs

*(The following apply regardless of which Council track is implemented)*

1. For BMP 4 (metering), at a minimum we accept the pace of residential meter retro-fit by each of those Water Forum purveyors not yet fully metered, as stated in Appendix J of the 2000 *Water Forum Agreement*, or the pace required by State law, whichever controls. This deferral recognizes that several Water Forum water purveyors are not yet metered and are investing in water meter and retrofit programs at a pace that is feasible but which may not be the rate stated in the Council MOU.
2. For BMP 1 (Residential Audits), targets are based on the purveyor’s number of metered residential accounts; so, as an agency becomes more fully metered, its

“population” of potential audit customers increases. It is understood that this is a pre-determined “deferral.” Audit programs must still be in place, but targets are proportional to metered accounts.

#### **E. Additional Deferral Requests**

1. If a water purveyor wants to request any other deferral from a standard BMP target, or a change in schedule or practice, the following procedure will be followed:
  - a. Water Forum signatories will follow the Council analysis and modeling tool. The analysis will be submitted to the Water Forum Water Conservation Negotiation Team (WCNT) who will have a technical review completed by an independent third party. The WCNT is composed of one representative from each Water Forum caucus (business, environmental, water, and public) and from each size and type of water purveyor in the region (publicly owned, investor owned, etc.)
  - b. Water Forum staff would develop a list of water conservation professionals based on qualifications and criteria agreed upon by the WCNT. This list of qualified candidates will be vetted through the WCNT. The list needs to be long enough to ensure that purveyors have adequate choices and can maintain reasonable costs. The list could also include Council staff reviewers.
  - c. The water conservation professional and water purveyor staff will conduct a review of the analysis for adequacy and compliance with the Council BMP. The review/technical validation will include checking data adequacy and accuracy, and will explore whether or not changes or modifications to the program design, would affect the outcome. The water conservation professional may suggest new partners or funds that might be available to assist the purveyor in implementing the BMP. This analysis with suggested changes will then be forwarded to the WCNT for its review and discussion.
  - d. After completion of the review/technical validation, if the BMP is found to have a benefit-cost ratio of 1 or greater (there is a greater benefit to the program than the cost to implement it), no deferral will be allowed.
  - e. If a BMP is found to have a benefit-cost ratio of less than 1 (this is expected to be uncommon), then the purveyor will have the choice of continuing with the BMP or deferring that BMP and substituting an alternative program as described below. However, prior to selecting an alternative program, the purveyor will offer to meet with Water Forum stakeholders to discuss deferral/substitution options. The intent of the meeting will be to have an open discussion about the advantages and disadvantages of the deferral/substitution options, provide interested stakeholders with relevant information, and provide stakeholders an opportunity to weigh in on the deferral/substitution options. Deferral options under discussion at this meeting will include, among other things, methods for redesigning the potentially-deferred BMP. This open discussion is not intended to prolong the BMP planning process or second-guess the independent technical review.

- f. Water Forum signatories agree that for any program or BMP that is deferred, the water purveyor will apply the program costs that were reported in the BMP deferral analysis toward the implementation of another BMP with the intent of achieving as much if not more water savings through expanding one or more of the remaining BMPs. Water Forum signatories agree to take into account existing acceleration of a BMP on a case-by-case basis.
- g. Water Forum signatories agree that any benefit-cost analysis performed will include an environmental cost of water of \$75 per acre-foot, adjusted annually for inflation using the same method outlined in the *Water Forum Agreement* to adjust annual contributions to the HME. This \$75 amount was negotiated by members of the WCNT and is based on historical purchases of water from the region for the CALFED Environmental Water Account.
- h. Water Forum signatories agree that deferrals will be granted for a period of two years, in accordance with the reporting cycle of the Council. After this time, purveyors would either resume the BMP or seek another deferral using the same process outlined above.

## **F. Assurances and Reporting**

- 1. Water Forum signatories recognize that some purveyors may need to seek support for certain conservation program by their boards and decision-makers. If requested, Water Forum signatories agree to publicly support conservation programs and any rate adjustments that are needed to implement the water conservation plans.
- 2. Reporting
  - a. Water purveyors will submit biennial reports on the implementation of water conservation activities pursuant to the reporting requirements of the Council. These reports will be shared with the Water Forum Successor Effort.
  - b. The biennial reports will include a comparison of total and per capita water use with original projections as published in the 2000 *Water Forum Agreement* Appendix J. In addition, the Water Forum will revisit the method used to estimate gallons per capita per day (GPCD) in the 2000 *Water Forum Agreement* so that it is consistent with approaches used by other agencies and organizations, including the Council, the Legislature, and the Department of Water Resources (DWR).
  - c. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described. Water purveyors have the option of reporting this information in the Council database comment field
- 3. Assurances

The Water Forum Successor Effort will do the following in order to facilitate compliance with water conservation implementation:

- a. Publicize the biennial BMP implementation CUWCC reports that are submitted by Water Forum signatories. This can include distribution of the reports to all Water Forum signatories, boards, elected officials and the media.
- b. Water Forum signatory organizations may submit letters to the State Water Resources Control Board (SWRCB), DWR or other funding and/or regulatory agencies stating their support or opposition to requests or actions of other signatory organizations based upon progress of water conservation program implementation.
- c. Water Forum signatory water purveyors will notify their customers as to agency progress toward water conservation program implementation through already established means of communication such as newsletters, customer bill inserts or water purveyor web sites. This will be consistent with the biennial reporting timeframe of the water conservation report.

## **G. Other Agreements**

**1. Florin County Water District and Del Paso Manor Water District.** It is recognized that residential water meter retrofit along with quantity based pricing are important tools for improving the efficiency of water use. This helps extend the supply while also reducing the need for increased groundwater pumping or diversions from the American River.

It is also recognized that these two relatively smaller water purveyors currently rely totally on groundwater and will not realize immediate water supply benefits from participating in the *Water Forum Agreement*. Therefore until such time as these two purveyors need discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the *Water Forum Agreement* prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as any of these purveyors needs discretionary approvals for new or expanded surface water supplies they agree to annually retrofit at least 3.3% - 5% of the total number of un-metered residential connections and read and bill as set forth below.

If in the future any of these purveyors receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

**2.** Water Forum signatories would not implement local meter retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. All purveyors would retain the ability to implement incentives for a voluntary meter retrofit at time of resale that would not impose escrow or disclosure requirements.

3. If requested, all signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.

4. A purveyor's agreed upon Water Forum water conservation plan shall be implemented for its entire service area including future changed boundaries.

## AGRICULTURAL WATER CONSERVATION

In 1990, agriculture in Sacramento County contributed to nearly 48% of the water demand for the area. It is projected that the future water demand for agriculture will drop to approximately 29% by 2030. This is due to a number of reasons including the conversion of agricultural land to urban uses as anticipated by the adopted general plans. Another reason for water use reduction is that agriculture in Sacramento County is projected to become more water efficient. By the year 2030 irrigation efficiencies are expected to increase by 5%.

The amount of water used by agriculture is determined by the crops grown, the type of irrigation system, and the incentives or regulations in place to increase irrigation efficiencies.

In the northwest section of Sacramento County the principal crop is rice. Water is supplied by the Natomas Central Mutual Water Company (NCMWC) which is a Central Valley Project (CVP) contractor. NCMWC has been conserving water since 1986 through the installation of recirculation systems which reduce water diversions while growing the same amount of crops. These systems have reduced water use in rice fields by 26%. In the future, NCMWC will continue to conserve surface water by conjunctive use. By pursuing this additional method, it is expected that another 5% could be saved. Other efforts, such as lined canals in sandy soil, tiered pricing, and other controls are expected to gain additional efficiencies.

In the southern section of Sacramento County, water is supplied principally through the pumping of groundwater. One incentive to reduce agricultural water use in this area has been the cost of electricity to pump groundwater. Since the early 1950's the South County Agricultural Irrigation Districts (Galt, Clay, Omochochumne-Hartnell) have been practicing water conservation by installing recirculating systems so water would not be lost at the end of the fields and drip irrigation systems for certain row crops. It is estimated that these methods have reduced water use by up to 50% compared to field irrigation. By implementing additional conservation measures it is expected that another 5% could be saved by 2030.

Much of the surface water currently used by agriculture in the Sacramento region is from the Central Valley Project (CVP). In addition, as provided for in the PSA for South Sacramento County Agriculture, the agricultural irrigation districts (Galt, Clay, Omochochumne-Hartnell) in the southern section of Sacramento County plan to divert and use up to 35,000 AF from Folsom-South Canal in years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 AF. This will augment its groundwater supplies. This surface water most likely will come from the CVP. Surface water from the CVP for agricultural use is subject to the conservation requirements of the CVP Improvement Act of 1992 including criteria for BMPs for Agricultural Contractors.

Support for this diversion is linked to successful negotiation of an agricultural water conservation program. Specifics on the Water Forum's agricultural water conservation program will be negotiated by the Water Forum Successor Effort.

## **~~V. WATER CONSERVATION ELEMENT~~**

### **~~Introduction~~**

~~This Water Conservation Element is essential to meeting both of the coequal goals of the Water Forum. First, conserved water will be available to help supply increased demand. Secondly, conservation will minimize the need for increased groundwater pumping and increased use of surface water, including water diverted from the American River.~~

~~Continued commitment to water conservation will benefit water purveyors, customers, and the environment because it:~~

~~Reflects growing public support for the conservation of limited natural resources and adequate water supplies.~~

~~Allows water districts to optimize the use of existing facilities.~~

~~Delays or reduces the capital investments required for capacity expansion of water and wastewater treatment facilities even though the service area may grow.~~

~~Is essential for the state and federal agency approvals which will be required for specific projects.~~

## **~~MUNICIPAL AND INDUSTRIAL WATER CONSERVATION~~**

### **~~A. Intent~~**

~~Water purveyors in the region have been working hard to conserve water through implementation of a number of water conservation BMPs. The Water Conservation Element of the *Water Forum Agreement* is intended to set forth the water purveyors' programs for implementing all of the BMPs. They were adapted from the statewide MOU regarding urban water conservation BMPs and have been customized for use by the Water Forum.~~

~~This Water Conservation Element contains the basic components of water conservation plans that will be implemented by the purveyors. Conservation plans for each purveyor are incorporated as Appendix J to this *Water Forum Agreement* (separately bound and on file at the Water Forum office).~~

### **~~B. Purveyors Receiving Central Valley Project Water Supplies~~**

~~San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, City of Folsom, El Dorado Irrigation District, Georgetown Divide Public Utility District, and Placer County Water Agency are, or will become, users of CVP water supplies. As such they are subject to the water~~

conservation provisions of the CVPIA. CVPIA conservation requirements and related costs are independent of the *Water Forum Agreement*.

**~~C. Basic Elements of Water Conservation Plan for Municipal and Industrial Uses~~**

**~~1. RESIDENTIAL METER RETROFIT (BMP # 4) and CONSERVATION PRICING (BMP #11)~~** Volumetric measurement and conservation pricing are essential elements of a water conservation program. Water users need to be able to know how much they are using in order to be efficient. Users need accurate economic signals—which require volumetric measurement and conservation pricing—in order to encourage the use of water in the most efficient manner possible.

**~~a. El Dorado Irrigation District, Georgetown Divide Public Utility District, Placer County Water Agency, Rancho Murieta Community Services District, and Rio Linda/Elverta Community Water District.~~** These five purveyors are already fully metered and use volumetric billing.

**~~b. San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water District, Sacramento County, City of Roseville, and City of Folsom.~~** It is recognized that CVPIA meter retrofit provisions are outside the scope of the *Water Forum Agreement* and that they require faster implementation than what is included in the *Water Forum Agreement*. Purveyors signing the *Water Forum Agreement* who receive CVP water agree that if for any reason any or all of its service area is not immediately or in the future subject to the CVPIA meter retrofit requirement, beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed they would annually retrofit at least 3.3%–5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

**~~c. In the first two years after the *Water Forum Agreement* is signed, the Sacramento Suburban Water District, the Carmichael Water District, and California American Water Company would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed these purveyors would retrofit at least 3.3%–5% of the total number of unmetered residential connections as of the date of the *Water Forum Agreement*.~~**

**~~d. City of Galt, Florin County Water District, Del Paso Manor County Water District.~~** It is recognized that residential water meter retrofit along with quantity based pricing are important tools for improving the efficiency of water use. This helps extend the supply while also reducing the need for increased groundwater pumping or diversions from the American River.

“Residential” for purposes of defining the scope of this BMP is defined as single family or duplex customers.

~~It is also recognized that these three relatively smaller water purveyors currently rely totally on groundwater and will not realize immediate water supply benefits from participating in the *Water Forum Agreement*. Therefore until such time as these three purveyors need discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the *Water Forum Agreement* prevents purveyors from deciding to undertake a more rapid meter retrofit program.~~

~~At such time as any of these purveyors needs discretionary approvals for new or expanded surface water supplies they agree to annually retrofit at least 3.3%–5% of the total number of unmetered residential connections and read and bill as set forth below.~~

~~If in the future any of these purveyors receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.~~

~~e. **City of Sacramento:** The City of Sacramento has a provision in its Charter prohibiting mandatory residential meters. It is recognized that it would be very difficult to amend the Charter. Going as far as possible within the limitations of its Charter, the City of Sacramento would implement a voluntary meter retrofit program. It is also recognized that environmental signatory organizations prefer and will continue to advocate that all connections be metered.~~

~~f. Water Forum signatories would not implement local retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. This provision would not apply to the City of Sacramento since its Charter prohibits mandatory residential metering. All purveyors would retain the ability to implement incentives for a voluntary meter retrofit at time of resale that would not impose escrow or disclosure requirements.~~

~~g. In administrative proceedings related to statewide matters such as the Bay-Delta water rights proceeding, signatories to this *Agreement* may need to advocate statewide meter retrofit schedules different than what is included in this *Agreement*.~~

~~h. All signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.~~

~~i. As soon as practical, purveyors signatory to the *Water Forum Agreement* will begin reading all meters and including the usage on the customers' bills. This includes meters required in new construction since 1992 and meters retrofit onto existing connections. It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would read the meters and provide usage information within three years of~~

~~signing of the *Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.~~

~~j. As soon as practical, purveyors will implement conservation pricing which will base customer charges on the quantity of water used. With conservation pricing, the unit rate is constant regardless of quantity used (uniform rate) or the rate increases as the quantity of water used increases (increasing block rate). It is recognized that circumstances vary purveyor by purveyor. However the general guideline used for negotiating each purveyor's water conservation plan was that purveyors would base customer charges on the quantity of water used within six years of signing of the *Water Forum Agreement*. Each purveyor's schedule for implementing this provision is included as part of its Water Conservation Plan.~~

~~2. NON-RESIDENTIAL METER RETROFIT (BMP #4) Purveyors will retrofit at least 85%–90% of non-residential customers within ten years. Complete non-residential retrofit is not a requirement. This is in recognition of the fact that there could be some smaller non-residential customers whose service locations could be very difficult and expensive to retrofit.~~

~~3. RESIDENTIAL ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM (BMP #16) California Plumbing Codes require the installation of Ultra-low Flush (ULF) (1.6 gallon) toilets in new construction which saves approximately 3.5 gallons per flush over older models. ULF toilet retrofitting programs have shown that the water savings average 44 gallons per day for toilets replaced in a multiple-family complex and 28 gallons per day saved in single-family retrofits.~~

~~Purveyors are encouraged, but not required, to establish residential toilet replacement programs. This could be done in conjunction with any toilet replacement programs implemented by sanitation districts. It could also be implemented in cooperative programs with community organizations.~~

~~4. NON-RESIDENTIAL TOILET PROGRAM (BMP #16) Purveyors will provide incentives for replacement of non-residential toilets with ULF toilets. This could also be done in conjunction with any toilet replacement program implemented by sanitation districts.~~

~~5. BEST MANAGEMENT PRACTICES OTHER THAN METERS, CONSERVATION PRICING, AND TOILETS If they have not already done so, purveyors will start implementing the remaining BMPs within three years of signing the *Water Forum Agreement* in a manner consistent with the Water Forum BMP Implementation Criteria (see Appendix D). These criteria were adopted on July 28, 1997 by the Water Forum. They were adapted from the Statewide MOU Regarding Urban Water Conservation BMPs developed by the California Urban Water Conservation Council (CUWCC) and have been customized for use by the Water Forum. These criteria include a Functional Equivalency Provision which in some cases allowed purveyors to negotiate alternative implementation methods that will be as effective as the standard criteria.~~

~~The Water Forum Successor Effort will facilitate “changed conditions” negotiations to determine how BMPs adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors’ Water Conservation Plans.~~

~~If Water Forum signatories are unable to agree on how BMPs adopted or amended by CUWCC after July, 1997 will be incorporated into the Water Forum purveyors’ water conservation plans, individual signatory organizations can advocate how they believe those new BMPs should be implemented. This can be done as part of the review of environmental documentation or in legislative, administrative, regulatory and other venues.~~

~~6. — CITIZEN INVOLVEMENT PROGRAM In the implementation of BMPs (especially meter retrofit and pricing programs) the water purveyors will establish a citizen involvement program, such as citizen advisory committees, to help design, implement and market water conservation programs. Each purveyor will establish this program within three years of signing the *Water Forum Agreement*, if they do not already have a program established. Each purveyor’s citizen involvement program is described in its water conservation plan.~~

~~7. — WATER CONSERVATION PLANS INCLUDED AS AN APPENDIX TO THE WATER FORUM AGREEMENT The water conservation plans provide the way for water purveyors to identify and then report its progress toward the implementation of the BMPs and for all parties to confirm that the conservation element of the *Agreement* is being implemented. Water Forum’s stakeholder representatives negotiated with each purveyor the specifics of that purveyor’s water conservation plan.~~

~~Components of the water conservation plans are:~~

- ~~a. — Description of how the purveyor will implement each BMP;~~
- ~~b. — Annual targets, staffing, and budgets for each of the initial four years;~~
- ~~c. — Description of how the purveyor will implement its citizen involvement program;~~
- ~~d. — Past (at least from 1975 on) and projected total water use to the year 2030— demonstrating consistency with assumptions used in *Water Forum Agreement* (see Appendix D for format); and~~
- ~~e. — Past (at least from 1975 on) and projected per capita water use to the year 2030 (see Appendix D for format).;~~

~~8. — IMPLEMENTATION OF WATER FORUM BMPS FOR NEW OR EXPANDED SERVICE AREA A purveyor’s agreed upon Water Forum water conservation plan shall be implemented for its entire service area including future changed boundaries.~~

~~See City of Folsom PSA (Section D) for further information on this item.~~

~~9. ANNUAL REPORTS Water purveyors will prepare annual reports on the implementation of water conservation activities as outlined in its water conservation plans. These reports will be shared with the Water Forum Successor Effort.~~

~~a. Purveyors will annually report its conservation activities for prior year and compare total and per capita water use with its original projections (i.e., updating the charts originally prepared for item 7 d and e above).~~

~~b. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described.~~

~~c. Each purveyor's progress toward BMP implementation will be annually reviewed and reported by the Water Forum Successor Effort.~~

~~10. UPDATING WATER CONSERVATION PLANS Purveyors will update its water conservation plans every five years.~~

**~~D. Specific Agreement on the Water Conservation Element for Municipal and Industrial Uses~~**

~~All signatories will support and, where appropriate, participate in the Water Conservation Element as set forth above and as described in its water conservation plans negotiated for the *Water Forum Agreement*. Purveyors' water conservation plans are incorporated as Appendix J to this *Water Forum Agreement* and are on file at the Water Forum office.~~

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## AGRICULTURAL WATER CONSERVATION

In 1990, agriculture in Sacramento County contributed to nearly 48% of the water demand for the area. It is projected that the future water demand for agriculture will drop to approximately 29% by 2030. This is due to a number of reasons including the conversion of agricultural land to urban uses as anticipated by the adopted General Plans. Another reason for water use reduction is that agriculture in Sacramento County is projected to become more water efficient. By the year 2030 irrigation efficiencies are expected to increase by 5%.

The amount of water used by agriculture is determined by the crops grown, the type of irrigation system, and the incentives or regulations in place to increase irrigation efficiencies.

In the northwest section of Sacramento County the principal crop is rice. Water is supplied by the Natomas Central Mutual Water Company (NCMWC) which is a Central Valley Project (CVP) contractor. NCMWC has been conserving water since 1986 through the installation of recirculation systems which reduce water diversions while growing the same amount of crops. These systems have reduced water use in rice fields by 26%. In the future, NCMWC will continue to conserve surface water by conjunctive use. By pursuing this additional method, it is expected that another 5% could be saved. Other efforts, such as lined canals in sandy soil, tiered pricing, and other controls are expected to gain additional efficiencies.

In the southern section of Sacramento County, water is supplied principally through the pumping of groundwater. One incentive to reduce agricultural water use in this area has been the cost of electricity to pump groundwater. Since the early 1950's the south County agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) have been practicing water conservation by installing recirculating systems so water would not be lost at the end of the fields and drip irrigation systems for certain row crops. It is estimated that these methods have reduced water use by up to 50% compared to field irrigation. By implementing additional conservation measures it is expected that another 5% could be saved by 2030.

Much of the surface water currently used by agriculture in the Sacramento region is from the Central Valley Project (CVP). In addition, as provided for in the PSA for South Sacramento County Agriculture, the agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) in the southern section of Sacramento County plan to divert and use up to 35,000 acre-feet from Folsom South Canal in years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 acre-feet. This will augment its groundwater supplies. This surface water most likely will come from the CVP. Surface water from the CVP for agricultural use is subject to the conservation requirements of the CVP Improvement Act of 1992 including criteria for BMPs for Agricultural Contractors.

Support for this diversion is linked to successful negotiation of an agricultural water conservation program. Specifics on the Water Forum's agricultural water conservation program will be negotiated by the Water Forum Successor Effort.

## VI. GROUNDWATER MANAGEMENT ELEMENT

Update – The Sacramento North Area Groundwater Management Authority became Sacramento Groundwater Authority on May 7, 2002.

This change is not considered an amendment to the Agreement and was made for clarity by staff.  
June 2009

Developed jointly by the Sacramento Metropolitan Water Authority Groundwater Committee and the Sacramento Water Forum Groundwater Negotiation Team.

### A. Intent

Our vital groundwater resource supplies about half the water used in the region. The purpose of a groundwater management plan is to protect the viability of that resource for both current and future users. To do so requires monitoring the amount of water withdrawn from the groundwater basin and promoting the use of groundwater in conjunction with surface water supplies to maximize the availability of both. This must be accomplished by creating publicly accountable governance structures which respect the rights of all groundwater users. Ideally, these structures should be established using existing authority and institutions.

This document contains recommendations by which to monitor the amount of groundwater which can be pumped from the basin over a long period without damaging the aquifer (sustainable yield). The ~~Sacramento Groundwater Authority (SGA)~~ ~~Sacramento North Area Groundwater Management Authority~~ was established in August 1998 using the existing authority of the ~~cities of Sacramento, Folsom, Citrus Heights~~ ~~City of Sacramento, the City of Folsom, City of Citrus Heights~~ and County of Sacramento through adoption of a joint powers agreement. In the ~~Central South~~ Area and the ~~South Galt~~ Area of the county, negotiations for specific groundwater management arrangements will continue employing the principles of interest-based negotiation to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique needs. ~~The Sacramento Central Groundwater Authority (SCGA) was formed in September 2006 and approved its groundwater management plan in November 2006. The Southeast Sacramento County Agricultural Water Authority (SSCAWA) was formed in 2002 and published its groundwater management plan in 2011.~~

### B. Recommendations Concerning Sustainable Yield

1. Background on Sustainable Yield and Conjunctive Use

Our vital groundwater resource must be protected. In addition, if managed in conjunction with the surface water available during wet years, the groundwater basin can provide storage capacity to bank water which can be used to meet demand in dry years. To achieve these objectives, recommendations must address two important factors, sustainable yield and conjunctive use.

Within the context of these recommendations, sustainable yield is defined as the amount of groundwater which can be safely pumped from the groundwater basin over a long period of time while maintaining acceptable groundwater elevations and avoiding undesirable effects which might include increased pumping costs, accelerated movement of underground pollutants, etc. Sustainable yield requires a balance between pumping and basin recharge and is expressed as the number of acre-feet of water per year which can be pumped from the basin on a long-term average annual basis.

Conjunctive use is the planned management and use of both groundwater and surface water in order to improve the overall reliability of a region's total water supply. For example, in wet years when surface water is plentiful, groundwater pumping may be reduced or eliminated and only surface water is used. The groundwater basin would be replenished in these wet years. In dry years when surface water is in short supply, the water that has been accumulating in the basin would be pumped for use and surface water diversions reduced or eliminated. Additional surface water diversions will be required to implement a conjunctive use program. Conjunctive use is expressed in acre-feet per year.

The following purveyors utilize the groundwater basin for some or all of their water supplies. There are also residents, businesses and agriculturalists that pump groundwater from the basin.

North Area: [Sacramento Suburban Water District](#) ~~[Arade Water District](#)~~, [Golden State Water Company](#) ~~[Arden Cordova Water Service](#)~~ (Arden area), Carmichael Water District, [California-American Water Company](#) ~~[Citizens Utilities Company of California](#)~~, Citrus Heights Water District, City of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, McClellan Air Force Base, Sacramento International Airport, Orange Vale Water Company, Rio Linda/Elverta Community Water District, [Sacramento County Water Agency](#) ~~[Sacramento County WMD \(portion\)](#)~~.

Central ~~South~~ Area: [Golden State Water Company](#) ~~[Arden Cordova Water Service](#)~~ (Cordova area), [California-American Water Company](#) ~~[Citizens Utilities Company of California](#)~~, City of Sacramento, Elk Grove Water Works, Florin County Water District, Fruitridge Vista Water Company, Mather Air Force Base, Omochumne-Hartnell Water District (portion), Sacramento County Water Agency, Tokay Park Water Company.

~~South Galt~~ Area: ~~[City of Galt](#)~~, Clay Water District, Galt Irrigation District, Omochumne-Hartnell Water District (portion).

## 2. Recommendation on Sustainable Yield: North Area

The recommended estimated average annual sustainable yield is 131,000 AF. This represents the year 1990 pumping amount. To help meet year 2030 demands, a program would be implemented to use the groundwater basin conjunctively with surface water supplies.

3. Recommendation on Sustainable Yield: ~~Central South~~ Area

The recommended estimated average annual sustainable yield is 273,000 AF. This represents the year 2005 projected pumping amount and is 23,000 AF more than the 1990 pumping amount. The projected 2005 pumping amount for the ~~Central South~~ Area took into consideration the cost of delivery of surface water and the impacts which occur due to the lower stabilized groundwater levels. To meet year 2030 demands, a program would be implemented to use the groundwater basin conjunctively with surface water diversions.

4. Recommendation on Sustainable Yield: ~~South Galt~~ Area

The recommended estimated average annual sustainable yield is 115,000 AF<sup>6</sup>. This represents the year 1990 pumping amount. Conjunctive use would be implemented, dependent upon the availability of surface water, to enhance groundwater levels.

## C. Recommendations Concerning a Groundwater Management Governance Structure

### 1. BACKGROUND ON GROUNDWATER RIGHTS

There are fundamental differences between surface water rights and groundwater rights that require any groundwater management plan to be tailored to reflect those differences. For example, most appropriative surface-water rights are governed by a complex, statewide statutory system. Since 1914, surface-water appropriators have been required to obtain a permit from the SWRCB and abide by the permit conditions to use water. Surface-water rights may be forfeited by disuse, i.e., the failure to exercise those rights. Surface-water users must also be able to demonstrate reasonable and beneficial use of water, as these terms are defined in California water law, or run the risk of losing some or all of their water rights.

In contrast, there is no statewide statutory scheme for groundwater and no permit system. While groundwater must also be put to beneficial use, groundwater rights are not *per se* lost by disuse. The regulation of groundwater use is primarily a local government

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<sup>6</sup> In the ~~South Galt~~ Area, the development of surface water for conjunctive use and reduction in groundwater pumping due to conservation and modified agricultural practices may take several years to accomplish. During this interim period, the average annual usage may exceed the recommended sustainable yield. It should be recognized that this recommendation for the ~~South Galt~~ Area is a *long-term* goal.

responsibility. In Southern California, statutory and judicially mandated or authorized groundwater management is, in fact, the rule rather than the exception. In recent years, encouraged by state legislation and recent judicial decisions, areas of Northern California have increasingly viewed groundwater management as an appropriate means by which local areas can protect their groundwater resources. Under current legislation, the County of Sacramento as well as the cities of Sacramento, Folsom, and Citrus Heights have groundwater management authority.

Groundwater rights fall into one of three general categories. The first category of groundwater rights is “overlying rights”. An overlying right is the right of a land owner to take water from the basin underneath the land for reasonable, beneficial purposes on the land, thus the term overlying rights. Overlying rights exist by virtue of land ownership and are correlative to the overlying rights of other land owners. “Unexercised overlying rights” are those overlying water rights that are not currently being utilized. Because both exercised and unexercised overlying rights are held as part of the ownership of land, they are “vested” rights in the sense that they pass from owner to owner with the sale of the land; however, such rights are subject to reduction by prescription when no surplus water is available, as discussed below.

The second type of right to groundwater is an “appropriative right”. This right is gained through the extraction and utilization of water for reasonable, beneficial purposes. Because appropriative rights are not held as part of the ownership of the overlying land, the rights of an appropriator depend on the actual taking of water for reasonable, beneficial use. As between two appropriators, the relative priority system of “first in time, first in right” applies. Because California law favors the greatest number of beneficial uses of water, public entities may gain appropriative rights by pumping groundwater for “municipal” purposes without actually owning a substantial portion of the overlying land. So long as there is a surplus in the groundwater basin, appropriative rights are not adverse to overlying rights.

The third type of right to groundwater, known as a “prescriptive right”, comes into existence only if the groundwater basin has no “surplus” water available. Prescriptive rights in groundwater law are rights gained by appropriating non-surplus water for the statutorily prescribed period. A basin is in a state of “surplus” when the amount of water being extracted from it is less than the maximum amount that could be drawn without adverse effects on the basin’s long-term supply. An appropriative right can ripen into a prescriptive right if the appropriator takes non-surplus water for the statutorily prescribed period. While private individuals and entities may lose their groundwater rights to others who gain a prescriptive right against them, California law states that public entities cannot lose their water rights through prescription.

In determining whether a basin has surplus water, the courts have looked to the basin’s “sustainable yield.” Sustainable yield is the maximum amount of water which can be withdrawn annually from a groundwater supply under a given set of circumstances without causing an undesirable effect. Under the best-case scenario, when overlying

rights holders are ready to exercise their unexercised rights, or when the city, county, or other entity seeks to appropriate more groundwater for municipal purposes, the pumping in the basin will not exceed the basin's sustainable yield. As long as surplus water exists and the basin maintains sustainable yield, all groundwater rights are protected: overlying rights are not lost by prescription; appropriative rights may be fully exercised; and no user gains a prescriptive right against another.

Under the “worst-case scenario”, when overlying rights holders are ready to exercise their unexercised rights, or when the city, county, or other entity seeks to appropriate more groundwater for municipal purposes, basin-wide pumping will exceed sustainable yield. The lack of surplus water serves as a signal that overlying rights may be lost through prescription and that appropriative rights may begin to ripen into prescriptive rights. In short, the inability to maintain a sustainable yield creates the conditions that have historically given rise to litigation and groundwater basin adjudication. Under this worst-case scenario, the “train wreck” that the Water Forum was established to prevent — divisive, expensive, and protracted litigation and adjudication — will have occurred.

As discussed in detail below, this groundwater element seeks to avoid the train wreck by calling for arrangements to manage the basin so as to prevent basin-wide pumping in excess of sustainable yield. Indeed, the primary purpose of these arrangements is to manage the limited groundwater resources such that the basin is never threatened by the inability to maintain sustainable yield.

Recognizing the unique and varied nature of groundwater rights, the surface water priority system of “first in time, first in right” does not apply to the policies and procedures effecting groundwater management. Instead, in establishing a groundwater management plan, the challenge is to create a framework that: (1) allows current users to continue to exercise their rights; (2) recognizes both exercised and unexercised overlying rights are vested rights in the sense that they pass from owner to owner with the sale of the land, as discussed above; (3) provides that similarly situated present and future groundwater users will be treated the same; and (4) creates certainty for all current and future users by ensuring that the basin is maintained at its sustainable yield. Ultimately, current groundwater users, future groundwater users, and those who rely on groundwater for conjunctive use must recognize that they all share a common interest — the protection, preservation, and enhancement of the groundwater basin.

## 2. FUNDAMENTAL ASSUMPTIONS

The recommendations contained in this document are based on the following thirteen assumptions:

- a. The purpose of groundwater management is to maintain access to a safe and reliable supply of water, either through continued use of groundwater, a conjunctive-use program or access to an alternative satisfactory source of supply.

b. For groundwater users in Sacramento County and adjacent areas, alternative satisfactory sources of supply should be developed which are both fully accessible and economically feasible.

c. In accordance with existing law, a groundwater management program must:

(1) respect the existing rights of any person, association, corporation, municipality or public district;

(2) recognize the vested nature of both exercised and unexercised overlying rights (as discussed in the background section of this Element);

(3) recognize that given the vested nature of all overlying rights, the surface water priority system of “first in right” does not apply to groundwater pumping; and

(4) ensure that the groundwater basin is managed in such a way as to promote the continued health and stability of that resource for the benefit of all current and future users.

d. The hydrology of the Sacramento region suggests three groundwater sub-areas within the basin, each with different problems and conditions. The groundwater management governance structure should recognize these differences and provide for local control in each sub-area of the basin so as to address these varying problems and conditions most effectively.

e. At the same time, adequate provisions must be made to ensure over-all coordination of policies and activities among the three sub-areas of the basin.

f. It is impossible to foresee the future or to predict each circumstance which might arise in management of the groundwater basin. Therefore, it is the goal of these principles and recommendations to outline a basic framework for groundwater management and to discuss options to ensure basin-wide coordination. In the North Area of Sacramento County, the ~~SGA Sacramento North Area Groundwater Management Authority~~ will have to exercise professional competence and good judgment in addressing specific problems and issues. ~~SCGA~~ in the ~~Central South~~ Area and the ~~South Galt~~ Area, those entities which assume groundwater management responsibilities will have to do likewise. It is not the purpose of this document to anticipate these specific problems and dictate solutions. To do so would weaken the authority of the various groundwater management entities and undermine the flexibility which they must have in order to discharge their responsibilities.

g. In discharging their planning and management responsibilities, the groundwater management entities must consider the fact that there are

unexercised rights holders who may begin to exercise their rights at some future date, either before or after the term of the *Water Forum Agreement* (year 2030). Consistent with the *Water Forum Agreement*, these entities must manage the groundwater basin with such eventualities in mind, taking into account both current and future water needs.

All groundwater rights holders, whether their rights are exercised or unexercised, share the common goal of maintaining the long-term viability of the basin. To ensure that all current and future users are treated equitably, including both those currently exercising groundwater rights and those with unexercised rights, the groundwater management plans must neither (a) reward or penalize exercised rights holders for electing to exercise their rights nor (b) reward or penalize unexercised rights holders for electing not to exercise their rights immediately. Accordingly, when previously unexercised rights are exercised in the future, the same conditions and burdens, financial and otherwise, will apply equally to similarly situated groundwater rights holders within the same sub-area that receive the same level of benefit, regardless of the date when their rights were first exercised.

- h. Effective groundwater management will require the use of surface water. Therefore, the groundwater management governance structure must address relationships with those agencies which can deliver such surface water and specify how the interests of these agencies will be represented in the governance structure.
- i. The groundwater management governance structure should facilitate participation by water agencies with specific and relevant interest in the groundwater governance structure outside of Sacramento County and encourage cooperation and collaboration with such agencies.
- j. Groundwater makes up a portion of the total water resource identified to meet projected water demands in 2030. These water demands are based primarily on the general plans approved by the respective city councils and the county boards of supervisors as of June, 1996.
- k. The authority to make land-use decisions is vested in county boards of supervisors and city councils. This document recognizes that fact and assumes that these entities will continue to exercise this authority.
- l. This document assumes that, as a part of the Water Forum discussions, a program will be negotiated to ensure the on-going monitoring and implementation of the *Water Forum Agreement*. This program is currently referred to as the “Water Forum Successor Effort.” The Successor Effort will be based on the principles of collaboration and consensus and will not entail formalized legal authority to mandate or regulate actions by the signatories to the *Water Forum*

*Agreement.* The Successor Effort may or may not include some permanent entity through which monitoring functions are carried out.

### 3. GOVERNANCE OPTIONS

Taking these assumptions into account, the Sacramento Metropolitan Water Authority (SMWA) Groundwater Committee (Committee) and the Water Forum Groundwater Negotiation Team (Team) reviewed options to implement a groundwater management governance structure including:

- \* a voluntary plan under AB 3030;
- \* existing options provided for in the Sacramento County Water Agency (SCWA) Act but never implemented;
- \* modification of these existing options which would require no action by the legislature or only a limited amendment of the groundwater provisions of the Act;
- \* options based upon joint powers agreements as provided for in state statutes; and
- \* special legislation in the State Assembly and Senate.

In considering each of these alternatives, the Committee and the Team applied three standards: what is simplest, what is most efficient, and given political realities, what can be implemented most expeditiously. The Committee and the Team also sought the advice of legal counsel to be sure that recommendations concerning a groundwater management governance structure would meet all requirements of law and regulation (as of September, 1996).

After exhaustive review and discussion, the Committee and the Team determined that the joint powers agreement which established the [~~SGA Sacramento North Area Groundwater Management Authority~~](#) is the option which best meets the three standards previously identified. Recognizing the differences in circumstances and conditions in other areas of the County, the Committee and the Team also determined that the Sacramento North Area arrangements should not serve as a template for the [~~Central South~~](#) and [~~South Galt~~](#) areas and negotiations concerning groundwater arrangements in the [~~Central South~~](#) Area and the [~~South Galt~~](#) Area should continue, as discussed below.

Concerning the joint powers agreement which established the [~~SGA Sacramento North Area Groundwater Management Authority~~](#), it is important to note the law requires that all of the participating public agencies must have independent authority to exercise whatever powers are to be jointly exercised. For purposes of groundwater governance, the two essential powers are authority to manage groundwater and authority to establish a regulatory fee. The public agencies in Sacramento County which hold these powers are Sacramento County, the cities of Sacramento, Folsom, and Citrus Heights.

The ~~SGA Sacramento North Area Groundwater Management Authority~~ was established in August 1998 using the existing authority of the City of Sacramento, the City of Folsom, City of Citrus Heights and County of Sacramento through adoption of a joint powers agreement.

#### 4. SCHEDULE FOR IMPLEMENTATION

The SMWA Groundwater Committee and the Water Forum's Groundwater Negotiation Team noted the fact that:

a. Current conditions affecting the importation of surface water and use of groundwater in the north area of the County differ significantly from those in the ~~Central South~~ Area and the ~~South Galt~~ Area: (NOTE: For purposes of this document, these areas are defined as follows: North Area – north of the American River; ~~Central South~~ Area – between the American and the Cosumnes rivers; ~~South Galt~~ Area – south of the Cosumnes.)

(1) The North Area is closer to build-out.

(2) Delivery systems for surface water are already being expanded and utilized to a greater extent in the North Area.

(3) Almost all of the North Area, including agriculture, is served by organized purveyors. Thus, the institutional infrastructure necessary to implement groundwater management is further developed in the North Area.

(4) The ~~SMWA Sacramento Metropolitan Water Authority~~ which includes eight of the ~~twelve 12~~ water purveyors in the North Area wishes to implement a groundwater management plan as soon as possible and has already taken action to do so.

b. Given these and other significant differences in the opportunities and constraints in the North Area compared to the rest of Sacramento County:

(1) The schedule for implementation of groundwater management arrangements in each area will differ.

(2) The ~~SGA Sacramento North Area Groundwater Management Authority~~ was established in August 1998.

c. It is important to note that discussions involving all parties interested in the negotiation of groundwater management arrangements in the ~~Central South~~ Area and the ~~South Galt~~ Area will continue. These discussions, employing the

principles of interest-based negotiation, are part of a public process designed to provide all community interests the opportunity to participate in tailoring a groundwater management plan to fit each area's unique circumstances. The goal of these discussions is to reach agreement on satisfactory groundwater management arrangements in the [Central South](#) Area and the [South Galt](#) Area as soon as feasible. [Similar interest-based negotiations led to the formation of SCGA in 2006.](#)

d. Again, it should also be noted that recommendations contained in this document for groundwater management in the North Area are not a "template" to be imposed on the [Central South](#) or [South Galt](#) areas. While some North Area recommendations may be useful in other areas of the county, groundwater management plans, including an appropriate governance structure and financial arrangements, must be developed and crafted to meet the unique conditions of the [Central South](#) and the [South Galt](#) areas. [A groundwater management plan for the Central Area was adopted by SCGA in 2006.](#)

e. Assuming that, at a future date, satisfactory joint powers agreements and/or memoranda of understanding are negotiated which provide for the participation in a groundwater management program by purveyors outside of Sacramento County, those purveyors may be represented in the groundwater management program and any related governance structure as specified in those joint powers agreements or memoranda of understanding.

## 5. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: GENERAL

Based upon careful consideration of the fundamental assumptions, review of the available options for a groundwater management governance structure, discussion with engineering and other technical consultants and guidance provided by legal counsel, the [SMWA Sacramento Metropolitan Water Authority](#) Groundwater Committee and the Sacramento Water Forum Groundwater Negotiation Team make the following recommendations.

a. The [SGA, SCGA Sacramento North Area Groundwater Management Authority \(Authority\)](#) and the responsible groundwater management [entity entities](#) in the [Central South Area and the South Galt](#) Area will exercise the right to manage groundwater for the benefit of current and future users, including overlying users with unexercised rights. In order to do so, the [SGA Authority](#) and other responsible entities will use economic measures (incentives and disincentives) to encourage conservation and raise revenues necessary to purchase surface water for implementation of conjunctive use programs. For example, groundwater users may pay a per acre-foot fee for water consumptively used. Such a fee encourages water management, rewards water conservation, protects overlying rights, and does not penalize those who have not yet fully exercised their overlying water rights. Of course, a per acre-foot fee on water

consumptively used is just one option that the ~~SGA Authority~~ or other groundwater management entity may elect to implement.

It will be up to each ~~management SGA Authority or other~~ entity to decide what mechanisms work best in their particular area to raise revenues and encourage conservation.

b. Provisions must be made to ensure coordination of management policies and activities among all three areas of the groundwater basin and to facilitate cooperation among the North, ~~Central South~~ and ~~South Galt~~ areas in all matters of mutual interest (See 8 later in this Groundwater Management Element).

c. The ~~SGA, SCGA Sacramento-North Area Groundwater Management Authority~~ and other groundwater management entities should be provided with sufficient technical support and/or staff to enable them to discharge their groundwater management responsibilities.

d. All meetings of the ~~SGA, SCGA Sacramento-North Area Groundwater Management Authority~~ and other groundwater management entities shall be open to the public, subject to the provisions of the Brown Act.

e. The purpose of the ~~SGA, SCGA Sacramento-North Area Groundwater Management Authority~~ and other groundwater management entities shall be to:

- (1) Maintain the long-term sustainable yield of the area of the groundwater basin under its delegated jurisdiction;
- (2) Manage the use of groundwater in the area of the basin under its delegated jurisdiction and facilitate implementation of an appropriate conjunctive use program by the area purveyors;
- (3) Coordinate efforts among all participants in the local groundwater management plan to devise and implement strategies to safeguard groundwater quality;
- (4) Work collaboratively with the responsible groundwater management entities in other areas to promote coordination of policies and activities throughout the basin;

f. In order to fulfill these purposes within their respective areas, the ~~SGA, SCGA Sacramento-North Area Groundwater Management Authority~~ and groundwater management entities in other areas of the basin should have the authority to:

- (1) Collect and monitor data on annual pumping amounts

- (2) Recommend annual extraction goal based on the availability of surface water
- (3) Monitor implementation of annual “puts” and “takes”
- (4) Monitor the migration of toxic plumes
- (5) Facilitate collaboration among purveyors to identify the area’s needs and develop a plan to meet those needs
- (6) Determine allocation of administrative costs
- (7) Determine allocation of water costs on a project by project basis
- (8) Based upon determinations of benefit, establish regulatory fees to cover water costs and administrative costs.

g. Each of the three areas of the groundwater basin is served by different water purveyors. The responsible groundwater management entity in each area of the basin must reflect this fact. Therefore, the composition of each entity will vary.

h. Commercial/industrial self-supplied groundwater users (i.e., major industrial users which pump their own groundwater) and agricultural pumpers shall be represented on the responsible groundwater management entity in each of the three areas of the basin.

i. Sec. 10910 of the Water Code, as amended by Senate Bill 901, requires cities and counties to ask a public water purveyor to provide an assessment of whether its total projected water supplies can meet the anticipated increase in water demand which would be created as the result of a proposed development project. (The size of projects subject to this requirement is set forth in the code.)

Nothing in these recommendations is intended to modify or impair the existing authority of county boards of supervisors or city councils to make land-use decisions. At the same time, in order to discharge its responsibility to manage the area of the basin under its delegated jurisdiction, the [SGA, SCGA Sacramento North Area Groundwater Management Authority](#) and other groundwater management entities must be informed of proposed development projects which may affect water demand in its area. Therefore, at the same time that a public water purveyor responds to a city’s or a county’s request for an assessment, it shall send a copy of its assessment report to the [SGA, SCGA Sacramento North Area Groundwater Management Authority](#) or the groundwater management entity in whose jurisdiction the proposed development would take place.

As indicated above, the ~~SGA Sacramento North Area Groundwater Management Authority~~ was established in August 1998. The joint powers agreement creating the ~~SGA the Sacramento North Area Groundwater Management Authority~~ was based upon the recommendations set forth in the following two sections of this document. The provisions in these two sections have already been implemented but they are included here for reference.

6. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: NORTH AREA - GENERAL

a. The ~~SGA Sacramento North Area Groundwater Management Authority~~ should be created as soon as possible by a joint powers agreement among public agencies which have the authority to manage groundwater and to establish a regulatory fee: i.e., the ~~cities of Sacramento, Folsom, Citrus Heights City of Sacramento, the City of Folsom, the City of Citrus Heights~~ and Sacramento County.

b. The joint powers agreement shall remain in effect until terminated by one of the signatory agencies. To do so, the signatory agency intending to terminate the agreement must give ninety days written notice to all other signatories. Upon termination, the assets and liabilities of the joint powers authority become the responsibility of the signatory agencies in whatever proportion is set forth in the joint powers agreement.

c. The ~~SGA the Sacramento North Area Groundwater Management Authority~~ shall have the authority, in conformance with existing water rights and consistent with the *Water Forum Agreement*, to exercise the delegated right to manage groundwater in the area of the basin under its jurisdiction so as to protect the future viability of the basin as a water resource.

d. In order to meet legal requirement, all members serving on the ~~SGA Sacramento North Area Groundwater Management Authority~~ must be appointed by the public agencies which are signatories to the joint powers agreement: i.e., the cities of Sacramento, Folsom, Citrus Heights and Sacramento County.

e. In the North Area, each organized purveyor shall be represented on the ~~SGA Sacramento North Area Groundwater Management Authority~~. Representatives shall be selected from among the elected members of the purveyor's board of directors. In the case of an investor-owned utility, the representative shall be a member of the board of directors or the designee thereof.

f. Prior to the appointment of the representative of each purveyor, the purveyor shall submit a recommended appointment for its representative to the appointing agency. The appointing agency shall give consideration to such recommendations but shall retain the absolute discretion to appoint any person satisfying the criteria set forth in Paragraphs h (1), (3) and (4) below.

g. In order to meet legal requirements, all members serving on the ~~SGA Sacramento North Area Groundwater Management Authority~~ do so at the pleasure of the appointing public agency.

h. The joint powers agreement creating the ~~SGA Sacramento North Area Groundwater Management Authority~~ shall specify membership on the ~~SGA Sacramento North Area Groundwater Management Authority~~ as follows:

- (1) One representative from each of the following organized water purveyors (selected from among the elected members of the purveyor's board of directors or, in the case of an investor owned utility, a member of the board of directors or designee thereof):

~~Sacramento Suburban Water District~~ ~~Arcade Water District~~  
~~Golden State Water Company~~ ~~Arden Cordova Water Service~~  
Carmichael Water District  
~~California-American Water Company~~ ~~Citizens Utilities Company of California~~  
Citrus Heights Water District  
City of Folsom  
City of Sacramento  
Del Paso Manor Water District  
Fair Oaks Water District  
Natomas Central Mutual Water Company  
~~Sacramento Suburban Water District~~ ~~Northridge Water District~~  
Orange Vale Water Company  
Rio Linda/Elverta Community Water District  
Sacramento County Water ~~Agency~~ ~~Maintenance District~~  
San Juan Water District

- (2) In order to meet the legal requirement that all members serving on the ~~SGA Sacramento North Area Groundwater Management Authority~~ be appointed by the public agencies which are signatories to the joint powers agreement:

- (a) The City Council of the City of Citrus Heights shall appoint the representative of the Citrus Heights Water District.
- (b) The City Council of the City of Folsom shall appoint its own representative.
- (c) The City Council of the City of Sacramento shall appoint the representatives of:

- ~~Sacramento Suburban Water District~~ ~~Arcade Water District~~
- ~~Golden State Water Company~~ ~~Arden Cordova Water Service~~

- California American Water Company ~~Citizens Utilities Company of California~~

- City of Sacramento
- Del Paso Manor Water District
- Natomas Central Mutual Water Company

(d) The Sacramento County Board of Supervisors shall appoint the representatives of:

- Carmichael Water District
- Fair Oaks Water District
- ~~Sacramento Suburban Water District Northridge Water District~~
- Orange Vale Water Company
- Rio Linda/Elverta Community Water District
- Sacramento County Water ~~Agency Maintenance District~~
- San Juan Water District

(3) One representative of North Area Agriculture to be appointed by the Sacramento County Board of Supervisors.

(4) One representative of commercial/industrial self-supplied groundwater users to be appointed by the City Council of the City of Sacramento.

(5) At such time as satisfactory joint powers agreements and/or memoranda of understanding are negotiated which provide for the participation in the groundwater management program by purveyors outside of Sacramento County, a representative(s) of those purveyors (the City of Roseville, Placer County Water Agency, South Sutter Water District, etc.) may be appointed to the ~~SGA Sacramento North Area Groundwater Management Authority~~ under any arrangement specified in the joint powers agreement(s) or memoranda of understanding.

i. In addition, the joint powers agreement creating the ~~SGA Sacramento North Area Groundwater Management Authority~~ should specify:

(1) voting on the ~~SGA Authority~~ be structured as follows:

(a) Each representative shall have one vote

(b) All items pertaining to finances must be approved by a double majority: i.e., a majority of all of the members of the ~~SGA Authority~~ (voting on the basis of one person/one vote)

And a majority of votes weighted on the basis of total water production.

(NOTE: For purposes of determining regulatory fees or charges to support the administrative costs, total water production means the combined surface water and groundwater delivered by retail providers, together with that water produced by agricultural and self-supplied users for use within the boundaries of the joint powers authority. For purposes of determining regulatory fees or charges to support water costs, total water production means the groundwater portion only of the total amount of water delivered by retail providers, together with that groundwater produced by agricultural and self-supplied users for use within the boundaries of the joint powers authority.)

(NOTE: The weighted vote of the representative for commercial/industrial self-supplied groundwater users shall be weighted on the basis of total water production by all such users combined. The weighted vote for the representative for agriculture shall be weighted on the same basis.)

(NOTE: To the extent that a classification of water producers/pumpers [e.g. agriculture] pays a differential rate [see 7, b, (1) and 7, c, later in this Element], the weighted vote of that representative shall be adjusted accordingly. For example, each acre-foot pumped equals one vote. Agriculture pumps a total of 100,000 AF but pays only 20% of the regulatory fees established for other pumpers. The vote of the representative for agriculture would be calculated at 20,000 votes, one fifth of that of other representatives. It is important to note that in this example the figure of 20% is used for illustrative purposes only. No determination on whether agriculture pays a differential rate or what that rate might be has been made.)

Approval of all other items requires only a majority of all the representatives on the [SGA Authority](#).

j. The [SGA Authority](#) should have the discretion to invoke alternative dispute-resolution procedures in any circumstances which it deems appropriate. (See also 9, later in this Element.) Such procedures might include review of any dispute or disagreement by an ad hoc subcommittee of the [SGA Authority](#), use of an outside neutral third party, etc.

## 7. RECOMMENDATIONS ON THE GROUNDWATER MANAGEMENT GOVERNANCE STRUCTURE: NORTH AREA - FINANCE

It is probable that in the North Area, the implementation of a groundwater management plan will require the importation of surface water. The importation of surface water will generate attendant costs. In addition, there will be costs related to administering the groundwater management program. Therefore, the following recommendations are made:

a. The [SGA Authority](#) shall establish a rate structure, having determined:

(1) The basis on which the rate is calculated (e.g., total water production, number of connections, etc.) and

(2) Whether the rate is to be applied under a tiered benefit system to take into account a groundwater user who receives a greater benefit than a user who receives a lesser benefit (e.g., maximum benefit, intermediate benefit, basic benefit). If the [SGA Authority](#) chooses to implement a tiered benefit system, it shall define tier or level of benefit as it deems appropriate, given the circumstances in the area of the basin under its jurisdiction.

b. The [SGA Authority](#) shall be responsible for determining the allocation of and the rate for regulatory fees or charges to cover water costs and administrative costs.

(1) Administrative costs (e.g., staffing, data collection, monitoring, studies, etc.).

There may be a differential rate applied to groundwater as opposed to surface water use. However, the rate for each type of non-agricultural water shall be applied consistently within that category of water.

(2) Water costs (e.g., the cost of water, pumping and treatment costs and other costs related to a conjunctive use program).

During the first five years of operation, the [SGA Sacramento North Area Groundwater Management Authority](#) shall be prohibited from establishing regulatory fees to fund water cost payments that exceed an annual average of \$5.00 per acre-foot (minimum \$0.00 - maximum \$10.00) of groundwater pumped spread against approximately 100,000 AF of pumping per year.

c. In the North Area, agricultural pumpers may pay a percentage of the regulatory fee established for non-agricultural pumpers for administrative and water costs. This percentage shall be determined by the [SGA Sacramento North Area Groundwater Management Authority](#). (NOTE: In other areas of the state, agricultural pumpers generally pay a lower rate. This differential rate is based on

such factors as: agriculture pays less for contract water; agriculture could use untreated water and thus avoid treatment related costs, etc.)

d. In discharging its planning and management responsibilities, the [SGA Authority](#) must consider the fact that there are unexercised rights holders who may begin to exercise their rights at some future date, either before or after the term of the *Water Forum Agreement* (year 2030). Consistent with the *Water Forum Agreement*, the [SGA Authority](#) must manage the groundwater basin with such eventualities in mind, taking into account both current and future water needs.

When overlying rights holders with unexercised rights begin to exercise those rights, they will be treated exactly the same as similarly situated users in the North Area who are currently exercising their rights; that is, when previously unexercised rights are exercised in the future, the same conditions and burdens, financial or otherwise, will apply equally to similarly situated groundwater rights holders within the North Area who receive the same level of benefit, regardless of date when their rights were first exercised. For example, those with unexercised rights will pay the then-existing regulatory fees when they elect to exercise their rights as their contribution to the groundwater management program — just like other similarly situated users in the North Area who receive the same level of benefit.

e. In the North Area, a groundwater extraction facility that is used to provide water for domestic purposes to a single-unit residence or for irrigation of less than 2.5 acres shall be exempt from any regulatory fee for water or administrative costs.

f. The [SGA Authority](#) shall decide whether other exemptions from participation in a groundwater management plan (based on some minimum amount of groundwater pumped for consumptive use) shall be allowed.

g. Any action (past and/or future) taken by a groundwater purveyor or pumper which provides a benefit to the basin should be reviewed by the [SGA Authority](#) on an annual basis and taken into account by the [SGA Authority](#) (as appropriate) when determining regulatory fees.

h. Any pumping of groundwater for remediation of hazardous substances under a regulatory agreement or governmental order is not a consumptive use subject to a regulatory fee or other financing mechanism discussed in this agreement, unless subsequently used for direct consumptive use or returned to the river for sale downstream.

i. Any individual, business or other entity which has been assessed a regulatory fee and believes the regulatory fee to be unwarranted or unfair, may seek

reconsideration by the SGA Authority in accordance with procedures to be developed by the SGA Authority (and similar to those used by other public agencies).

#### 8. RECOMMENDATIONS TO ENSURE BASIN-WIDE COORDINATION AMONG THE LOCAL GROUNDWATER MANAGEMENT ENTITIES

The groundwater management entity in each area of the basin (North, Central South and South Galt) will be independent of one another. But, while the hydrology of the Sacramento region suggests that there are three groundwater sub-areas within the basin, each sub-area overlies the same basin. Therefore, there must be a mechanism to:

- \* Safeguard the viability of the total basin through coordination of policies and activities across the three sub-areas of the basin,
- \* Facilitate cooperation among the three sub-areas on projects or programs of mutual benefit,
- \* Promote efficient operation through cost-sharing arrangements, shared staff, equipment, facilities, etc. if possible and appropriate,
- \* Facilitate resolution of any inter-area disagreement in conformance with an agreed upon model for dispute resolution. (See 9 later in this Element).

A variety of measures or combinations of measures which might be used to accomplish these four objectives have been considered by the Committee and the Team including but not limited to:

- \* No formal mechanism for coordination: each situation to be addressed on an ad hoc basis by the appropriate groundwater management entities in each sub-area of the basin,
- \* A standing inter-area coordinating committee composed of representatives of the appropriate groundwater management entities who meet regularly (or only as necessary),
- \* Mandatory joint meetings of area representatives,
- \* Informal or formal coordination as needed through the Water Forum Successor Effort.

Based upon review and discussion of all available options, the following recommendation is made:

\* Within one year of the initiation of the ~~SGA Sacramento North Area Groundwater Management Authority~~, representatives of the ~~SGA Authority~~ shall meet with representatives of other entities which have groundwater management responsibilities in the ~~Central South~~ Area and the ~~South Galt~~ Area to develop and adopt appropriate measures to ensure ongoing coordination of policies and activities in the three sub-areas of the basin.

## 9. RECOMMENDATIONS CONCERNING ALTERNATIVE DISPUTE RESOLUTION

The *Water Forum Agreement* is a complex document negotiated by the representatives of the many stakeholder organizations over a five year period. No agreement, however, no matter how complex, can anticipate every possible changing condition which might arise in the future or how these changed conditions may impact the terms of the *Agreement*. Concerns or disagreements among the stakeholders may arise and these must be addressed in a direct and timely manner. At the same time, it is important to safeguard the integrity of the *Agreement* and the delicate balance of interests which it represents. Therefore, the following recommendations on alternative dispute resolution are made concerning:

- \* disputes between parties represented on the ~~SGA Sacramento North Area Groundwater Management Authority~~,
- \* disputes between groundwater management entities in different sub-areas of the basin.

Nothing in these recommendations shall preclude any party from exercising their legal rights by filing an action in a court of competent jurisdiction concerning any item at issue. However, before doing so, all persons, associations, corporations, districts, municipalities or public agencies represented on the various groundwater management entities throughout the basin agree to participate in good faith in these alternative dispute resolution procedures.

### **Disputes among parties represented on the ~~Sacramento Groundwater Authority~~ ~~Sacramento North Area Groundwater Management Authority~~**

- a. Within six months of its inception, the ~~SGA Sacramento North Area Groundwater Management Authority~~ shall discuss, develop and adopt an alternative dispute resolution program and procedures.
- b. Participation in such a program shall be mandatory for all persons, associations, corporations, districts, municipalities or public agencies represented on the North Area ~~SGA Authority~~.
- c. These alternative dispute resolution procedures shall provide for:

- (1) If the disagreement pertains to the substance of the *Water Forum Agreement*, timely consultation with the Water Forum Successor Effort on the cause and current status of the disagreement as well as strategies which may lead to a resolution of the problem;
- (2) Prompt response by the [SGA Authority](#) when any party invokes alternative dispute resolution procedures;
- (3) If the disagreement cannot be resolved by the [SGA Authority](#) itself, use of an outside neutral third party (i.e., a mediator) to assist the parties in working toward a satisfactory resolution;
- (4) Completion of all procedures within sixty to ninety days, unless the parties to the dispute agree to extend this timeline; and
- (5) Timely notice to the Water Forum Successor Effort that alternative dispute resolution procedures have been initiated and the reasons therefore.

**Disputes between Groundwater Management entities in different sub-areas of the Basin**

- a. Within six months of initiation of agreed-upon groundwater management plans in the [Central South](#) Area or in the [South Galt](#) Area, the appropriate groundwater management entities shall meet together and establish a process to discuss, develop and adopt alternative dispute resolution procedures which will be implemented in any dispute or disagreement which might arise between or among these groundwater management entities.
- b. Implementation of these procedures by these entities in any dispute or disagreement shall be mandatory.
- c. These procedures shall provide for:
  - (1) If the disagreement pertains to the substance of the *Water Forum Agreement*, timely consultation with the Water Forum Successor Effort on the cause and current status of the disagreement as well as strategies which may lead to a resolution of the problem;
  - (2) If the disagreement cannot be resolved by the groundwater management entities themselves, use of outside neutral third party (i.e., a mediator) to assist the entities in working toward a satisfactory resolution;
  - (3) Completion of all procedures within sixty to ninety days, unless the entities themselves agree to extend this timeline; and

(4) Timely notice to the Water Forum Successor Effort that alternative dispute resolution procedures have been initiated and the reasons therefore.

d. These procedures shall be adopted by the groundwater management entities not later than one year after the initiation of agree-upon groundwater management plans in the ~~Central South~~ Area and/or the ~~South Galt~~ Area.

10. Recommendations to ensure on-going collaboration between the local Groundwater Management Entities and the Water Forum Successor Effort

As noted above, this document assumes that a permanent Successor Effort will be created and charged with the responsibility of overseeing, monitoring and reporting on implementation of the *Water Forum Agreement*. In order to discharge this responsibility, the Successor Effort must work closely with the local groundwater management entities throughout the basin. This will require a full sharing of all information pertaining to the groundwater basin and consultation, as appropriate. Therefore, the following recommendations are made.

a. Representatives of the ~~SGA Sacramento North Area Groundwater Management Authority~~ and the Successor Effort shall meet together to discuss and adopt appropriate measures to ensure an on-going exchange of information and collaboration on all matters of mutual interest and concern.

b. When a groundwater management plan becomes operational in the ~~Central South~~ Area and/or the ~~South Galt~~ Area, a similar meeting between the Successor Effort and the appropriate groundwater management entities shall be convened within three months of the inception of the new groundwater management plan.

11. SPECIFIC AGREEMENT ON THE GROUNDWATER ELEMENT

All signatories to the *Water Forum Agreement* will support and, where appropriate, participate in the Groundwater Management Element as set forth above.

**North Sub basin**

Recommendations for a groundwater management governance structure in the North Area of the County (i.e., in the area between the American River and the Sacramento – Placer County boundary) were spelled out in the *Water Forum Agreement* to some detail.

These recommendations were subsequently implemented by a Joint Powers Authority made up of Sacramento County and the Cities of Citrus Heights, Folsom, and Sacramento and led to the creation of the Sacramento North Area Groundwater Management Authority – now known as the Sacramento Groundwater Authority (SGA). The SGA developed a Groundwater Management

Plan (GMP) that incorporates a sustainable yield of 131,000 AF/year as described in the *Water Forum Agreement*.

The SGA continues to partake in groundwater management activities that meet the Water Forum co-equal objectives and the objectives of the member agencies. The objectives are as follows:

- Facilitate implementation of regional conjunctive use
- Mitigate conditions of regional groundwater overdraft
- Replenish groundwater extractions
- Mitigate groundwater contamination migration
- Monitor groundwater elevations and quality
- Develop relationships with State and Federal agencies

A number of specific activities for meeting the groundwater management objectives have been identified. These activities include:

- Development of a groundwater monitoring and data collection collation system referred to as the Data Management System (DMS).
- Development of a system of economic incentives and disincentives for encouraging the operational modifications required to implement the regional conjunctive use program.
- Development of a regional groundwater banking and exchange – surface water transfer based on the Water Forum Agreement and the regional conjunctive use program.
- Coordination of quality groundwater protection programs (e.g., the Drinking Water Source Assessment Program – DWSAP).
- Development of a comprehensive outreach and education program to keep the public and regional stakeholders apprised of the activities of the SGA.

### **Central Sub basin**

Consistent with the co-equal objectives of the *Water Forum Agreement*, stakeholders of the Central groundwater basin began a groundwater management planning process in 2002 that led to the development of the Central Sacramento County groundwater Management Plan (GMP) in February 2006 and creation of the Sacramento Central Groundwater Authority (SCGA) in August 2006. The GMP recognized the Central Basin's long-term average sustainable groundwater yield of 273,000 AF/year as delineated in the *Water Forum Agreement*.

The SCGA's GMP identifies available water supplies to meet the total water demands of users within the basin. A goal of the SCGA is to ensure a viable groundwater resource for beneficial uses including water for adjacent purveyors, agricultural, agricultural-residential, industrial, and municipal supplies that support the Water Forum Agreement's co-equal objectives. In addition, an objective of the Central Basin GMP is enhancement of ecological flows in the Cosumnes River. The SCGA has introduced two unprecedented negotiated programs: the Well Protection Program and the Groundwater Contamination Monitoring and Collaboration Program.

The Well Protection Program recognized the need to protect domestic and agricultural irrigation wells. Protection of existing privately owned wells is of fundamental importance to the stakeholders of the Central Basin. As part of this program a trust fund will be put in place to cover costs of deepening or replacing any existing well that provides water for agricultural or domestic use that may be impacted by future development.

The Groundwater Contamination Monitoring and Collaboration Program will provide a clear line of communication between the designated responsible parties for groundwater contamination clean-up activities and private well owners. The program encourages the use of remediated groundwater in urbanized areas to keep the groundwater in the basin. This program also envisions the Regional Water Quality Control Board requiring designated responsible parties to survey private wells within 2,000 feet of any identified contamination plume.

The SCGA's current budget was developed based on meeting the GMP's administrative program requirements but has very limited funding for the Well Protection Program. It is anticipated that once the economic conditions of the County improve there will be additional funding for the Well Protection Program. The Monitoring Program did receive a grant award in 2008 however due to State budget issues those funds have not been released for program implementation.

### **South Sub basin**

Efforts to create a governance structure in the South Basin are currently underway with the creation of the South Area Water Council for negotiation of a governance structure and completion of a groundwater management plan by end of 2010 or early 2011. The South Area Water Council is comprised of stakeholders in the South Basin. The Council is exploring a process by which groundwater management and governance can be achieved.

The Water Forum Agreement's long-term average sustainable yield determination for the South Basin is 115,000 AF/year. Another important element of the Water Forum Agreement relating to the South Basin is a commitment that a 15,000 AF portion of the Central Valley Project contract supply of SMUD would be assigned for agricultural use in the South Basin once a governance structure is formed. Upon completion of the negotiation process and the formalization of a governance structure and adopted groundwater management plan, the South Basin will likely move forward with programs similar to those in the North and Central Basins with more of a focus on the Cosumnes River corridor.

## VII. WATER FORUM SUCCESSOR EFFORT ELEMENT

### A. Intent

Given the complexity of the issues, level of detail, number of signatories, the duration of the *Water Forum Agreement* and the changes that will inevitably occur between now and the year 2030, stakeholder representatives have concluded that a mechanism must be created to ensure actual implementation of the *Agreement* over the next three decades.

### B. Purpose

The Water Forum Successor Effort is responsible for overseeing, monitoring and reporting on the implementation of the *Water Forum Agreement*. It will continue the interest-based collaborative process successfully used to develop the *Water Forum Agreement*. Consistent with that process, **the Water Forum Successor Effort will have no independent governing or regulatory authority.**

### C. Modification of the *Water Forum Agreement*

The Water Forum Successor Effort has no independent authority to alter the *Water Forum Agreement*. At the same time, the Successor Effort must be able to respond to the changing conditions or other unforeseen circumstances which will arise over the next thirty years. The *Agreement* may be changed only by the signatories employing the same interest-based collaborative process used to negotiate the original *Agreement*. The Water Forum Successor Effort will facilitate and coordinate such negotiations, should they prove necessary.

It should be noted that specific agreements found in [Chapter 5 Section Five](#) of the *Water Forum Agreement* cannot be changed or modified without the expressed approval and consent of the entity whose interests would be affected by the change.

### D. Membership

Membership in the Successor Effort will be composed of representatives of those entities which are signatories to the *Water Forum Agreement* including business, agricultural and environmental organizations, citizen groups, water purveyors, and local governments.

## **E. Characteristics and Responsibilities of Representatives**

As noted, the Successor Effort will continue the interest-based process used successfully in developing the *Water Forum Agreement*. Therefore, it is important that individuals selected as representatives evidence the following characteristics:

- Commitment to the discipline of interest-based problem solving;
- Willingness to make the necessary time available; and
- Willingness to work collaboratively with others.

Because the effectiveness of the Successor Effort will depend upon cooperation and collaboration among all participants, representatives will observe the following guidelines:

- Listen carefully and openly discuss issues with others who hold different opinions;
- View a disagreement as a problem to be solved, not a battle to be won;
- Avoid stereotyping and personal attacks on any other representative;
- Avoid questioning or impugning the motivations or intentions of any other representative;
- Respect the integrity and values of other representatives; and
- Honor commitments once made.

## **F. Administrative Structure and Policy Direction**

The Water Forum Successor Effort will be administered under the auspices of the Sacramento City-County Office of Metropolitan Water Planning. As with the Water Forum, Successor Effort staff will be employees or contractors of the City of Sacramento and all administrative responsibilities with respect to such employees or contractors will continue to be handled by the City. This arrangement will:

- Ensure continuity between the Water Forum and the Water Forum Successor Effort;
- Preserve existing technical expertise;
- Avoid the costs, confusion and delays inherent in transferring the Successor Effort to a different organization; and
- Avoid creating another redundant government entity.

The *Water Forum Agreement* will be an MOU. It will contain provisions creating the Successor Effort organization. All parties which sign the MOU will become full participants in the Successor Effort. In addition, there will be a supplementary funding agreement which will include the City of Sacramento, the County of Sacramento and other agencies (including agencies outside of Sacramento County) which, consistent with the funding principles set forth in J below, are actually making payments to support the work of the Successor Effort.

It is important to note that:

- All signatories to the *Water Forum Agreement* will have equal standing in the Successor Effort whether they are a public agency, investor-owned utility or citizen interest/advocacy organization;
- Though Water Forum Successor Effort staff will be employees or contractors of the City of Sacramento, the Successor Effort representatives will provide over-all policy direction for work by staff.

## **G. Decision-making Process**

Members of the Successor Effort will continue to use the same collaborative form of decision-making used in the Water Forum negotiations. This collaborative process respects both the diversity and the legitimacy of the interests of all participants. The following principles, based on the interest-based decision-making model used in the Water Forum, will guide the Successor Effort decision-making process.

1. The Successor Effort will strive for consensus (agreement among all participants) in its decision-making.
2. The Successor Effort will not limit itself to strict consensus if a one hundred percent agreement cannot be reached after all interests and options have been thoroughly identified, discussed and considered. Less-than-consensus decision-making will not be undertaken lightly.
3. Less-than-consensus decision-making will use an interest-based approach. This means that all Successor Effort decisions must have a preponderance of support from each of the major “interest groupings” participating in the Successor Effort. Although “interest groupings” have not yet been identified for the Successor Effort, interest groupings used in the Water Forum will likely serve as a reference point.
4. Specific agreements found in [Chapter 5 Section Five](#) of the Water Forum Agreement cannot be changed or modified without the expressed approval and consent of the signatories whose interests would be affected by the change.

It should be noted, however, that within the principles enumerated above, the Successor Effort itself must take the lead responsibility in working out the details of its own decision-making model. Therefore, by July 1, 2000 signatory representatives shall meet together to determine how the Successor Effort’s collaborative decision-making will work.

**AMENDMENT – This section has been changed to reflect the updated WFSE Decision-making Process. These changes were the result of a multi-year negotiation among Water Forum members.**

## **WATER FORUM SUCCESSOR EFFORT DECISION-MAKING PROCESS**

### Background:

In accordance with the Water Forum Agreement, signatory representatives to the Water Forum Agreement met September 7, 2000 to determine how the Water Forum Successor Effort's (WFSE) collaborative decision-making would work.

Pertinent sections of the WFSE Element related to this process are: Section G – Decision-making Process and Section L – Changed Conditions and Amendments to the Water Forum Agreement.

### General Principles:

1. Water Forum Interest Groupings:
  - Business
  - Environmental
  - Public
  - Water

There will be one Designated Signatory Representative from each Signatory Stakeholder Organization.

2. Strive for consensus, but continue the 75% Rule developed in the Water Forum Groundrules (the following text has been adapted from the WF Groundrules):

If, after full exploration and discussion of an issue or set of issues, the Water Forum Successor Effort (WFSE) cannot come to 100% agreement, the following process would be used.

- a. The Signatory Representative(s) who disagrees with the rest of the group “stand aside” and let the group reach consensus.
  - b. If the Signatory Representative(s) who disagrees with the rest of the group cannot “stand aside,” then the “75% rule” would prevail. The 75% rule requires that 75% of the members from each Interest Group support a proposal for it to be considered a formal recommendation of the WFSE.
3. Specific Agreements found in Chapter Five of the Water Forum Agreement cannot be changed or modified without the expressed approval and consent of the signatories whose interests would be affected by the change.

4. Designated Signatory Representatives may identify alternates to participate on their behalf in the WFSE in instances of unavoidable absences. However, it remains the responsibility of each Designated Signatory Representative to make the necessary time available to attend all WFSE meetings as well as the various “Team” meetings, as appropriate.
5. Meetings of all Signatory Representatives shall occur on the 1<sup>st</sup> Thursday of the following months (typically from 5:30 – 7:30 pm, although they may be extended as the need arises):
  - September
  - November
  - January
  - March
  - May
  - June – the Annual Plenary at which there will be an evaluation of the progress on all aspects of implementation of the Water Forum Agreement.
6. The WFSE shall, as necessary, appoint “teams” of Signatory Representatives to meet on a routine and/or ad hoc basis to: foster implementation of the Water Forum Agreement; finalize procedural agreements; develop “trial balloons” regarding changed conditions; and resolve disagreements related to non-compliance or differing interpretations of the Water Forum Agreement. These “teams” shall use the interest-based collaborative decision-making process as used in the Water Forum negotiations.
7. As provided for in the Water Forum Agreement, purveyors having Procedural Agreements will participate in the WFSE decision-making, except on the following three issues:
  - a. Amending the Water Forum Agreement.
  - b. Decisions regarding any litigation associated with the Water Forum Agreement.
  - c. Decisions regarding expenditure of Habitat Management funds.

Purveyors with Procedural Agreements include:

- El Dorado County Water Agency (on behalf of El Dorado Irrigation District and Georgetown Divide Public Utility District)
- Rancho Murieta Community Services District

## **H. Dispute Resolution**

~~A major function of a collaborative process is to prevent disagreements from escalating into full fledged disputes. With proper facilitation and communication, most potential disputes can be resolved. However, no matter how sophisticated a collaborative process exists, there will inevitably be disputes. Some may arise out of interpretation of specific provisions of the Agreement. Others may result from concerns about non-compliance or differing interpretations of the terms of the Agreement.~~

~~It is essential that stakeholders not revert to litigation as a first response to every perceived problem or transgression. Lawsuits can quickly destabilize the collaborative process and return all Successor Effort participants to gridlock. Therefore, while not waiving any of their legal rights, all organizations represented in the Successor Effort agree to initiate alternative dispute resolution procedures, including mediation, before pursuing litigation.~~

AMENDMENT – This section has been changed to reflect the agreement of the WFSE.  
*Water Forum Successor Effort approval: September 6, 2001*

## PROCEDURES FOR RESPONDING TO REQUESTS FOR ENDORSEMENTS FROM THE WATER FORUM

Occasionally, the Water Forum is asked to endorse or provide input on a specific issue, usually through a written statement, letter, or oral testimony. The subject area of the request generally falls under one of two categories. They are:

- Subjects that we know fall under the purview of the Water Forum Successor Effort, are consistent with the Water Forum Agreement and are not controversial, or
- Subjects that generally are new, that may or may not be consistent with the Agreement, or that may be controversial.

The following draft procedures describe how Water Forum staff might address each kind of request.

**Non-Controversial** – Response is drafted, reviewed by the Executive Director, and sent via e-mail to the Coordinating Committee for a 3-day review. If no comments are received after 3 working days, then the draft will be finalized and sent to the party (ies) of interest. Copies of the final response are sent to the Coordinating Committee and included in the Water Forum Successor Effort's Plenary member agendas as an information item for the next WFSE meeting.

**Potential for Controversy** – Upon receiving a request for an endorsement, or input to a specific issue, Water Forum staff decides whether the benefits of developing a response are worth the effort to finalize it, (in relation to the time needed to finalize the response), as described in the subsequent paragraphs.

- Upon receipt of a potentially controversial request, Water Forum staff initiates discussions with the requestors to identify and clarify issues and to determine the requested timelines of the response.
- Staff contacts potentially affected Coordinating Committee and Plenary members and briefs them on the subject.
- Staff prepares a brief issue paper that includes a suggested response. The issue paper/draft response is sent to all Coordinating Committee members and those Plenary members who may be affected/interested, for a 5-day review period. The purpose of the review is to ensure consistency with the Water Forum Agreement and comfort with the contents of the draft letter. At the end of the review period, staff contacts the Coordinating Committee and Plenary members to determine if they have comments or revisions. Any conflicting comments will be resolved.
- Concurrent with the above steps, the issue paper and draft response is also e-mailed to the full Plenary membership for a 5-day review. If no comments are received, staff will proceed with drafting a final response.
- Based on comments received and subsequent follow-up conversations, staff will develop and send a final response to the requestor.
- Copies of the final response are mailed to the Coordinating Committee and included in the Plenary members packet as an information item for the next meeting.

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#### **A. Example of a non-controversial subject**

Request by a WFSE member to send a letter to the editor of a newspaper extending support for a program that is clearly part of the “seven linked elements,” e.g. installation of water meters, and is consistent with the purveyor specific agreement of that member.

#### **B. Example of a potentially controversial subject**

Request by a WFSE member or non-member to publicly support a specific action that may provide benefit to some parties, but may not be supported by other WFSE member or non-member parties. This action will usually not be covered in the “linked elements” nor would it be a specific action of a purveyor specific agreement. An example may be support for a project that could result in negative direct or indirect impact to resources valued by WFSE members.

### **I. Specific Tasks which must be completed by the Successor Effort for the *Water Forum Agreement* to Be Fully Implemented**

Revision – Detailed information on the original Preliminary Successor Effort budget and tasks have been omitted. The Water Forum Successor Effort has been working actively since 2000 to

execute the *Water Forum Agreement*. Annual work plan and budget have been approved by Water Forum Coordinating Committee each year.

-This change is not considered an amendment and has been changed for clarity by staff:

May 2012

~~See Attachment A: Water Forum Successor Effort Preliminary Work Plan.~~

## **J. Budget and Allocation of Budget Costs**

The projected budget for the Successor Effort as well as the allocation of costs is based on the following ten principles.

1. In order to estimate the actual cost of the Successor Effort, a Preliminary Work Plan ~~which identifies the tasks~~ for the first four years ~~was has been~~ developed and ~~is~~ included in the 2000 *Water Forum Agreement*. ~~this document as Attachment A.~~ The projected annual cost for the tasks set out in ~~that this~~ work plan ~~was is~~ \$675,000 for the first year of operation. Fiscal Year 2015-2016 budget components include Proposed Expenditures (Table 0.6), Summary of Projected Funding Sources (Table 0.7), HME Cost Share Projection (Table 3.8), WFSE Cost Share (Table 3.9), and SCWA Zone 13 and Cities of Citrus Heights and Elk Grove (Table 3.10). ~~(A sample budget for the first year of operation is set forth in Attachment B). All signatories have reviewed this Preliminary Work Plan and agree that \$675,000 for the first year will be provided as set forth below.~~

2. Prior to completion of the first year following the signing of the *Water Forum Agreement*, the Successor Effort shall undertake a careful review of progress to date and shall revise the work plan in light of the then existing circumstances. The annual budget and contributions may be revised at that time.

Any increase or decrease to the first year budget would require a consensus among all interest groups and agreement by those agencies providing Successor Effort funding.

3. On an annual basis, the Successor Effort budget will be approved by the stakeholder representatives to the Water Forum Successor Effort in accordance with the updated work plan for that year.

4. Consultants shall be used only as needed and the identification and approval of actual expenditures for specific consultant contracts shall be part of the Successor Effort budget process. If consultant contract funds or funds allocated for consultant contracts in a given fiscal year are not spent prior to the end of that year or ~~designated earmarked~~ for future expenditure, the Successor Effort shall modify the next year's budget in an appropriate manner.

5. A purveyor's annual contribution to support the estimated cost of the Successor Effort shall be based upon the number of connections served by the purveyor. There are other possible bases

for determining contributions; e.g. the number of acre-feet per year diverted from the American River. Some purveyors, however, will use only groundwater. Some will divert only from the Sacramento River. Others will use a combination of both surface water and groundwater in amounts which will vary from year to year. Yet all will benefit from implementation of the *Water Forum Agreement* and the work of the Successor Effort. In general, then, purveyor contributions related to number of connections served offers the most equitable and stable basis for sharing Successor Effort costs.

Allocation of first year costs for the Successor Effort on a purveyor-by-purveyor basis is contained in [Table 3.11 Attachment C](#). It should be noted that this cost allocation assumes that all the purveyors identified in [Table 3.11 Attachment C](#) will sign the initial *Water Forum Agreement*. If fewer purveyors sign the initial *Water Forum Agreement*, the first year costs allocated to the purveyors that do sign will increase.

6. Zone 13 was formed by the Sacramento County Water Agency (SCWA) to fund drainage and water supply studies and related costs. As a result, property owners in the unincorporated areas of Sacramento County and the City of Citrus Heights are already assessed through their property taxes for the planning and evaluation activities that will be carried out by the Successor Effort. Therefore, SCWAs Zone 13 contribution to the Successor Effort shall cover the financial obligations of water purveyors serving the unincorporated areas of the County and the City of Citrus Heights. This will include the Carmichael Water District, Citrus Heights Water District, [California-American Water Company \(CAWC\) \(formerly known as Citizens Utilities Company of California\)](#) ~~Citizens Utilities Company of California~~, Clay Water District, Del Paso Manor Water District, Fair Oaks Water District, Florin County Water District, Galt Irrigation District, Natomas Central Mutual Water Company, [Sacramento Suburban Water District Northridge Water District](#), Omochumne-Hartnell Water District, Orange Vale Water Company, Rio Linda/Elverta Community Water District, and San Juan Water District (in Sacramento County).

7. The annual contribution of other purveyors in Sacramento County not included in Zone 13 shall be based upon the number of connections served by that purveyor (as set forth in Principle 5 above). This would include the City of Folsom, ~~the City of Galt~~<sup>7</sup> and the City of Sacramento.

8. The annual contribution of purveyors outside of Sacramento County shall be based upon the number of connections served by that purveyor (as set forth in Principle 5 above). This will include [California-American Water Company](#) ~~Citizens Utilities~~ (in Placer County), City of Roseville, El Dorado Irrigation District, Georgetown Divide Public Utility District, the Placer County Water Agency and the San Juan Water District (in Placer County).

9. Each purveyor's share shall be adjusted annually based on the then current number of connections of each purveyor signatory to the *Agreement*.

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<sup>7</sup>~~The City of Galt City Manager has informed Water Forum staff that when the Water Forum Successor Effort begins, the City of Galt will evaluate whether to financially participate in the Water Forum Successor Effort. The City of Galt's participation in the Water Forum Agreement is also subject to agreement with other signatories regarding Galt's financial contribution to the Water Forum Successor Effort.~~

10. Sacramento Municipal Utility District shall make an annual contribution of \$10,000.

11. El Dorado Irrigation District and Georgetown Divide Public Utility District: Mutually agreed upon Water Forum Successor Effort expenses related solely to converting these purveyors' procedural agreements into specific agreements will be reimbursed by these purveyors. As soon as the purveyors have negotiated specific agreements and they sign the *Water Forum Agreement*, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.

#### Revision –

##### **Funding**

The Water Forum operates on a July through June fiscal year. Stakeholder representatives approve the annual budget each May in accordance to the work plan proposed by staff.

Water purveyors signatory to the *Agreement* provide funding to the Water Forum Successor Effort as outlined in the original *Water Forum Agreement (2000)*. This funding is based on the number of connections served. A WFSE budget for Fiscal Year 2015-2016 is included to provide a current budget example.

A Fiscal Year 2015-2016 sample budget for the Habitat Management Element is also included with this update to the *Agreement*. Base contributions from the City of Sacramento and the County of Sacramento to the HME are adjusted annually for inflation.

The HME has also received funding from the San Juan Water District and City of Roseville as agreed to in the original *Water Forum Agreement*. These contributions are triggered when these purveyors increase diversions of non-CVP water from the American River. Other potential contributors to the HME for non-CVP water in the future include the City of Folsom and Placer County Water Agency.

In addition, Golden State Water Company agreed to contribute to the HME beginning in 2002. The formula for the contribution was based upon the amount of water purchased from SMUD as replacement supply for groundwater lost due to contamination.

##### **Fund Balance**

Upon signing the *Water Forum Agreement* in 2000, stakeholder organizations agreed that if undesignated funds in the HME exceeded \$1 million, annual contributions would be reduced or deferred until the undesignated balance went below \$1 million.

In April 2006 the Coordinating Committee agreed that the existing balances in the WFSE and HME funds would be saved for use during the expected environmental documentation process for an updated flow management standard.

**Table 0.6** Water Forum projected expenditure summary for FY 2015-2016

<b>Water Forum Annual Budget</b>				
<b>Fiscal Year 2015-16</b>				
<b>- Proposed Expenditures -</b>				
	<b>FY 2014-15</b>			<b>FY 2015-16</b>
	<b>Approved</b>	<b>Difference</b>		<b>Proposed</b>
<b><i>WATER FORUM SUCCESSOR EFFORT</i></b>				
<b>Staff / Labor and Benefits</b>	459,748	12,501	2.72%	472,249
Furlough Savings	0	0	n/a	0
<b>Subtotal</b>	459,748	12,501	2.72%	472,249
<b>Operating Services and Supplies</b>				
Leased office space	38,514	0	0.00%	38,514
Special projects	20,000	0	0.00%	20,000
City administrative costs	39,000	0	0.00%	39,000
Outreach and sponsorships	15,000	0	0.00%	15,000
Food and catering for meetings	7,000	0	0.00%	7,000
Printing	5,000	0	0.00%	5,000
Transportation/local	4,000	0	0.00%	4,000
Legal services	10,000	0	0.00%	10,000
Travel / lodging / registration fees / meeting rooms	3,100	2,900	93.55%	6,000
Office supplies, AV, subscriptions/membership	5,000	0	0.00%	5,000
Rental and maintenance of equipment	5,100	0	0.00%	5,100
Telecommunications	6,500	0	0.00%	6,500
Computer supplies, services/software, web site	6,000	0	0.00%	6,000
Postage & delivery services	500	0	0.00%	500
<b>Subtotal</b>	164,714	2,900	1.76%	167,614
<b>Consulting Services / Programs</b>				
LAR Flow Management Standard	8,000	0	0.00%	8,000
Technical support	165,000	0	0.00%	165,000
Mediation/facilitation	75,500	0	0.00%	75,500
Water conservation	45,000	0	0.00%	45,000
<b>Subtotal</b>	293,500	0	0.00%	293,500
<b>WFSE Subtotal</b>	917,962	15,401	1.68%	933,363
<b><i>HABITAT MANAGEMENT ELEMENT</i></b>				
<b>Consulting Services / Programs</b>				
LAR Flow Management Standard	466,252	9,479	2.03%	475,731
Technical support	17,000	3,000	17.65%	20,000
Mediation/facilitation	20,000	0	0.00%	20,000
LAR projects	60,000	0	0.00%	60,000
Survey and monitoring	36,000	4,000	11.11%	40,000
<b>HME Subtotal</b>	599,252	16,479	2.75%	615,731
<b>Water Forum Subtotal</b>	1,517,214	31,880	2.10%	1,549,094
<b><i>FUND BALANCE</i></b>				
<b>LAR Flow Management Standard EIR</b>				
<b>WFSE Fund Balance</b>	350,000	-183,000	-52.29%	167,000
<b>HME Fund Balance</b>	900,000	100,000	11.11%	1,000,000
<b>Fund Balance Subtotal</b>	1,250,000	-83,000	-6.64%	1,167,000
<b>Grand Total</b>	2,767,214	-51,120	-1.85%	2,716,094

**Table 0.7** Water Forum projected funding sources summary for FY 2015-2016

<b>Water Forum Annual Budget</b>		
<b>Fiscal Year 2015-16</b>		
<b>- Summary of Projected Funding Sources -</b>		
<b>WFSE</b>		
Sacramento County - Zone 13		485,965
City of Sacramento		267,063
City of Roseville		80,468
City of Folsom		38,880
Placer County Water Agency		20,344
Sacramento Municipal Utility District		17,577
San Juan Water District in Placer County		13,732
El Dorado County Water Agency		<u>9,334</u>
	<b>Subtotal</b>	<b>933,363</b>
<b>HME</b>		
Sacramento County - Zone 13		410,487
City of Sacramento		205,244
Non CVP Diversions		0
Golden State Water Company		<u>0</u>
	<b>Subtotal</b>	<b>615,731</b>
<b>Draw From Fund Balance</b>		
WFSE		167,000
HME		<u>1,000,000</u>
	<b>Subtotal</b>	<b>1,167,000</b>
	<b>Combined Total</b>	<b>2,716,094</b>

**Table 3.8. Habitat Management Element cost-share breakdown for FY 2015-2016 projection**

Water Forum Annual Budget <sup>1</sup> Fiscal Year 2015-16					
- HME Cost Share Projection –					
	2014-15 Approved	2015-16 Proposed	Difference		
County of Sacramento - Zone 13		399,501	410,487 <sup>2</sup>	10,986	2.75%
City of Sacramento		199,751	205,244 <sup>2</sup>	5,493	2.75%
Non CVP Diversions		0	0 <sup>3</sup>	0.00%	n/a
Golden State Water Company		0	0 <sup>4</sup>	0.00%	n/a
<b>Total</b>		<b>599,252</b>	<b>615,731</b>	<b>16,479</b>	<b>2.75%</b>

<sup>1</sup>The Water Forum Agreement describes the cost-sharing process among the Water Forum purveyors for the Habitat Management Element on pages 86-87.

<sup>2</sup>Contributions by the City of Sacramento and County of Sacramento were initially set annually at \$125,000 and \$250,000, respectively. These contributions are adjusted each year for inflation as set by the January issue of the "Engineering News Record" published Construction Cost Index (CCI) for US - 20 Cities Average and for the San Francisco Bay Area. The annual adjustment is using the average of the CCI for these two areas, currently 2.75%. This % is multiplied by the prior year contribution amount to determine the amount of increase/decrease.

<sup>3</sup>Other purveyors with contracts for Central Valley Project water agreed to contribute to the HME in those years when they divert non-CVP water above their baseline. The potential value of these contributions is unknown at the time budgets are prepared.

<sup>4</sup>Golden State Water Company agreed to contribute to the HME for water diverted under its replacement water supply contract with SMUD. The potential value of this contribution is unknown at the time budgets are prepared.

**Table 3.10. WFSE cost-share breakdown for FY 2015-2016 projection**

<b>Water Forum Annual Budget Fiscal Year 2015-2016 WFSE Cost Share</b>				
<b>Purveyors / Organizations</b>	<b>Active Connections on 12-31-14</b>	<b>Cost Share</b>	<b>Percent of the total</b>	
Zone 13, Sacramento County unincorporated area <sup>1</sup>	250,555		485,965	52.07%
City of Sacramento	137,693		267,063	28.61%
City of Roseville	41,488		80,468	8.62%
City of Folsom	20,046		38,880	4.17%
Placer County Water Agency <sup>2</sup>	10,489		20,344	2.18%
Sacramento Municipal Utility District <sup>3</sup>		n/a	17,577	1.88%
San Juan Water District in Placer County	7,080		13,732	1.47%
El Dorado County Water Agency <sup>4</sup>		n/a	9,334	1.00%
			<b>Total</b>	<b>467,351</b>
<b>933,363</b>	<b>100%</b>			

<sup>1</sup>Zone 13 funds will be used to cover the financial contributions for water purveyors serving the unincorporated areas of Sacramento County and the cities of Citrus Heights, Rancho Cordova and Elk Grove. (The Zone 13 breakdown is on the next page of this packet.)

<sup>2</sup>For Placer County Water Agency, it is assumed that 66.7 percent of their 31,499 connections are regularly served by the Yuba/Bear Rivers. Therefore, the remaining 10,489 connections are included in this calculation. As PCWA continues to develop the American River and develops the Sacramento River diversion included in the Water Forum Agreement, connections served by these supplies will be included in the allocation procedure.

<sup>3</sup>Contributions by the Sacramento Municipal Utility District was initially set annually at \$10,000. This contribution is adjusted each year for inflation as set by the January issue of the "Engineering News Record" published Construction Cost Index (CCI) for US - 20 Cities Average and for the San Francisco Area per the Water Forum Agreement (page 87). The annual adjustment is calculated using the average of the CCI for these two areas, currently 2.75%. This % is multiplied by the prior year contribution amount to determine the amount of increase/decrease.

<sup>4</sup>El Dorado County Water Agency contributes a flat one percent of the total budget on behalf of the El Dorado Irrigation District and the Georgetown Divide Public Utility District, all of which currently have Water Forum Procedural Agreements. As soon as these purveyors have negotiated Specific Agreements, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have Specific Agreements.

**Table 3.11. Zone 13 - Sacramento County unincorporated area and City of Citrus Heights and Elk Grove as of December 31, 2014**

<b>Water Forum Annual Budget Fiscal Year 2015-16 - SCWA Zone 13 and Cities of Citrus Heights and Elk Grove –</b>		
<b>Purveyors / Organizations</b>	<b>Active Connections on 12-31-14</b>	<b>Percent of Zone 13</b>
California-American Water Company	58,841	23.48%
Carmichael Water District	11,793	4.71%
Citrus Heights Water District	19,674	7.85%
Clay Water District	n/a	0.00%
Del Paso Manor Water District	1,797	0.72%
Elk Grove Water District	12,216	4.88%
Fair Oaks Water District	13,809	5.51%
Florin County Water District	2,227	0.89%
Galt Irrigation District	n/a	0.00%
Golden State Water Company	16,330	6.52%
Natomas Central Mutual Water Company	n/a	0.00%
Omochumne-Hartnell Water District	n/a	0.00%
Orange Vale Water Company	5,751	2.30%
Rancho Murieta Community Services District	2,614	1.04%
Rio Linda/Elverta Community Water District	4,514	1.80%
Sacramento County Water Agency	51,868	20.70%
Sacramento Suburban Water District	45,683	18.23%
San Juan Water District (in Sacramento County)	3,438	1.37%
<b>Total</b>	<b>250,555</b>	<b>100.00%</b>

## **K. Five Year Review**

Every five years the Water Forum Successor Effort will comprehensively review progress made in achieving both of the coequal objectives.

*See [Water Forum Agreement Progress on the Seven Elements – A Review 2000 – 2005](http://waterforum.org/wp-content/uploads/2015/09/WF-Agreement-Evaluation-2000-2005.pdf)*  
*<http://waterforum.org/wp-content/uploads/2015/09/WF-Agreement-Evaluation-2000-2005.pdf>*

*and*

*The Water Forum Agreement – Ten Years of Implementation,*  
*<http://www.waterforum.org/wp-content/uploads/2016/01/WF-Ten-Year-Report-Oct-2010.pdf>*

## **L. Changed Conditions and Amendments to the *Water Forum Agreement***

Given the complexity of issues, level of detail, number of signatories, duration of the *Water Forum Agreement*, and changed circumstances that will undoubtedly occur between now and the year 2030. Some changes may call for renegotiation of some terms of the *Water Forum Agreement*. However, a request for renegotiation does not necessarily mean the *Water Forum Agreement* will be revised. The *Water Forum Agreement*, including specific agreements, can be changed or modified only with the expressed approval and consent of the signatories to the *Water Forum Agreement*.

Any proposal to amend this MOU or the attached *Water Forum Agreement* would be considered in the context of both of the Water Forum's coequal objectives. Specific procedures for amending the *Water Forum Agreement* consistent with the collaborative decision making process will be developed by the Water Forum Successor Effort within the first year of its operation.

## **M. Specific Agreement on the Water Forum Successor Effort.**

All signatories to the *Water Forum Agreement* will participate as members of the Water Forum Successor Effort and, where specified, will financially contribute as indicated above.

## ~~ATTACHMENT A: WATER FORUM SUCCESSOR EFFORT~~

### ~~PRELIMINARY WORK PLAN~~

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~~FULL TIME EQUIVALENT STAFF TIME (INCLUDING SECRETARY) FOR EACH  
ACTIVITY AREA SHOWN AS “(FTE \_\_\_)” : TOTAL FTE, 4.~~

### ~~ESTIMATED TIMELINE FOR IMPLEMENTATION~~

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<del>CATEGORY 1</del>	<del>First year</del>
<del>CATEGORY 2</del>	<del>Second year</del>
<del>CATEGORY 3</del>	<del>Third year</del>
<del>CATEGORY 4</del>	<del>Fourth year and thereafter</del>

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### ~~WATER DIVERSIONS (FT 1.5):~~

- ~~• Provide leadership in securing implementation of the updated lower American River flow standard (1, 2)~~
- ~~• Oversee drafting of the updated flow standard (1, 2)~~
- ~~• Negotiate with Reclamation mutually acceptable flexibility in implementation of the flow standard (1, 2)~~
- ~~• Negotiate recommended amendment to the existing Declaration of Full Appropriation for the American River (1, 2)~~
- ~~• Monitor completion of the upstream diversion agreements (1, 2)~~
- ~~• Negotiate future updates to the lower American River flow standard based on future agreements with any purveyor whose diversions may not be in the first phase of the Water Forum Agreement (2, 3, 4)~~
- ~~• Prepare testimony for the SWRCB (2)~~
- ~~• Coordinate with external water users including
  - ~~— State Water Project Contractors Association~~
  - ~~— CVP Water Users Association~~
  - ~~— Delta water users (1, 2)~~~~
- ~~• Coordinate with state wide environmental organizations (1, 2)
  - ~~— Environmental Defense Fund~~
  - ~~— Natural Resources Defense Council~~
  - ~~— Bay Institute~~
  - ~~— Natural Heritage Institute (1, 2)~~~~
- ~~• Coordinate with government agencies including
  - ~~— Reclamation~~
  - ~~— Department of Water Resources~~
  - ~~— Environmental Protection Agency~~
  - ~~— U.S. Fish and Wildlife Service (USFWS)~~
  - ~~— National Marine Fisheries Service~~
  - ~~— Department of Fish and Game (CDFG)~~~~

- ~~—California Resources Agency~~
- ~~—State Lands Commission~~
- ~~—CALFED (1, 2)~~
- ~~• Mediate and complete negotiations with any purveyors not included in the first phase of the *Water Forum Agreement* (1, 2)~~
- ~~• Negotiate criteria for transfers among Water Forum participants that would result in Water Forum signatories support for those transfers (2)~~
- ~~• Establish data base, schedule and methodology for determining annual projected water diversions including which water forecasts to use, timely notice to diverters, etc. (2)~~
- ~~• Develop reporting system to ensure accurate information on actual diversions (1, 2)~~
- ~~• Implement the system including secure the cooperation of all diverters, collect, analyze and disseminate data, monitor results on an on-going basis, etc. (2, 3, 4)~~
- ~~• Assist implementation of dry year alternatives (as needed) (4)~~
- ~~• Organize stakeholder support for modifications necessary to implement the *Water Forum Agreement* such as changes in points of diversion, places of use, water exchanges, etc. (2, 3, 4)~~
- ~~• Ensure that necessary assurances concerning future actions are achieved and specific caveats are met. (1, 2, 3, 4)~~

#### **CRITICALLY DRY YEAR RESPONSE (FT .1):**

- ~~• Work with water purveyors and the Sacramento Area Water Works Association to develop a coordinated approach to water reductions in drought years (2)~~
- ~~• Develop a detailed response plan for critically dry years including schedule and criteria for determining extent of water shortage, membership on the dry year conference Committee, range of response options, methodology for determining “equitable” water use reductions, decision-making process within the committee, etc. (1, 2)~~
- ~~• Convene the Dry Year Conference Committee (as needed) (4)~~
- ~~• Provide staff support for all aspects of the committee’s work (4)~~
- ~~• Coordinate implementation of committee decisions among all water users including purveyors, self-supplied industry and agriculture (4)~~
- ~~• Communicate the work of the committee to outside agencies, organizations, the media and the public (4)~~

## **COORDINATION WITH HABITAT MANAGEMENT PROGRAM AND FISHERY ASSURANCES—(FT.1)**

### **~~FISHERY ASSURANCES — [FUNDED AS PART OF THE HABITAT MANAGEMENT ELEMENT, NOT THE SUCCESSOR EFFORT]~~**

- ~~• Identify and prioritize actions to ensure protection for the fishery, wildlife, recreational and aesthetic values of the lower American River. These may include:
  - ~~— Participating in the development of the OCAP for releases from the CVP reservoirs~~
  - ~~— Participating in the development of the CVP Programmatic Environmental Impact Statement to ensure conformity with the *Water Forum Agreement*—(1, 2, 3, 4)~~~~
- ~~• Coordinate Water Forum participation in the lower American River Operation Group which will make real time flow release decisions based on adaptive management (1, 2, 3, 4)~~
- ~~• Participate in the adoption of the AFRP for the lower American River (1, 2, 3)~~
- ~~• Provide technical collaboration and assistance to Reclamation, USFWS and CDFG (1, 2, 3, 4)~~

### **~~HABITAT MANAGEMENT PROGRAM — [FUNDED AS PART OF THE HABITAT MANAGEMENT ELEMENT, NOT THE SUCCESSOR EFFORT]~~**

- ~~• Coordinate all activities related to habitat management undertaken by *Water Forum Agreement* signatories—(2, 3, 4)~~
- ~~• Coordinate creation of and participate in the multi-agency lower American River HMP—(2, 3, 4)~~
- ~~• Participate in the Restoration Roundtable to ensure that a fair share of CVP restoration funds are spent for improvements on the lower American River—(1, 2, 3, 4)~~
- ~~• Coordinate Water Forum's response to the existing petition for endangered species listing for steelhead—(1, 2, 3, 4)~~
- ~~• If desired, coordinate development of a habitat conservation plan that would respond to endangered species listing for steelhead—(1, 2, 3, 4)~~
- ~~• Provide technical collaboration and assistance to Reclamation, USFWS and CDFG (1, 2, 3, 4)~~
- ~~• Review effectiveness of partnership with the LARTF in implementing the lower American River HMP—(1)~~

## **GROUNDWATER—(FT.3):**

- ~~• Monitor on-going implementation of the *Water Forum Agreement* Sustainable Yield Recommendations (1, 2, 3, 4)~~
- ~~• Maintain liaison with the Sacramento North Area Groundwater Management Authority (1, 2, 3, 4)~~
- ~~• Convene and facilitate negotiations to establish an acceptable groundwater management program in the south area of the county. Activities will include:
  - ~~— Identifying all key participants~~~~

- ~~—Assisting participants to define and present its issues and interests~~
- ~~—Coordinating logistical arrangements for all meetings~~
- ~~—Providing “technical support” on interest-based negotiation~~
- ~~—Staffing all aspects of the negotiation process~~
- ~~—Maintaining contact with all key constituencies~~
- ~~—Communicating the work of the negotiators to outside agencies, organizations, the media and the public~~
- ~~—Coordinating implementation of the groundwater management program as negotiated (1, 2, 3)~~
- ~~•—Work with signatories to the existing agricultural district joint powers agreement to establish an acceptable groundwater management program in the Galt area which includes all interested parties including the City of Galt (1, 2, 3)~~
- ~~•—Ensure adequate consistency and coordination among the groundwater management programs/entities across the three sub-areas of the groundwater basins (2, 3, 4)~~
- ~~•—Oversee the alternative dispute resolution procedures concerning groundwater set forth in the *Water Forum Agreement* (as needed) (4)~~

#### **~~WATER CONSERVATION—(FT.2):~~**

- ~~•—Review all water purveyors’ Water Forum annual water conservation reports as outlined in the Water Conservation Element—(2,3,4)~~
- ~~•—Make annual report to the Plenary Session of all stakeholders concerning the status of implementation of BMPs—(2, 3, 4)~~
- ~~•—Advise purveyors whose conservation results are below expectations or sources of assistance—(2, 3, 4)~~
- ~~•—Facilitate “changed conditions” negotiations to determine how BMPs adopted or amended by the CUWCC after July 1997 will be incorporated into the Water Forum purveyors’ Water Conservation Plans.—(1, 2, 3, 4)~~
- ~~•—Monitor all other federal, state and CPUC regulations which effect conservation programs and advise purveyors and other stakeholders of the impact of any changes which may indicate a “changed condition” for the Water Forum—(2, 3, 4)~~
- ~~•—Facilitate “changed conditions” negotiations among stakeholders to modify conservation elements of the *Water Forum Agreement* if required by new federal or state regulations—(2, 3, 4)~~
- ~~•—Implement Water Forum Procedural Agreement concerning agricultural water conservation—(2, 3)~~
- ~~•—Annually review all water purveyors Citizen Involvement Programs for Water Conservation and advise any purveyors whose efforts are below expectations of sources of assistance—(2, 3, 4)~~
- ~~•—Monitor and support regional efforts to collaborate on the implementation of BMPs, particularly in ways to include energy and wastewater utilities—(2, 3, 4)~~

#### **~~COORDINATION OF PARTICIPATION IN OTHER PROCESSES—(FT.2):~~**

- ~~•—Coordinate Water Forum signatories participation in other processes including:~~

- ~~—CVPIA implementation~~
- ~~—SWRCB Bay-Delta Water Rights Proceedings~~
- ~~—CALFED process~~
- ~~—Department of the Interior, AFRP (1, 2, 3, 4)~~
- ~~—Endangered Species Act consultation (1, 2, 3, 4)~~
- ~~• Provide technical analysis and support to those processes (1, 2, 3, 4)~~
- ~~• Participate in the development of Reclamation's OCAP for the CVP (1, 2, 3, 4)~~
- ~~• Negotiate criteria for land-use agencies to use in assessing consistency of land-use decisions with the diversions from the American River and the estimated average annual sustainable yields of the three sub-basins negotiated as part of the *Water Forum Agreement* (1, 2, 3)~~
- ~~• Coordinate support for external funding of Folsom Reservoir Recreation Improvements (1, 2, 3, 4)~~

### **~~RESPONDING TO CHANGED CONDITIONS (FT.3):~~**

- ~~• Monitor legal developments including legislation, rules, regulations, and court decisions which may impact implementation of the *Water Forum Agreement* (e.g., drinking water standard, additions to the endangered species list, etc.) (2, 3, 4)~~
- ~~• Monitor other developments at the local, regional, state and federal levels which may impact implementation of the *Water Forum Agreement* (e.g., land-use decisions, changes in the health of the American River fishery, migration of toxic plumes in the groundwater basin, etc.) (2, 3, 4)~~
- ~~• Analyze the impact of such external factors on the implementation of the *Agreement* and provide timely notice to all stakeholders (2, 3, 4)~~
- ~~• Identify those external factors which are of such import that they will require re-negotiation of some elements of the *Agreement* (4)~~
- ~~• Work with stakeholders to develop a renegotiation agenda and schedule (4)~~
- ~~• Provide staff support for all aspects of the renegotiation process (4)~~
- ~~• Coordinate implementation of re-negotiated elements of the *Agreement* by all stakeholders (4)~~

### **~~ENVIRONMENTAL COMPLIANCE (FT.2):~~**

- ~~• Assist Reclamation to complete National Environmental Policy Act (NEPA) compliance (1, 2)~~
- ~~• Prepare any/all subsequent environmental documentation which may be required to support actions taken in response to changed conditions (4)~~
- ~~• Implement mitigation monitoring and reporting plan (1, 2, 3, 4)~~

### **~~EVALUATION AND REPORTING (FT.1):~~**

- ~~• Evaluate progress on all aspects of implementation of the *Water Forum Agreement* (2, 3, 4)~~
- ~~• Comply with all reporting requirements of the EIR (2, 3, 4)~~

- ~~Research, draft and issue to the stakeholders, the media and the public an annual report documenting all important developments pertaining to implementation of the Agreement including but not limited to:~~
  - ~~—actual diversion amounts~~
  - ~~—progress on water conservation/BMP implementation~~
  - ~~—actions to implement the fishery flow pattern~~
  - ~~—health of the lower American River eco-system~~
  - ~~—progress on integrating the use of surface water and groundwater to achieve sustainable yield (2, 3, 4)~~
- ~~Research, draft and issue to the stakeholders, the media and the public a comprehensive five-year evaluation on progress toward achieving the two coequal goals of the Water Forum Agreement: a safe and reliable water supply and protection of the public trust values of the lower American River (4)~~
- ~~Prepare for, convene and staff the annual Plenary Session of the Water Forum stakeholders (2, 3, 4)~~

#### **~~MAINTAIN RELATIONSHIPS/ PREVENT-RESOLVE DISPUTES (FT .3):~~**

- ~~Facilitate on going dialogue among stakeholders on all items of mutual interest (1, 2, 3, 4)~~
- ~~Coordinate interpretation of the Water Forum Agreement (2, 3, 4)~~
- ~~Assist Water Forum Agreement signatories to resolve misunderstandings and maintain positive inter-personal relationships (1, 2, 3, 4)~~
- ~~Preserve and enhance the good faith interest-based process which has made the Agreement possible (1, 2, 3, 4)~~
- ~~Educate all new stakeholder representatives on the principles of interest-based negotiation, the interests of all other Water Forum Agreement signatories, the history of the Agreement (especially the essential integration of the seven key elements of the Agreement), progress to date and current status (2, 3, 4)~~
- ~~Provide updates, as necessary, to stakeholder organizations and to individual stakeholder representatives on the principles on interest-based negotiation (2, 3, 4)~~
- ~~Respond promptly to identified stakeholder concerns (2, 3, 4)~~
- ~~Identify timely actions which can prevent/lessen problems related to “deal-creep” or non-compliance (2, 3, 4)~~
- ~~Work with stakeholders to develop mutually acceptable administrative procedures to address and resolve disputes internally before seeking other legal remedies including but not limited to designated responsible individuals, specific timelines, response options, etc. (2, 3)~~
- ~~Secure explicit stakeholder approval of these procedures and reaffirmation of commitment to implement them (2, 3)~~

#### **~~PUBLIC OUTREACH (FT .2):~~**

- ~~Develop and implement a comprehensive communication strategy concerning the purpose and progress of the Water Forum Agreement which reaches~~

- ~~— stakeholder organizations~~
- ~~— opinion leaders in the Sacramento region~~
- ~~— other interested parties in the American River watershed~~
- ~~— community groups and organizations~~
- ~~— interested parties outside of the American River watershed~~
- ~~— the media~~
- ~~— the public (1, 2, 3, 4)~~
- ~~• Maintain public outreach and education activities designed to promote continued public support for the *Water Forum Agreement* (1, 2, 3, 4)~~

#### **~~INTERNAL ADMINISTRATION (FT .5):~~**

- ~~• Staff all meetings of the Successor Effort including~~
  - ~~— Plenary Meetings of all stakeholders~~
  - ~~— Steering Committee and all sub-committees~~
  - ~~— Technical teams, ad hoc groups, etc. (1, 2, 3, 4)~~
- ~~• Provide for adequate office space, equipment, supplies, etc. (2, 3, 4)~~
- ~~• Develop annual budget (1, 2, 3, 4)~~
- ~~• Provide staff and consultants as needed (1, 2, 3, 4)~~
- ~~• Administer contracts (1, 2, 3, 4)~~
- ~~• Maintain all appropriate records (1, 2, 3, 4)~~
- ~~• Etc., etc., etc.~~

## ~~ATTACHMENT B: WATER FORUM SUCCESSOR EFFORT~~

### ~~SAMPLE BUDGET~~

#### ~~FIRST YEAR OPERATION~~

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- ~~STAFF: \$326,000 per year~~

~~Assumes three professional full-time equivalent employees or contractors and one secretary. After the first three years, when a significant portion of the initial work of the Water Forum Successor Effort has been completed, professional staff may be reduced from 3 to 2.~~

- ~~RENTAL OF OFFICE SPACE AND EQUIPMENT: \$53,400 per year~~

~~Assumes office space of 2500 sq. ft. @ \$1.50 per square foot. Copier @ \$700 per month. Does not reflect economies of scale resulting from shared facilities.~~

- ~~TELECOMMUNICATIONS: \$5,600 per year~~

- ~~OFFICE SUPPLIES AND MATERIALS: \$40,000 per year~~

~~Includes postage, printing, publications, meal and travel expenses, temporary clerical service, computer supplies, seminar registrations, etc.~~

- ~~CONSULTANT CONTRACTS: \$250,000 per year~~

~~Contracts needed for hydrology, fishery, engineering, mediation services, etc. Consultants used only as needed.~~

- ~~TOTAL OF ABOVE: \$675,000 per year~~

~~ATTACHMENT C: POTENTIAL FIRST YEAR COST ALLOCATION ON A  
PURVEYOR-BY-PURVEYOR BASIS~~

Purveyors/ Organizations	Total Connections	Successor Effort			
		% connections	# connections	Successor Effort	monthly
		Included	Included	Total	Rate impact
Zone 13, Sacto. Co unincorporated area	173,641	100%	173,641	\$333,359	0.160
City of Folsom	9,942	100%	9,942	\$19,087	0.160
City of Galt	5,170	50%	2,585	\$4,963	0.080
City of Roseville	23,859	100%	23,859	\$45,805	0.160
City of Sacramento	121,300	100%	121,300	\$232,874	0.160
Placer County Water Agency	9,480	See note below	9,480	\$18,200	0.160
Sacramento Municipal Utility District	NA	NA	NA	\$10,000	NA
San Juan Water District (Placer Co.)	5,580	100%	5,580	\$10,713	0.160
Totals	348,972		346,387	\$675,000	

**NOTES:**

An estimate of \$675,000 was used as the first year cost for the Successor Effort.

Zone 13 funds will be used to cover the financial contributions for water purveyors serving the unincorporated areas of Sacramento County and the City of Citrus Heights.

For Placer County Water Agency, it is assumed that 67% of its 28,440 connections are regularly served by the Yuba/Bear rivers. Therefore, the remaining 9,480 connections are included in this calculation. As PCWA continues to develop the American River and develops the Sacramento River diversion included in the *Water Forum Agreement*, connections served by these supplies will be included in the allocation procedure.

El Dorado Irrigation District and Georgetown Divide Public Utility District: Mutually agreed upon Water Forum Successor Effort expenses related solely to converting these purveyors' procedural agreements into specific agreements will be reimbursed by these purveyors. As soon as the purveyors have negotiated specific agreements and they sign the *Water Forum Agreement*, they will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.

~~In the future as California American Water Company Citizens Utilities Company of California serves customers in Placer County, it will contribute to the Water Forum Successor Effort based on the number of those connections.~~

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## CHAPTER 4 ~~SECTION FOUR~~

### OTHER IMPORTANT AGREEMENTS

#### I. ASSURANCES AND CAVEATS

##### A. Intent

The *Water Forum Agreement* will allow the region to meet its needs in a balanced way through implementation of all seven elements of the *Agreement*: increased surface water diversions; actions to meet customers' needs while reducing diversion impacts in drier years; support for improved pattern of fishery flow releases; lower American River habitat management; water conservation; groundwater management; and Water Forum Successor Effort.

Each signatory needs to be assured that as it fulfills its responsibilities under the *Agreement* the other signatories will be also honoring their commitments. Adequate assurances allow each signatory to expend the energy and resources necessary for it to uphold its part of the *Agreement* with confidence that others signatories will be doing likewise.

For instance, for environmentalists to support purveyors' increased water diversions, they need assurances that purveyors will support all seven elements of the *Water Forum Agreement* over the entire term of the *Agreement*. This will provide them assurances that agreed upon actions to preserve the lower American River will be continued.

Conversely, for water purveyors to participate in all seven elements of the *Agreement*, including those which will preserve the lower American River, they will need to have assurances that the other signatories will support the purveyor's increased diversions over the term of the *Agreement*.

##### B. Assurances

The *Water Forum Agreement* is based on nine assurances:

- Signing the *Water Forum Agreement*;
- Implementation of the Central Valley Project Improvement Act (CVPIA);
- An updated lower American River flow standard and related assurances;
- Assurances of support for increased diversions;
- Assurances for the lower American River Habitat Management Element (HME);
- Assurances for the water conservation element;
- Assurances for the groundwater management element;
- Assurances for the Water Forum Successor Element; and
- Assurances for response to changed conditions.

1. Signing the *Water Forum Agreement*.

All signatories agree that by signing the *Water Forum Agreement*, which is a Memorandum of Understanding (MOU) among all signatories, they commit to carrying out all the actions specified for them in the *Agreement*. This MOU is supplemented by additional assurances, which are described below.

Timing of this assurance: The *Water Forum Agreement* will be effective upon signing.

Status update – The *Water Forum Agreement* was signed in April 2000. See Chapter 1, Section H for a complete list of signatories.

May 2012

2. Implementation of the Central Valley Project Improvement Act

Under the CVPIA, the Department of Interior is responsible for carrying out two programs that provide significant assurances that fishery, wildlife, recreational, and aesthetic values of the lower American River will be protected.

a. The Anadromous Fish Restoration Program (AFRP) provisions of the CVPIA require the U.S. Bureau of Reclamation (Reclamation) to release water from Central Valley Project (CVP) facilities including Folsom Dam on a schedule that better matches the lifecycles of anadromous fish. The draft AFRP flow objectives for the American River as set forth in the November 20, 1997 “Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water” are essentially the same as the *Water Forum Agreement’s* improved pattern of fishery flow releases.

b. In addition, the CVPIA Restoration Fund collects money from CVP contractors to finance improvements to habitat affected by the CVP, including the ecosystem of the lower American River. These funds are expected to provide cost-sharing for the multi-agency lower American River Habitat Management Plan (HMP).

Timing of this assurance: The CVPIA was enacted as federal law in 1992. Since 1996 Reclamation, in conjunction with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) ~~Game (CDFG)~~, has attempted to release water from project facilities in a manner consistent with the flow objectives for the lower American River set forth in the draft AFRP to the extent Reclamation’s available water supply has permitted it to do so. The AFRP flow objectives will not become final until after the CVPIA Programmatic Environmental Impact Statement (EIS) is complete.

Status update – The CVPIA AFRP goals have not been met. Since signing the WFA, the WFSE has developed a proposed Improved Pattern of Flow Releases (aka Flow Management Standard) that differs from the AFRP flows. The current Flow Management Standard includes provisions for both flow and temperature management (see Chapter 4, Schedule for Updating the lower American River Flow Standard).

May 2012

### 3. Updated lower American River Flow Standard and Related Assurances.

The AFRP flow targets for the lower American River are an important assurance. However they have not been finalized as of the signing of the *Water Forum Agreement*. In addition they do not address how much water will be diverted from the American River under various hydrologic conditions. In the process of updating the lower American River standard, it will be necessary to make some corrections to the AFRP flow objectives for the lower American River. These include some typographic corrections as well as inclusion of target carryover storage amounts for Folsom Reservoir.

An additional assurance will be in the form of an updated lower American River flow standard. All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated lower American River flow standard and updated Declaration of Full Appropriation. This recommended standard will incorporate the *Water Forum Agreement* provisions on water diversions under varying hydrologic conditions, optimize the release of available water for the fisheries and include other provisions as follows:

- a. Updated lower American River flow standard for Folsom and Nimbus dams. All signatories agree they will recommend to the SWRCB an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for Reclamation releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement (PSA). The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and

Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

Timing of this assurance: The City of Sacramento, with support from other signatories to the *Water Forum Agreement*, has already requested the SWRCB to expedite updating of

the lower American River flow standard. In the spring of 2000, after consultation with other American River water rights holders, the City of Sacramento will present a recommended flow standard to the SWRCB on behalf of the Water Forum.

The updated LAR Flow Standard has not been completed. For status update, see Chapter 4, Table 4.1, Progress Update on the Lower American River Flow Standard.

September 2015

b. Upstream Diversion Agreements. The recommended updated lower American River flow standard will incorporate rules on how much water purveyors would divert upstream of Nimbus Dam under varying hydrologic conditions. Therefore Reclamation and Water Forum signatories need some form of assurance as to how much those purveyors would divert under those conditions.

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contracts with Reclamation that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for diversion reductions in dry year and/or other equivalent actions (See “Model Diversion Agreement with Reclamation” included as Appendix F).

Timing of this assurance: These contracts need to be entered into before the updated lower American River flow standard becomes effective.

Update – The upstream diverters worked with Reclamation in the early 2000’s to develop draft contract provisions to assure long-term implementation of dry years actions. These provisions have not as of yet been included in executed contracts.

March 2016

c. City of Sacramento Diversion Conditions. There needs to be some form of assurance that the City of Sacramento’s diversions from the American River will be consistent with the *Water Forum Agreement*. Because it diverts from downstream of Nimbus Dam it would be inappropriate of the City to enter into a diversion agreement with Reclamation.

Therefore the City of Sacramento agrees to include the provisions of its PSA concerning its diversion conditions in its request for SWRCB approval needed to expand the E.A. Fairbairn Water Treatment Plant (FWTP) diversion.

Timing of this assurance: These diversion conditions will be included when the SWRCB grants the City its needed approval.

This assurance has been included in the City’s SWRCB permit.

May 2012

d. Flexibility in the standard with regard to implementation of the improved pattern of fishery flow releases. The updated lower American River flow standard recommended by signatories will also address the tension between certainty and flexibility in how water is released from Folsom Reservoir. A flow standard that incorporated the improved pattern of fishery flow releases with no flexibility in its implementation would make it impossible to use adaptive management to respond to real time conditions. Conversely, absolute flexibility would not provide parties the assurance that releases from Folsom Reservoir will be timed to meet the objectives of the improved pattern of fishery flow releases. In addition implementation of the standard must recognize that Reclamation operates Folsom Dam as an integrated part of the CVP.

A technical group of parties with operations expertise including members of the Water Forum Successor Effort, [Reclamation U.S. Bureau of Reclamation](#), the USFWS [U.S. Fish and Wildlife Service](#), the National Marine Fisheries Service, and the [CDFW CDFG California Department of Fish and Game](#) will prepare recommendations on how to reconcile these issues. Provisions they will consider recommending in the updated flow standard include:

(1)Acceptable tolerance for variation in flow releases. The pattern of releases would be based on the November 20, 1997 “Department of the Interior Final Administrative Proposal on the Management of Section 3406 (b) (2) Water.” However there is also a need to allow some variation to respond to real time conditions. The tolerance could vary by type of water year. It could be an absolute number or a percentage.

(2)Formalization of the existing ad hoc lower American River Operations Group (the group that recommends real time adaptive management operations for the lower American River) that would meet as needed. This is an existing group of resource experts that provides input to [Reclamation the Bureau](#) on its operations under real-time conditions. The operations group would agree on actual flow releases within the previously approved range. It will have to be coordinated with other operations groups. This group should also take advantage of the experience of the CALFED Operations Group.

(3)A provision to allow greater variations in flows in response to significant, unforeseeable events. For instance, if a gate at Folsom Reservoir were to fail in July, there might not be enough water remaining to meet fall flow standards. Or there could be a never before experienced pattern of inflow or flood release. Another example of the need for variation could be to allow repairs to be made on the fish diversion structure at Nimbus Fish Hatchery.

(4) A recognition of the SWRCBs ~~State Water Resources Control Board~~ continuing authority to amend the standard to protect in-stream resources of the lower American River.

(5) The approach to flexibility will also be coordinated with ~~Reclamation's the Bureau's~~ new Operations Criteria and Plan (OCAP).

Timing of this assurance: The recommendation for appropriate flexibility will be developed in time for inclusion in the updated lower American River flow standard.

See Table 4.1, Schedule for Updating the lower American River Flow Standard for status update.  
September 2015

e. Conference year principles. The recommended flow standard for the lower American River incorporates agreement on water diversions and optimizes the release of available water for the fisheries for all types of water years through implementation of the improved pattern of fishery flow releases. This recognizes the wide variation in runoff which has ranged from over 6 million acre-feet (AF) in one year to less than 400,000 AF in the driest year on record. It is during times of low runoff that pressures on the available water supply are greatest. Therefore, signatories agree that the updated lower American River flow standard that they recommend will have the following provisions for the extremely dry years:

(1) Diversions and river flows. The amount each purveyor could divert is set forth in its PSA and is reflected in the recommended lower American River flow standard.

(Note that the annual quantity of water diverted from the American River and the amount available to flow all the way down the river from March to November may total more than 400,000 AF. That is because the amount available may include releases from storage of water carried over from previous years.)

The recommended updated flow standard will also include a provision for adaptive management. This will allow resource managers to allocate the total quantity of water available to the fishery for maximum benefit to the fishery.

(2) Conferencing. During years when the projected March to November inflow to Folsom Reservoir is less than 400,000 AF (referred to as conference years) there is insufficient water to meet lower American River in-stream needs and provide the quantities of diversions specified in PSAs. Special provisions are necessary to deal with water management in those extremely dry years. Therefore all stakeholders agree to meet in those years to confer on how the available water supply should be managed to

preserve as much as possible both of the Water Forum's two coequal objectives. The guiding principle will be to "share the pain" so that both in-stream and consumptive users bear an equitable burden.

(3) Minimum flow standard. The updated flow standard recommended by the Water Forum for inclusion in ~~Reclamation's the Bureau's~~ water rights permits for operation of Folsom and Nimbus dams will include a minimum flow requirement of 190 cubic feet per second (cfs) at the mouth of the American River<sup>8</sup>. The Water Forum will also recommend that the City of Sacramento's water rights require the ~~FWTP Fairbairn Water Treatment Plant~~ diversion to bypass the flow that ~~Reclamation the Bureau~~ releases or maintains below Nimbus Dam to meet that minimum flow requirement at the mouth of the American River. Nothing in this *Water Forum Agreement* is intended to affect Reclamation's obligation to make water available to the City of Sacramento under the City's 1957 ~~Reclamation Bureau~~ contract.

This does not, however, imply signatories agree that 190 cfs is adequate for fish screen bypass flows for the expanded Fairbairn diversion or a new diversion near the mouth of the American River. Those fish screen bypass flows will be identified in project specific Environmental Impact Reports (EIRs) for those diversions.

In extraordinary circumstances, the 190 cfs minimum could be relaxed if reallocating that volume of water to another time in the year would be more beneficial for the fishery.

(4) Extraordinary conservation efforts. In conference years water purveyors agree to implement the highest level of conservation/rationing in its drought contingency plans.

(5) Conferencing in other years. The lower American River Operations Group can recommend that the Water Forum Successor Effort meet and confer on operations in any year if called for by extraordinary circumstances.

These conference year principles will be included in the diversion agreements between ~~Reclamation the Bureau~~ and purveyors signatory to the *Water Forum Agreement* that divert upstream of Nimbus Dam.

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<sup>8</sup> Decision 893 established a variable minimum requirement for flows at the mouth of the American River. Under D-893 in 1977, the driest year on record, the minimum flow requirement was presumed to be between 185 and 190 cfs. D-893 also conditioned the City of Sacramento's water rights to require the City of Sacramento's E.A. FWTP diversions to bypass the flow that Reclamation releases or maintains below Nimbus Dam to meet D-893's minimum flow requirement.

Timing of this assurance: The concept of conferencing in the years with a projected March to November unimpaired inflow of less than 400,000 AF will be included in the recommendation for the updated lower American River flow standard when it is presented to the SWRCB.

The WFSE has tracked annual hydrologic conditions to determine water year type and publishes periodic runoff reports. Reports are available online at <http://waterforum.org/resources/resource-library/>.

November 2015

f. Declaration of full appropriation. The SWRCB has already declared the American River to be fully appropriated during certain times of the year. In recognition of the additional diversions and fishery flows agreed to in the *Water Forum Agreement*, the Declaration of Full Appropriation needs to be amended. Because there are significant remaining issues including area of origin protections, this will require additional negotiation.

Signatories agree to negotiate with all affected stakeholders and the Water Forum Successor Effort will recommend an amendment to the Declaration of Full Appropriation for the American River consistent with the *Water Forum Agreement*.

Timing of this assurance: A recommended amendment to the Declaration of Full Appropriation for the lower American River will be developed so that the amended Declaration can be recommended as soon as the lower American River flow standard is updated.

A recommendation for a declaration of full appropriation for the LAR has not been developed.

May 2012

g. How to develop an updated lower American River flow standard if all upstream diverters are not in the initial *Water Forum Agreement*. Not all purveyors that divert upstream of Nimbus Dam are in the initial *Water Forum Agreement*. This section describes how an updated flow standard for [Reclamation's the Bureau's](#) operation of Folsom and Nimbus dams can be adopted when there is uncertainty as to increased diversions by some upstream purveyors.

The updated flow standard will reflect those increased diversions, including dry year reductions and/or other equivalent actions, upon which there is agreement as reflected in the initial *Water Forum Agreement*.

Signatories agree that the recommended updated flow standard will also contain a reserved jurisdiction clause specifying that whatever the SWRCB decides in the

future regarding diversions upstream of Nimbus Dam will automatically result in a corresponding revision to ~~Reclamation's the Bureau's~~ water rights permit for the operation of Folsom and Nimbus dams.

That will preserve the opportunity for those not yet in the *Agreement* to come to agreement with other Water Forum stakeholders when the issues are ripe for decision. It will also preserve the option for parties to support or oppose those increased diversions if an agreement with the Water Forum signatories cannot be reached in the future.

Timing of this assurance: This provision will be included in the updated lower American River flow standard when it is presented to the SWRCB for its approval.

The upstream diverters were original signatories to the WFA.

May 2012

4. Assurances of Support for Increased Diversions

- a. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each PSA.
- b. All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the *Water Forum Agreement* including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the five points described below.
  - (1) All signatories agree that implementation of the *Water Forum Agreement* including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River HME, actions to meet customers' needs while reducing diversion impacts in drier years, and the water conservation element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the *Water Forum Agreement*.
  - (2) Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.
  - (3) To the extent that the water facilities are consistent with the *Water Forum Agreement*, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American

River. Nor will signatories object to water facilities consistent with the *Water Forum Agreement* based on the planned growth to be served by those water facilities (See [Chapter 4, Section IV Section Four, IV](#), Relationship of the *Water Forum Agreement* to Land Use Decision making).

(4) In the planning for new water diversion, treatment, and distribution facilities identified in the *Water Forum Agreement*, water purveyors signatory to the *Agreement* will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.

(5) All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.

c. Endorsement of the water entitlements and related facilities in the *Water Forum Agreement* will expend reasonable efforts to:

- (1) Speak before stakeholder boards and regulatory bodies,
- (2) Provide letters of endorsement,
- (3) Provide supportive comments to the media,
- (4) Advocate the *Water Forum Agreement* to other organizations, including environmental organizations that are not signatory to the *Water Forum Agreement*, and
- (5) Otherwise respond to requests from other signatories to make public their endorsement of the *Water Forum Agreement*.

Timing of this assurance: Support for increased diversions will be provided whenever requested by the water purveyors signatory to the *Water Forum Agreement*.

Status update – Support for increased diversions have been provided when requested.
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May 2012

5. Assurances for the lower American River Habitat Management Element

- a. Signatories commit in the signed Water Forum MOU to implement the habitat management element as specified in the *Water Forum Agreement*.
- b. In certifying the Water Forum Programmatic EIR and approving findings, the City of Sacramento and the County of Sacramento agree to include the

commitments of purveyors participating in the HME in the adopted Mitigation Monitoring and Reporting Plan.

c. In approving project specific EIRs and EISs, purveyors agree to include language in their adopted environmental documentation which commits them to participate in the HME as specified in the *Water Forum Agreement*.

d. The City of Sacramento, the County of Sacramento and those other purveyors outside of Sacramento County's Zone 13 that divert American River water agree to enter into a contract with the City of Sacramento (as fiscal agent for the Water Forum) to provide funding for the HME as specified in this agreement. Parties entering into the contract agree to include a provision whereby other signatories to the *Water Forum Agreement* will be designated as third party beneficiaries. That will enable those other signatories to have standing to enforce the contractual commitments.

Timing of assurance: Habitat assurances are included in the Water Forum EIR. They will also be included in purveyors' project-specific EIRs when they are adopted. The contract for funding and implementing the HME will be entered into within one hundred twenty days of the effective date of the *Water Forum Agreement*.

Status update – This assurance is being met through implementation of the HME. See update in Chapter 3, Section IV.

May 2012

#### 6. Assurances for the Water Conservation Element

a. Each purveyor agrees as part of the Water Forum MOU to implement the Water Conservation Element as described in Chapter 3, Section V. ~~its water conservation plan which is included in the Water Forum Agreement as Appendix J a separately bound appendix.~~

b. In certifying the Water Forum Programmatic EIR and approving findings, the City of Sacramento and the County of Sacramento agree to include in the adopted Mitigation Monitoring and Reporting Plan all purveyors' commitments to their Water Forum conservation plans.

c. In approving project specific EIRs and EISs, purveyors agree to include language in its adopted environmental documentation which commits them to carry out the Water Conservation Element as described in Chapter 3, Section V. ~~its water conservation plans as included in the Water Forum Agreement as Appendix J, a separately bound appendix.~~

d. All signatories recognize that the CVPIA includes water conservation requirements to be implemented by CVP contractors.

e. All signatories agree to actively support the California Public Utilities Commission (CPUC) allowing investor owned utilities to recover all costs of meter retrofit through rates.

f. All signatories agree to work in the Water Forum Successor Effort to negotiate a conservation program for agricultural water use. Water Forum signatories' support for new or increased surface water diversions to serve agricultural uses is dependent on acceptable assurances that those diverters will implement mutually agreed upon agricultural water conservation programs.

Timing of this assurance: Water conservation assurances are included in the Water Forum EIR. They will also be included in purveyors' project-specific EIRs when they are adopted. CVPIA water conservation requirements are already enacted.

Status update – In 2009 the WFSE updated the Water Conservation Element (Chapter 3, Section V). Since the signing of the WFA purveyors have included Water Forum water conservation commitments in related project specific EIRs. As of this update no request for new or increased agricultural surface water diversions has been made, therefore no agricultural water conservation programs have been negotiated.

May 2012

## 7. Assurances for the Groundwater Management Element

a. Signatories who pump groundwater from the sub area of the basin in the North Area of Sacramento County agree to participate in the ~~Sacramento Groundwater Authority (SGA) Sacramento North Area Groundwater Management Authority~~ established under the joint powers agreement in August 1998.

b. The ~~SGA Sacramento North Area Groundwater Management Authority~~ may enter into an MOU with entities in adjacent counties to coordinate the management of the groundwater basin that is shared by those counties.

c. In Sacramento County, land use agencies' determination of groundwater available for new development will be consistent with the estimated average annual sustainable yields identified in the *Water Forum Agreement*.

d. Signatories who pump groundwater from the sub area of the basin in the Central Area of Sacramento County agree to participate in the SCGA established under the joint powers agreement in 2006 with a GMP adopted 2006.

e. Signatories to the *Water Forum Agreement* agree to negotiate arrangements for groundwater management for the ~~South Galt~~ Area. and the ~~Central South~~ Area within Sacramento County appropriate to its individual needs. Signatories agree that the North Area groundwater management program is not a template for

programs in the ~~Central South~~ Area or the ~~South Galt~~ Area within Sacramento County.

Water Forum signatories' support for new or increased surface water diversions for use in the ~~Central South~~ Area or the ~~South Galt~~ Area within Sacramento County is linked to those signatories' participation in the development of groundwater management programs for the ~~Central South~~ Area and the ~~South Galt~~ Area.

Timing of this assurance: In July 2000, the Water Forum Successor Effort will review progress in implementing groundwater management programs in the ~~Central South~~ Area and the ~~South Galt~~ Area to confirm that sufficient progress has been made to allow continued Water Forum support for new or increased surface water diversions.

8. Assurances for the Water Forum Successor Effort

- a. Upon signing the *Water Forum Agreement*, all signatories will immediately become members of the Water Forum Successor Effort.
- b. In certifying the Water Forum Programmatic EIR and approving findings, the City of Sacramento and the County of Sacramento agree to include in the adopted Mitigation Monitoring and Reporting Plan all purveyors' commitments to the Water Forum Successor Effort.
- c. In approving project specific EIRs and EISs, purveyors agree to include language in its adopted environmental documentation which commits them to participate in the Water Forum Successor Effort as included in the *Water Forum Agreement*.
- d. The City of Sacramento, the County of Sacramento and those other purveyors outside of Sacramento County's Zone 13 agree to enter into a contract with the City of Sacramento (as fiscal agent for the Water Forum) to provide funding for the Water Forum Successor Effort as specified in this agreement. Parties entering into the contract agree to include a provision whereby other signatories to the *Water Forum Agreement* will be designated as third party beneficiaries. That will enable those other signatories to have standing to enforce the contractual commitments.

Timing of the assurance: The contract for funding and implementing the Water Forum Successor Effort will be entered into within one hundred twenty days of the effective date of the *Water Forum Agreement*.

Status update – This assurance is currently being met through the ongoing implementation and funding of the WFSE.
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### 9. Assurances for Response to Changed Conditions.

It is recognized that over time there will be changed circumstances that are not currently foreseen. The changed conditions could significantly affect attainment of either or both of the Water Forum's two coequal objectives.

For instance groundwater contamination could affect water purveyors' ability to rely on conjunctive use in drier years. Conversely, the fishery might not do as well as was projected when the *Water Forum Agreement* was signed.

Therefore all signatories agree that if changed circumstances affect the ability to attain either of the two coequal objectives, the Water Forum Successor Effort will recommend changes to relevant portions of the *Water Forum Agreement*. Amending the *Water Forum Agreement* requires express approval by those signatories that would be affected by the amendment.

Timing of the assurance: This will be an on-going activity over the life of the *Water Forum Agreement*.

Status update –Water Forum signatories continue to monitor for changed conditions.

May 2012

### C. Caveats

The *Water Forum Agreement* includes linked actions based on many “quid pro quos” (i.e., something given for something received.) Some of the actions will require future approvals or implementation by local, state and federal agencies.

In addition some things cannot be known with certainty at this time. For instance, results of Endangered Species Act consultations for specific projects will not be available for some time.

Therefore, in order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the agreement to be operative.

1. Each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Water Forum Agreement* for all of its facilities and entitlements as shown on Table 0.1 ~~the chart~~ *“Major Water Supply Projects That Will Receive Water Forum Support Upon*

~~Signing the Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Diversion restrictions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and,

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on Table 0.1~~the chart “Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the agreement that meet its interests.
3. A stakeholder’s support for water supply entitlements and facilities is contingent on adequate assurances, including:
  - a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.
  - b. Purveyors’ commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*, support for updating the lower American River flow standard, commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of Reclamation~~ and commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.
  - c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the

diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not intended to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

- d. Adequate progress on the updated lower American River standard. (See the "Schedule for Updating the lower American River Flow Standard" at the end of this section).
- e. Adequate progress in construction of the temperature control device.
- f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in the lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **D. Specific Agreement on Assurances and Caveats.**

All signatories agree that the assurances described in this section are needed to ensure that specified future actions will occur. All signatories also acknowledge the caveats included in this section that describe actions or conditions that must exist for the agreement to be operative.

## **SCHEDULE FOR UPDATING THE LOWER AMERICAN RIVER FLOW STANDARD**

The following schedule reflects the Water Forum's need to have the lower American River flow standard updated as soon as possible. Signatories to the *Water Forum Agreement* will do everything they can to expedite approval by the State Water Resources Control Board (SWRCB). This includes the City of Sacramento providing supplemental financial assistance to the SWRCB for priority processing if that is agreed to by the SWRCB.

**October, 1999** City of Sacramento, with support from the Water Forum, requests the SWRCB to update the lower American River flow standard consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for fisheries.

**November, 1999** SWRCB holds a workshop and hearing on the City of Sacramento's request to expedite processing of the updated lower American River flow standard.

**Spring, 2000** After consultation with other American River water rights holders, Water Forum stakeholders agree on detailed recommendations for the updated lower American River flow standard.

**Spring, 2000** After Water Forum stakeholders agree on detailed recommendations for the updated lower American River flow standard, the City of Sacramento will present it to the SWRCB.

**Spring, 2000** Initiate SWRCB review including environmental review for the proposed updated lower American River flow standard.

As soon as all requirements have been met, the SWRCB will hold a hearing on the proposed updated lower American River flow standard. Thereafter the SWRCB will issue its decision.

**Table 4.1. Progress Update on the Lower American River Flow Management Standard**

PROGRESS UPDATE ON THE LOWER AMERICAN RIVER FLOW MANAGEMENT STANDARD	
The implementation Improved Pattern of Fishery Flow Releases from Folsom Reservoir has not been completed. Following is an abbreviated description of progress on this element which has been conducted through development of a Flow Management Standard (FMS):	
August 2000	Water Forum Agreement finalized: FMS is one of seven key elements
2001 thru 2003	Water Forum, Reclamation, FWS, NMFS, and CDFW <del>DFG</del> conduct technical work to develop FMS
January 2004	FMS Policy Document: Framework for FMS; Water Forum and Reclamation hold public workshop to describe FMS
October 2004	MOU between Reclamation and Water Forum: Work in good faith to submit FMS to State Board by summer 2005
September 2005	Reclamation Press Release: Reclamation and Water Forum reach agreement on FMS flow regime
July 2006	FMS Draft Technical Report issued by Reclamation, FWS, NMFS, CDFW <del>DFG</del> and Water Forum: Detailed technical description of FMS, including minimum flows, temperature objectives, Operations Group, and monitoring
July 20, 2007	Water Forum completes Draft Petition and attachments reflecting the 2006 FMS Draft Technical Report; Petition materials submitted to Reclamation
August 2007 thru April 2008	Water Forum repeatedly requests review comments on Draft Petition. Reclamation repeatedly assures stakeholders that they are committed to the FMS process.
December 4, 2007	Reclamation provides comments to State Board at meeting on Delta Standards: FMS will be in OCAP
April 2, 2008	Congresswoman Matsui writes Commissioner Johnson: Finish FMS
April 28, 2008	In lieu of comments on Draft Petition materials as requested, Reclamation delivers redrafted FMS Petition: several key components of FMS have been omitted
May 2008	Reclamation releases OCAP Biological Assessment: Project description and modeling contains representation of FMS flows; LAR temperature objectives/targets were not included

July 2008	Water Forum, Sacramento County, and Reclamation begin FMS contract negotiation; Public negotiation sessions and joint technical meetings convened
October, 2008	Reclamation letter to Water Forum: “Until we have a new OCAP, substantive work on a flow standard for the lower American River is not practical.”
December, 2008	Water Forum authorizes staff to move forward with Flow Standard EIR and notifies Reclamation.
January, 2009	Water Forum staff and consultants begin preparing Flow Standard EIR; keep lines of communication open with Reclamation
June 2009	NMFS releases OCAP Biological Opinion: calls for Water Forum FMS with some key differences, notably an iterative temperature management approach
August 2009	Water Forum, NMFS, Reclamation agree to work cooperatively to define iterative temperature management approach and develop associated modeling tool.
2010	Water Forum completes iterative temperature management tool for Reclamation’s use
October 2010	Center for Collaborative Policy conducts FMS stakeholder interview, identifies need for Water Supply Impact Analysis
August 2011	Water Supply Impact Analysis completed
October 2011	Cross-Caucus discussions begin
January 2012	All Caucuses direct staff to complete FMS EIR and proceed to State Board
May 2013	Notice of Preparation for EIR released
June 2013	Work begins on adding iterative temperature management approach to FMS, as directed by NMFS BiOp
March 2014	Iterative temperature approach in FMS is found to have unacceptable impacts to Sacramento River water temperature
April 2014	Work begins on new approach to meeting NMFS BiOp requirements: the modified FMS which includes target for Folsom Storage
August 2014	Modified FMS development continues: End-of-December Storage Target identified as best approach to enhancing lower American River water temperature; also show promise for protecting Folsom Reservoir storage and associated water supply

June 2015	Refinements to Modified FMS are completed, including red dewatering protections and spring pulse flow
October 2015	Summary report of Modified FMS is released: Lower American River Modified Flow Management Standard – A Drought Buffer for the Environment and Local Water Supplies
November 2015	Discussions begin with Reclamation on the benefits of the Modified FMS

## II. WATER RIGHTS

### A. Surface Water Rights

It is recognized that some purveyors that will sign the *Water Forum Agreement* have long-term surface water entitlements in excess of demands projected for the term of the *Water Forum Agreement*. Nothing in the agreement is intended to call for the reduction or forfeiture of existing surface water entitlements. Signatories to the agreement will honor this principle in state and federal entitlement proceedings directly related to the *Water Forum Agreement* as shown in Table 0.1. ~~the chart “Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement”.~~

It is also recognized that there may be broader state and federal entitlement proceedings where signatories may have different interests, such as the State Water Resources Control Board (SWRCB) water rights proceeding for the Bay-Delta.

Signatories agree to work in good faith through the Water Forum Successor Effort with the objective being to develop a consensus recommendation for how state and federal entitlement proceedings should affect those agencies that store and divert American River water. All signatories will make good faith efforts so that recommendations will be consistent with both coequal objectives of the *Water Forum Agreement*:

Provide a reliable and safe water supply for the region’s economic health and planned development through to the year 2030;

and

Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.

### B. Groundwater Rights

It is recognized that groundwater rights holders have valuable rights that must be protected. Groundwater rights holders must not have their rights threatened either by their participation in the Water Forum process or by the groundwater management arrangements called for in the *Water Forum Agreement*. Consistent with the Groundwater Management Element, nothing in this agreement is intended to call for the reduction or diminution of any exercised or unexercised groundwater rights. Accordingly, the signatories agree that the *Water Forum Agreement* shall not impair the vested groundwater rights of any person or entity regardless of whether those rights are currently exercised or unexercised.

Signatories retain their ability to assert their groundwater rights by participating in the public process of creating rules, regulations, policies and procedures associated with the [SGA](#) ~~Sacramento North Area Groundwater Management Authority~~ and other groundwater management arrangements called for by the *Water Forum Agreement*.

### **III. SACRAMENTO RIVER SUPPLY FOR NORTH SACRAMENTO COUNTY AND PLACER COUNTY**

#### **A. Intent**

All signatories recognize there would be benefits from a Sacramento River diversion to serve the north area of Sacramento County and Placer County. This could be an additional source of water for conjunctive use in the North Area groundwater sub-area of the basin. It could also provide a surface water supply to help meet a portion of some purveyors' needs in all years. This would contribute to a reliable supply for the area. It would also reduce the need for some purveyors to divert from the American River in drier years.

#### **B. Sacramento River Supply for North Sacramento County and Placer County**

Several purveyors in the north Sacramento County area have already taken the lead in constructing a pipeline to take American River water from Folsom Reservoir west across the north part of Sacramento County. This major pipeline could provide surface water for the North Area conjunctive use program.

In addition, the *Water Forum Agreement* includes support for an upgrade to Natomas Central Mutual Water Company's diversion structure on the Sacramento River. This upgrade would provide state-of-the-art fish screening. This could be a joint facility to also serve water to Placer County.

In the future it would be beneficial to interconnect the North Area pipeline with a Sacramento River diversion. The North Area pipeline was constructed large enough to deliver water from either the American or Sacramento Rivers.

Such an interconnection would have several benefits. First, it would provide purveyors with an alternative source of water should there be any problem with its American River supply. Second, it would allow purveyors access to water transfers from the Sacramento or Feather rivers.

The lower American River could also benefit because a Sacramento River diversion would reduce the need for diversions from the American River in driest years. This could be an option for purveyors needing alternative water supplies to meet customers' needs in drier years while reducing impacts of diversions from the American River.

This option would be available to purveyors with direct access to the Sacramento River. It could also be an option for purveyors further upstream that could participate through an exchange. They could continue to make diversions from the American River in drier and driest years if other purveyors switched from their American River supplies to the Sacramento River supply.

It is also recognized that winter-run salmon have been listed as endangered under the Endangered Species Act, and steelhead have been listed as threatened. Any diversion would have to fully comply with the Endangered Species Act.

**C. Specific Agreements on Sacramento River Water Supply for North Sacramento County and Placer County**

1. All signatories to the *Water Forum Agreement* agree that an environmentally upgraded Sacramento River diversion to serve the north Sacramento county area and Placer County as described above would provide important benefits to the region.
2. All signatories to the *Water Forum Agreement* agree to work in good faith to develop a project consistent with their interests that would:
  - a. Consolidate several of Natomas Central Mutual Water Company's diversions;
  - b. Upgrade fish screens at the consolidated diversion;
  - c. Accommodate the diversion of 35,000 AF of water by Placer County Water Agency (PCWA) consistent with its Purveyor Specific Agreement (PSA);
  - d. Accommodate the diversion of 29,000 AF of water for delivery to [Sacramento Suburban Water District](#) ~~Northridge Water District~~ consistent with its PSA;
  - e. Subject to additional negotiations among Water Forum signatories, potentially accommodate other diversions (e.g. City of Sacramento diversions);
  - f. Interconnect that consolidated diversion with the North Area pipeline which delivers water from the American River. This interconnection will help meet water needs in northern Sacramento County and Placer County.
  - g. Support for this diversion is also subject to all elements of the *Water Forum Agreement* including the Caveats in [Chapter 4, Section I](#) ~~Section Four, I~~, including:
    - (1) Caveat 3.a., Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

- (2) Caveat 3.f., Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

## IV. RELATIONSHIP OF THE WATER FORUM AGREEMENT TO LAND USE DECISION-MAKING

Amendment – This section was changed to reflect the completion of the Land Use Procedures set forth in the *Water Forum Agreement*. The full text of the agreed upon procedures are provided below.

*Water Forum Plenary approval: February 2002*

### A. Background

Water Forum signatories include cities and counties that have land use planning responsibilities and water purveyors that have water planning responsibility. Water Forum signatories recognize the need to coordinate between water resources planning and land use decision-making. Land use decisions should be based on reliable information regarding water supply and infrastructure availability. Conversely, water supply planning and management decisions should be informed by land use decisions.

This section documents the work of the Water Budget and Land Use Committee during 2001-2002 to implement the land use/water use coordination procedures for the *Water Forum Agreement*. The recommendations have been developed and discussed at a series of meetings between the members of the Land Use Committee with the assistance of the planning directors (or their designees) from each jurisdiction and a representative from Local Agency Formation Commission (LAFCo) to review and react to the ideas. The entire Water Forum Successor Effort approved the procedures as of March 2002.

This section does not provide all of the details required for day-to-day implementation. It leaves some of the implementation procedures up to each local land use and water agency to determine with Water Forum staff assistance. In developing this section, the Water Forum considered a range of options for implementation. The land use procedures adopted here are designed to evolve as they are used and tested – an “adaptive management” approach. This section also only focuses on Sacramento County (particularly related to groundwater). Signatories recognize that other entities share the groundwater basin including those not signatory to the *Water Forum Agreement*. Additional discussion may be needed in addressing the full range of water supply-land use related issues.

The signatories acknowledge that there are a number of existing laws and procedures in place to link land use decisions and water supply. These include Senate Bills (SB) 221 and 610, adopted in 2001 and in place as of January 1, 2002, as well as other water supply information requirements set forth in Chapter 881 of the California Water Code, the California Environmental Quality Act (CEQA) process, “can and will serve” letters from water purveyors and related requirements. The procedures outlined here are meant to augment established procedures and ensure consistent implementation.

SB 221 of 2001 (codified generally in California Government Code sections 66473, 66455, 65867, 66499 regarding subdivision provisions and sections 10631, 10635 and 10910 of the California Water Code) prohibits cities and counties from approving large subdivision proposals (including those done by development agreement) unless a finding is made of adequate and reliable water supply. This finding is to be based on information supplied by the water purveyor (within 90 days of a request from the land use agency) including whether supplies are available in dry and multiple dry years and for existing and future water users. If new water sources are to be considered, the supply has to have secured water rights, infrastructure financing and permits and approvals. If the water purveyor does not provide the data or indicates that there is not adequate long-term water to supply the project, the local jurisdiction has the option of investigating alternative water supplies provided all the same tests of “adequacy” are met. This bill only applies to residential subdivisions over 500 units, or for small water systems (5,000 connections or fewer), a residential project that would use up more than 10% of the water connections. Urban infill and affordable housing projects are exempt from the water supply requirements.

SB 610 of 2001 (codified generally in California Water Code sections 10631, 10657, 10910, 10911, 10912) requires all water purveyors that prepare Urban Water Management Plans (UWMP) and rely on groundwater, to incorporate additional information in their plans and submit this to California Department of Water Resources (DWR) for review. The information includes data on groundwater basin condition, present and potential extractions, management plans in place, future uses and adequacy of the basin, etc. The new provisions also revise several minor sections of a previous land use-water supply bill.

The new State law provisions further requires that for any large development project or plan (including general plan amendments) that receives an Environmental Impact Report (EIR) or negative declaration (including mitigated negative declaration), a water supply assessment must be completed and included as part of the project review. If the project was assumed in the water purveyor’s most recent UWMP or has received a water supply analysis comparable to what the bill calls for, then that information can simply be incorporated into the project review and provided to the land use decision-makers. If the project was not assumed in the UWMP, then the land use agency requests a separate water supply assessment from the purveyor. With each of the new provisions, the purveyor has 90 days to provide the data (with a 30 day extension option) and it includes all water supplies and demands relevant to the proposal. The assessment is similar to that required for large subdivisions involving normal, dry and multiple dry years, factoring in all existing and future water users (including groundwater users if that is the source), and providing considerable detail on any future water sources that might be envisioned. If the water purveyor indicates that water supply is not or may not be available, SB 610 requires some discussion of how the purveyor and/or the local jurisdiction plan to augment supplies to account for the proposal. All of these data are to be included in the environmental review and in the record for review by the land use agency.

The new provisions for long-range planning (i.e. SB 610) apply to residential projects over 500 units (or over 10% of the connections for small water districts), commercial projects over

500,000 square feet (sf), office projects over 250,000 sf, industrial park projects over 40 acres or 650,000 sf, mixed use projects meeting any of the thresholds and 500 room hotel/motels.

## **B. Intent, Framework Agreements, Goals and Assumptions**

### **Intent**

It is the intent of the signatories that land use decisions dependent on water supply from the American River or the three groundwater sub-basins in Sacramento County be consistent with the limits on water supply from the American River and the estimated average sustainable yield for those groundwater sub-basins as negotiated in the *Water Forum Agreement*.

### **Framework Agreements**

The following agreements from the *January 2000 Water Forum Agreement* serve as a framework for this section:

1. All signatories recognize that land use decision-making authority remains the responsibility of land use agencies and neither the Water Forum nor the Successor Effort have any formal land use authority. These procedures do not provide any additional authority.
2. Signatories agree to comply with all relevant sections of the State Water Code and Government Code related to the coordination of water supply and land use decisions. If water supply/land use coordination laws are amended or new laws created, the Water Forum Successor Effort will revisit the procedures in this section to ensure compliance with State law.
3. Signatories will reference the *Water Forum Agreement*, including agreed upon estimated annual sustainable yields of each of the three sub-basins of the groundwater basin of Sacramento County (North Area 131,000 AF; ~~Central~~ **South** Area 273,000 AF; ~~South Galt~~ Area 115,000 AF) and limits to diversions from the American River in their water master plans and urban water management plans.
4. The *Water Forum Agreement* includes surface water and groundwater to meet the region's projected water needs for growth planned to the year 2030. Included in Appendix B of the *Agreement* is a description of the methodology and assumptions used by the Water Forum for assessing the demand to the year 2030, and a map delineating geographic boundaries used in projecting demand in Sacramento County.
5. In the unincorporated portions of Sacramento County only, signatories retain the ability to support or oppose water facilities that would serve new development outside the Urban Services Boundary as defined in the Sacramento General Plan, December 1993. All parties also retain the right to support or oppose the sizing of water distribution facilities that would allow service to the new development outside the Urban Services Boundary.

6. The *Water Forum Agreement* contains estimated average annual yields for each of the sub-areas of the groundwater basin in Sacramento County and limits to diversions from the American River. Beyond these agreements, limits on water from other sources have not been negotiated as part of the *Water Forum Agreement*. Signatories retain the right to support or oppose water projects that would use water from sources that have not been negotiated as part of the agreement.
7. The *Water Forum Agreement* focuses on providing a reliable and safe water supply and protecting the lower American River. As such it is not an agreement on land use planning. Therefore, all signatories retain the ability to support or oppose land use decisions on any basis except water supply availability insofar as these water supply decisions are consistent with the *Water Forum Agreement*.
8. There is a need for greater information exchange than just having water purveyors provide project-by-project assessments of water supply availability. Therefore, signatory water purveyors agree to participate in a proactive program to educate all land use authorities in the region about the provisions of the *Water Forum Agreement*.

### **Goals**

Two interdependent goals were developed for the Water Forum Successor Effort to implement the framework agreements in the *Water Forum Agreement* (January 2000).

1. Procedures will be developed by the Water Forum Successor Effort to advise land use agencies as they assess the consistency of proposed land use decisions with the estimated annual sustainable yield of the three sub-basins in Sacramento County and the diversions from the American River negotiated as part of the *Water Forum Agreement*.

This goal has been further defined by Water Forum signatories as follows:

*The procedure should provide land use agencies with clear, factual and timely information on water supply entitlements (consistent with the Water Forum Agreement) and infrastructure capacity, as compared to current, committed and planned water demand as land use agencies consider new land use proposals that come before them. Signatories want to ensure that future land use decisions are coordinated with water supply availability.*

2. To create guidelines for developing the periodic accounting of the Water Forum “water budget.”

### **Assumptions**

To develop the water supply/land use procedures, several assumptions were made:

1. Some type of Water Forum staff and some form of an interest-based sub-committee (called the Water Demand and Supply Information Committee) comprised of Water Forum Successor Effort members would remain active over the long term. Local water purveyors will be the primary sources of contact and information for the land use authorities with support from the Water Forum. Signatories acknowledge that they do not want to create a new “bureaucracy” for land use or water supply or have Water Forum staff burdened by reviewing many environmental and related planning documents.
2. The existing land use planning and decision-making process will continue as currently practiced. This means that many development proposals will be consistent with local general plans, and many will not. It also means that various jurisdictions will be revising and updating their general plans over time.
3. The Water Forum will be able to develop an objective and widely agreed upon water budget accounting/monitoring process as indicated in goal 2 for the Water Demand and Supply Information Committee. The procedures developed in this section need such a process to be implemented.
4. The land use procedures delineated here are intended to be clear, effective, as simple (and cost-effective) as possible to administer, flexible enough to adapt to changing circumstances, and cover all jurisdictions in a consistent manner. Procedures can be adapted for particular jurisdictions provided they are consistent with the guidelines in this section. These procedures are consistent with and complimentary to the requirements set forth in State law related to land use/water use coordination.
5. The procedures will need to be revised, adapted and evolve as the processes are tested and parties learn more about specific cases.

### **C. Specific Procedural Agreements**

The proposed procedures are divided into three elements:

- Overall recommendations to implement immediately to improve coordination of land use and water use.
- A procedure for addressing community-initiated general plan updates and specific plans, as well as LAFCo approvals including sphere of influence changes.
- A procedure for addressing privately initiated land use development proposals.

#### **1. Overall Recommendations**

The following agreements are designed for immediate implementation.

- a. Signatory water purveyors will send a copy of their most recent UWMPs (including any water conservation plans) to the land use authorities in their purview and agree to meet and discuss the plans. This will allow purveyors to take full advantage of any established data sources, planning documents and existing information and procedures.
- b. Water Forum staff will research the existing landscape water conservation ordinances of each local jurisdiction and provide this information to Water Forum Successor Effort members to be included in the Water Efficiency discussions. The Water Forum Successor Effort will use a sub-committee to monitor and work on water efficiency issues.
- c. Water Forum staff will contact signatory water purveyors to review the communication procedures that the purveyor and the land use agency use to periodically exchange information (at least once per quarter) about pending land use applications and water supply/demand availability and status. Summaries of the information exchanges will be provided to Water Forum staff in memo or spreadsheet form.
- d. The land use agency and water purveyor will collaborate to provide Water Forum staff with a compilation of land use changes approved during the course of each year and associated water demands. This cumulative total should be updated at least once per year so Water Forum staff can update the current water use assumptions and keep track of regional water demands.
- e. Water Forum staff will send *Water Forum Agreements*, water supply assumptions, and other relevant information to the planning and public works departments of the recently-incorporated City of Elk Grove to assist them as the city develops its new general plan. Similar information exchange will be needed as other communities incorporate or embark on new general plans.
- f. Individual water purveyors and land use agencies may develop their own internal ways of implementing the land use/water supply information procedures, provided they are comparable to the procedures established in this section and consistent with State law. Each jurisdiction may develop streamlined procedures such as standard checklists, as long as the information remains accessible to the public.
- g. The roles of the key players in the process need to be well defined as follows:

**Water Forum Staff:** provide regional water information; act as a checkpoint to ensure that water-related information is prepared in a timely way according to a pre-agreed upon and consistent method; serve as monitor for the cumulative water budget.

**Water Purveyor Staff:** provide localized water data including major facilities and infrastructure needs and availability; serve as the primary link to the local land use authority; update urban water master plans to be used in the monitoring process; work with, request information from and provide timely data to Water Forum staff to keep the regional water budget accurate and up to date.

**Sacramento Groundwater Authority Staff:** provide groundwater information in their service area (north of the American River) for land use/water use coordination purposes; become the authority and take a lead role in providing up-to-date groundwater management data in the north sub-basin.

**Land Use Agency:** continue to process planning applications and publicly-initiated plans as they do now; inform water purveyor of upcoming projects; take the water data provided and highlight it prominently in the application review process. Incorporate information into the review process as set forth in recent State requirements.

**Water Demand and Supply Information Committee:** provide a public forum for discussion of water/land use coordination issues; serve as a sub-committee of the Water Forum Successor Effort to review correspondence and process for significant land use/water use issues.

Other agencies may play a role in the future such as any groundwater management entity in the south Sacramento County, the Regional Water Authority, Placer County or others.

- h. Water Forum staff may respond directly to project proponents, non-governmental and citizen groups as requested, but will typically refer people to the local land use agency and/or local water purveyor for routine information needs. Water Forum information will be provided when requested and as a routine matter when general plan amendments and updates occur.

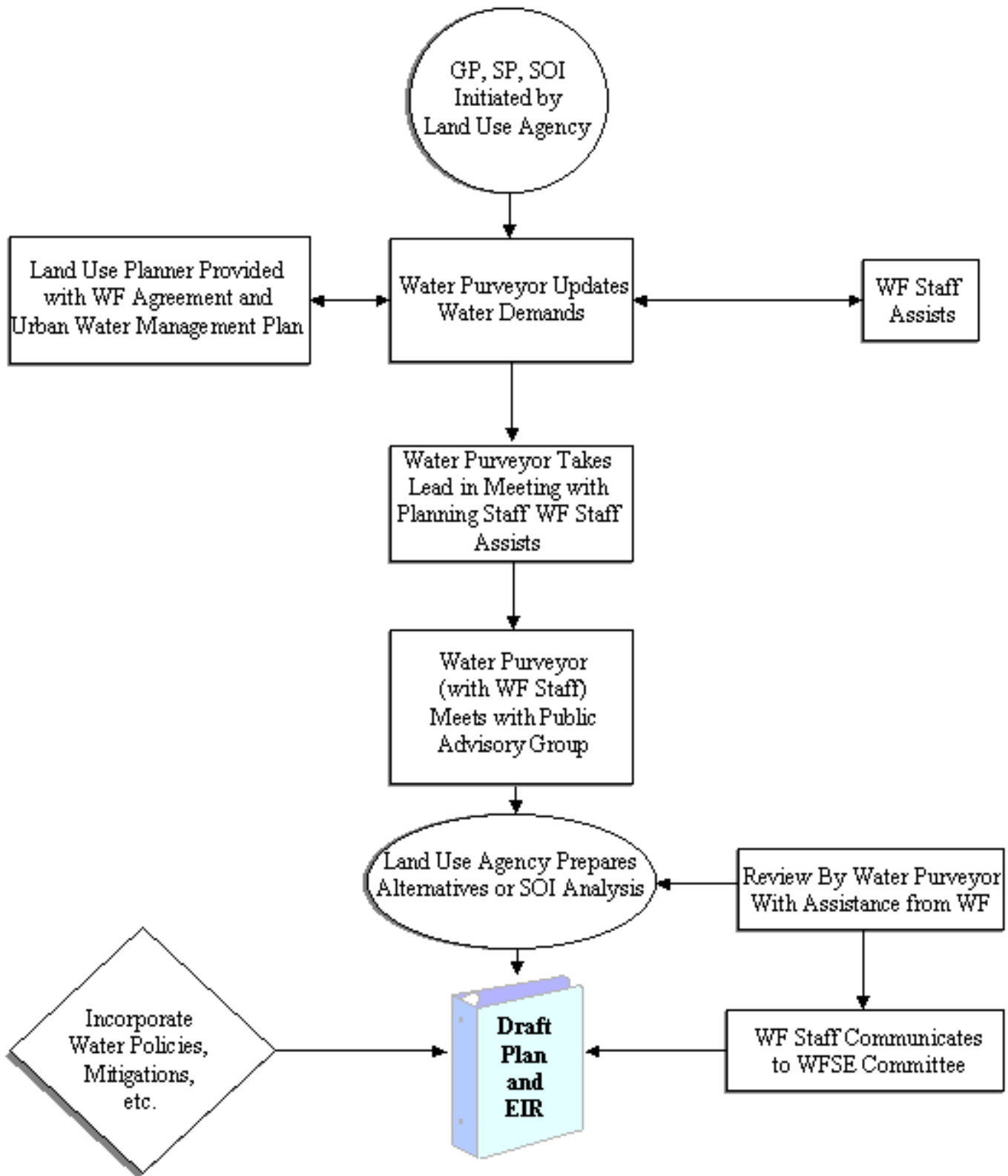
## **2. Procedure for General Plans/Specific Plans/LAFCo Decisions**

(Please refer to Diagram 1) For community-initiated general plan updates, major specific plans (e.g. County General Plan, Elk Grove General Plan) and annexations, Water Forum information will be made available as early as possible to inform the planning process. This process would also be used for sphere of influence requests to LAFCo.

- a. When a jurisdiction undertakes a general plan update, Water Forum staff will request that the water purveyor update the existing baseline water use/demand calculations to reflect current conditions. This will keep improving the information base as the Water Forum moves toward more detailed monitoring. Water Forum staff may provide technical assistance.

- b. When a jurisdiction undertakes a general plan or specific plan or requests a Sphere of Influence (SOI) change, the water purveyor and Water Forum staff will work together to communicate with the land use agency to ensure that the jurisdiction has the *Water Forum Agreement* (with highlighted key sections) and any other relevant materials. The water purveyor will request a meeting with planning staff to interpret, clarify and explain the *Water Forum Agreements*, procedures, goals, technical data etc. Water Forum staff may participate. When applicable, the land use agency will request the water purveyor to provide the water supply assessment information set forth in State law to be included in the environmental review of the project.
- c. The water purveyor (with Water Forum staff assistance) will offer to meet with a general plan or specific plan committee (or comparable public body), attend a public workshop or forum or comparable venue to help inform advisors and decision-makers of the *Water Forum Agreement* and related water issues. Once this is done, the appropriate decision-makers in the general plan or specific plan process may debate their land use issues as they choose with information from the water purveyor or Water Forum and other stakeholders.
- d. Once a draft general plan or specific plan and draft EIR are issued, the Water Forum may become involved in the notification/comment process as described in the next section. When applicable, the land use planner will incorporate the water supply assessment information required by State law into the environmental review and provide it for consideration by the land use agency.

**Diagram 1**  
**Public Proposals: General Plan Update,**  
**Specific Plan, LAFCO Sphere of Influence**



- e. Each jurisdiction may amend its general plan (or various specific plans) from time to time in a way that has no effect (or minimal effect) on water demands. Any general plan or specific plan amendment that has minimal effect on water demands such as a change to a circulation or noise element will not be reviewed. Likewise, a package of multiple, single-parcel general plan amendments without significant water supply implications may not be reviewed at the time of application, but will be incorporated into the annual cumulative record.
- f. For SOI requests, LAFCo is mandated to address water supply as a public services issue. As a result, SOI requests are subject to the review procedure outlined in this report. SOI requests often occur with minimal information on the ultimate land uses that may be sought within the SOI area. Therefore, the level of detail and analysis on water supply and demand may be quite general. The water purveyor with assistance from Water Forum staff will supply the best available information to LAFCo at the time of SOI request. LAFCo may impose conditions on the SOI approval that future annexations will have to be consistent with the *Water Forum Agreement* and potentially provide additional data on how the area is to be served with water.
- g. The Water Forum staff will keep the Water Demand and Supply Information Committee (or its successor) apprised of relevant consultation in these planning efforts. All Water Forum-related responses will include sufficient context and background information to convey the complex regional water issues and implications (i.e. no simplistic “sound bites”).

### **3. Procedure for Development Proposals**

(See diagram #2 for a diagrammatic view.) For privately initiated development proposals (that are formally submitted for entitlements to a city or county), the following procedure will be used.

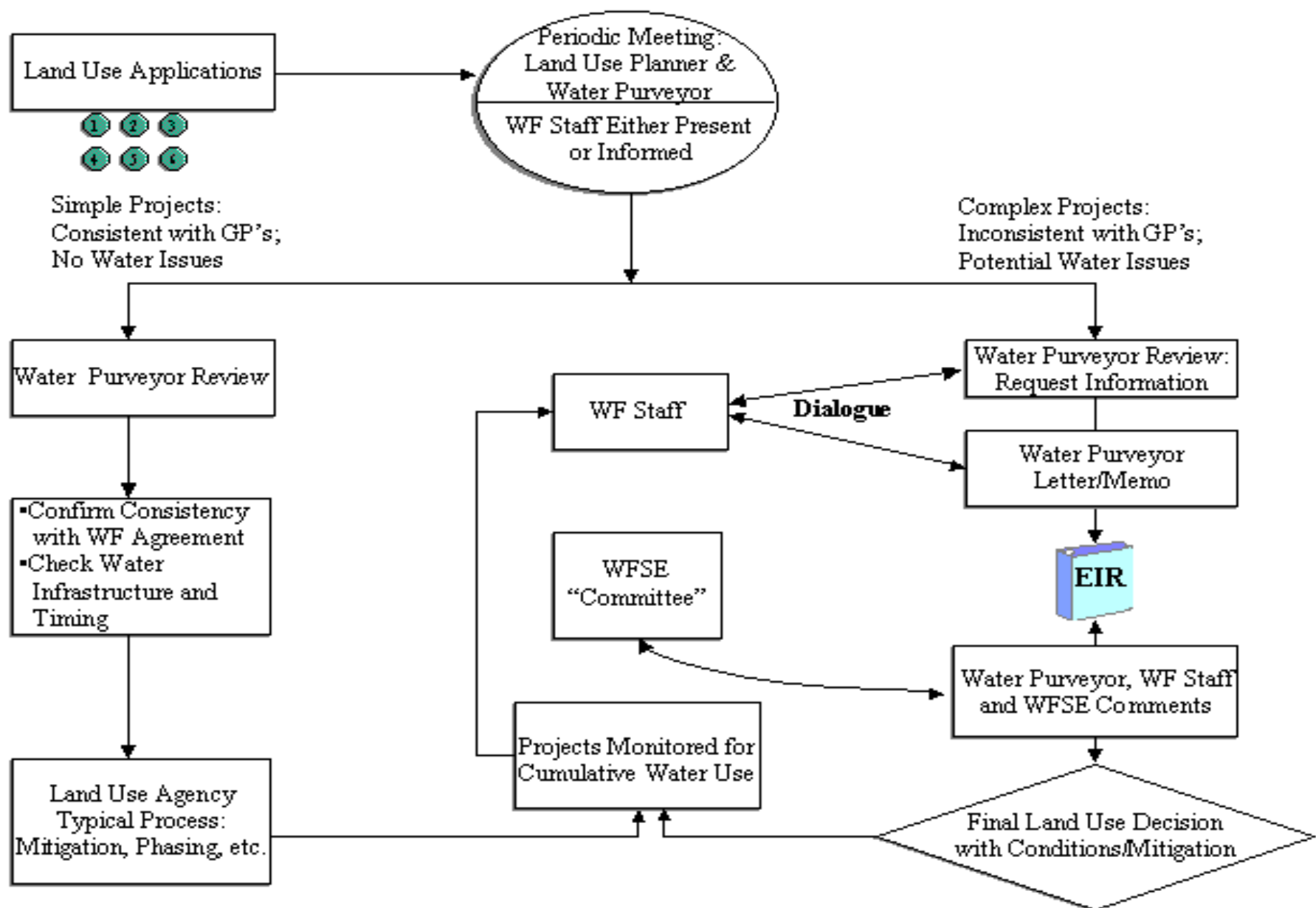
#### **Simpler Cases**

Certain land use proposals that are consistent with the community’s general plan land use diagram contained in the *Water Forum Agreement*, and/or where water use is clearly not an issue, will require the following relatively simple procedure.

- a. The water purveyor will notify the land use agency (via letter, memo, checklist or other written form) affirming consistency with the *Water Forum Agreement*. This would not be an endorsement of the project. However, it would clearly indicate whether the proposed project is assumed as part of the water use/demands calculated in the Water Forum water budget and is consistent with the water allocations in the Water Forum. Water Forum staff will be notified of this communication at the time

of the periodic meeting/information exchange. If the proposal is a residential subdivision greater than 500 units, then the land use agency and water purveyor will follow the water supply determination procedures required by State subdivision law.

**Diagram 2**  
**Privately - Initiated Development Proposals**



- b. The water purveyor may also provide information about available major facilities and infrastructure relative to the timing of proposed development. Overall water demands may be within the ultimate Water Forum water allocation, but certain major facilities necessary to provide water may not yet be constructed. Land use authorities would have the ability to make informed decisions about project timing, phasing or mitigation relative to water-related infrastructure. It may be possible to utilize the development process to provide some early facility improvements. If the water supply determination requirements of State subdivision law apply, information on future water supply infrastructure will need to include applicable water rights, financing, permits and approvals.
- c. Many land use proposals (even those that change a general plan designation, such as from commercial to light industrial) may have little or no measurable effect on water use. In these routine cases, the water purveyor's existing procedure of reviewing the application and providing information is sufficient.

### **More Complex Proposals**

The following process will be used for major development proposals that may result in a significant departure in water demand from what was anticipated in the *Water Forum Agreement*. These are likely to be proposals outside the County's Urban Services Boundary or proposals outside current city boundaries seeking annexation and a change from non-urban to urban uses. For these types of proposals, the requirements of State law regarding water supply/land use coordination may apply and will be followed by local land use agencies and water purveyors.

- a. The land use agency and water purveyor will determine whether a proposal fits in this complex category during their periodic meetings/information exchange. The land use agency will also determine if the proposal is large enough to be subject to State water supply/land use coordination requirements.
- b. Water Forum staff or any Water Forum stakeholder may request that a particular land use proposal is "called up" for Water Forum discussion.
- c. For complex projects, the following procedure will apply:
  - (1) The land use agency will notify the water purveyor and Water Forum staff of the project as early in the process as reasonable. This may occur on a routine basis as each application is submitted or through the periodic meeting/information exchange (after a formal application has been filed). The land use agency will provide enough detail on the project so all parties clearly understand the land uses requested and project location to enable an estimate of water demand and proposed water supply. Water purveyor staff will discuss the project with the land use staff to establish a dialogue and determine if there are likely to be potential water problems

and what solutions are possible. The Water Forum staff may participate. If the project is subject to State law requirements, the land use agency will specifically request the water supply assessment required under those statutes as part of the information.

- (2) Water purveyor staff will send a preliminary letter or memo to the land use agency staff with copies to Water Forum staff and the Water Demand and Supply Information Committee with the following information:
  - a) Description of appropriate Water Forum information such as total water budget for that jurisdiction and assumptions about infrastructure.
  - b) A statement indicating the appropriate level of water supply analysis to be undertaken in the planning process (usually through environmental review).
  - c) A statement indicating whether the project is within or outside the water budget agreed to in the Water Forum.
  - d) If State law requirements apply, then the water purveyor will provide any additional information needed.
- (3) Once a draft environmental analysis is completed (EIR or negative declaration), the water purveyor staff will review the water use component of the environmental document and consult with Water Forum staff, as necessary. The environmental document should address key issues like water supply availability, infrastructure/facilities, and potential water supply implications of the project. A complete analysis needs to address wet and normal years, dry years and critically dry years. The analysis also needs to address potential groundwater impacts and concerns. If State law requirements apply, the water supply analysis also needs to include the information required by those statutes.
- (4) Water Forum staff will bring the most significant proposals forward to the Water Demand and Supply Information Committee (or its successor) for discussion. The Committee will not evaluate the project's land uses, but rather whether the water supply proposal has any implications for the *Water Forum Agreement*. If water use has not been adequately considered this is the opportunity for the Water Forum Successor Effort to raise the issue formally.
- (5) The Committee will discuss and seek agreement on an appropriate response and then direct a letter back to the land use and water purveyor staff as part of the planning process. In the event the Committee cannot agree, a procedure has been established (see sub-section 6, In Case of Disagreements). These letters will become part of the package of material to help inform land use decision-makers.

- (6) Any communications will be made available to the Water Forum Successor Effort Plenary. An issue can be brought up to the plenary level at any time for broader dialogue.

#### **4. Information Types**

The following types of information may be included in comment letters from the Water Forum and/or water purveyors. The information that is actually included will vary depending on the development application, its location and water source, when the application is filed relative to the water budget and other factors.

- a. Overall water budget for the region and PSAs based on periodic monitoring (water supply and demand) as per the *Water Forum Agreement*.
- b. Overall statements regarding whether the water requirements of the land use proposal are consistent with the *Water Forum Agreement*, and the implications that it may have for Water Forum members.
- c. Information regarding whether the land use proposal lies outside the County's Urban Services Boundary as defined in the Sacramento General Plan of 1993 and its relationship to the *Water Forum Agreement*.
- d. In assessing the availability of water supply for new land uses in Sacramento County, the land use agencies shall take into account reasonable estimates of the following:
  - Sustained yield of the groundwater basin;
  - Best available data on current use of the sub-basin;
  - Anticipated use of currently unexercised water rights;
  - Unmet demand within the Urban Policy Area;
  - Water demand for new uses between the Urban Policy Area and the Urban Services Boundary; and
  - Potential implications of this extraction on basin management or other issues.
- e. Specific facilities and infrastructure needed for the land use proposal. Potentially, there may be water entitlements still needed to supply the land use proposal. Description of where facilities are in the process of development; funding status; time until completion; and related issues.
- f. An objective, factual assessment of the level of efficiency with which the water is used in the land use proposal. For example, this may indicate how the specific land use proposal compares to the average per capita water demand for similar types/densities of land use.

- g. Effectiveness of the water demand management programs that have occurred to date on a regional and local basis.
- h. Identify local or regional limitations or thresholds that might limit water use, groundwater extraction, etc. or require major new water entitlements or facilities.
- i. Specific implications of the land use proposal based on the proposed water source or some characteristic of the proposed water plan (storage, conveyance, treatment, etc.).
- j. Commentary on the information provided as part of complying with the State requirements set forth regarding land use and water supply coordination.

## **5. Specific Challenges**

One particular type of development proposal presents a unique challenge because it is partially within the assumed land use/water budget of the Water Forum. These are proposals that occur on County lands between the Urban Services Boundary and the Urban Policy Areas. To estimate overall water demands to the year 2030, the Water Forum water budget assumed water use in these areas (18,000 AFY plus potential conversion of current agricultural use of groundwater), but the water was not allocated either geographically or in time. For these areas, the same notification/comment process referenced above is to be used. Some of these projects may fall into the “complex” category.

Urbanization of any type between the Urban Services Boundary and Urban Policy Boundary will likely require a change in general plan land use and trigger the notification process. It is possible that in the early years, the water purveyor and others may have limited concerns with proposals that are able to secure water. Currently, County projects are subject to policy CO-20 (a policy of the Sacramento General Plan Conservation Element) which requires a water master plan prior to project approval. Over time, however, as the Water Forum water budget accounting (Goal 2) demonstrates the water supply situation, proposals may receive more attention. Land use proposals that require significant amounts of water in areas without historic groundwater pumping, may also merit more attention. The signatories recognize the positive value of County policy CO-20 in requiring water supply plans and use of supplemental surface water. Continuing this type of requirement will help the Water Forum monitor and plan for future water supplies.

Another specific type of proposal is a citizen initiative that has a major effect on land use. These proposals would be analyzed if Water Forum staff or members determine that they merit examination. However, signatories acknowledge that land use agencies, water purveyors or Water Forum members may not hear about such proposals in a timely way.

It is the responsibility of each member of the Water Forum to bring such proposals to the attention of the Water Forum staff, Water Demand and Supply Information Committee or Plenary if they believe the proposal has a material effect on water use. If a proposal is forwarded for discussion, it will be treated similarly to a complex development project.

## **6. In Case of Disagreements**

The Water Forum discussed what procedure should be in place if the Water Demand and Supply Information Committee (or its successor) does not reach agreement on how to respond to a particular land use proposal. The following procedure was agreed upon:

- a. Some form of Water Demand and Supply Information Committee will be maintained to consider land use/water supply issues. This group will be a sub-committee of the Water Forum and must be representative of all the Water Forum interests and have sufficient expertise and interest to address land use/water use questions.
- b. In the event of a disagreement, the Committee will use the decision-making procedure that has guided the Water Forum Successor Effort (75% of every caucus has to agree for a decision to move forward). If that level of agreement cannot be achieved, the Water Forum response will indicate areas of agreement and disagreement and the nature of the divergent positions. That way, the Water Forum Successor Effort would not delay sending its response until it was too late in the process to have influence.

#### **~~IV. — RELATIONSHIP OF WATER FORUM AGREEMENT TO LAND USE DECISION-MAKING~~**

##### **~~A. — Background~~**

~~Water Forum signatories include cities and counties that have land use planning responsibility and purveyors that have water supply planning responsibility. Water Forum signatories recognize there needs to be coordination among land use decision-making and water planning. Land use decisions should be based on reliable information on water supply availability. Conversely, water planning should be informed by land use decisions.~~

~~This section describes the agreement among Water Forum signatories on how information on water supply availability will be coordinated with the land use decision-making process in the context of Chapter 881 of the Statutes of 1995, also referred to as SB 901. This information exchange is to better inform both the water and land use planning efforts.~~

~~SB 901 applies to city or county approval of significant development projects (specified in the law as residential development of over 500 units, business development with over 500,000 square feet of office space, commercial building having more than 250,000 square feet, etc.) that would require amendments to general or specific plans, or the adoption of a specific plan.~~

~~Under SB 901 cities and counties are required to identify water systems that would provide water supplies for the proposed project. The law requires the city or county to request the identified public water systems to make an assessment regarding water supplies, as prescribed. The law requires the public water system to approve its assessment and submit the assessment to the city or county not later than 30 days after the date on which the request was received, with a provision for a time extension, if necessary and requested by the water system. Public water systems include investor owned utilities.~~

~~Under SB 901 the land use agency then determines, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the proposed project, in addition to existing and planned future uses. If the land use agency determines that water supplies will not be sufficient, it can still approve the project but must include a statement of overriding considerations in its findings.~~

~~**This section of the agreement does not provide water purveyors, the Water Forum or the Water Forum Successor Effort with any land use authority.**~~

##### **~~B. — Intent~~**

~~It is the intent of signatories to the *Water Forum Agreement* that land use decisions dependent on water supply from the American River or the three groundwater sub-basins in Sacramento County be consistent with the limits on water supply from the American River and the estimated average annual sustainable yields for those three groundwater sub-basins as negotiated for the *Water Forum Agreement*.~~

### ~~C. — Specific Agreements~~

- ~~1. — All signatories recognize that land use decision making remains the responsibility of land use agencies and neither the Water Forum nor the Water Forum Successor Effort has any authority to make land use decisions.~~
- ~~2. — Signatories agree to use Chapter 881 of the Statutes of 1995 (SB 901) to coordinate land and water use decision making. If that law is substantially amended, the Water Forum Successor will revisit this issue.~~
- ~~3. — Signatories to the *Water Forum Agreement* will reference the *Water Forum Agreement*, including agreed-upon estimated average annual sustainable yields of each of the three sub-areas of the groundwater basin in Sacramento County<sup>9</sup> and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.~~
- ~~4. — The *Water Forum Agreement* includes surface water and groundwater to meet the region's projected water needs for growth planned to the year 2030. Included in Appendix B is a description of the methodology and assumptions used by the Water Forum for assessing the demand to the year 2030. Also included in Appendix B is a map that delineates geographic boundaries that were used in projecting demand in Sacramento County.~~
- ~~5. — In Sacramento County only, signatories retain the ability to support or oppose water facilities that would serve new development outside the Urban Services Boundary that was defined in the Sacramento County General Plan, December 1993. All parties also retain the right to support or oppose the sizing of water distribution facilities that would allow service to new development outside of the Urban Services Boundary. (See Map in Appendix B.)~~
- ~~6. — In assessing the availability of water for new uses and development in Sacramento County, land use agencies shall take into account reasonable estimates of water demand for the following:
  - ~~a. — Existing uses;~~
  - ~~b. — Anticipated use of currently unexercised water rights;~~
  - ~~c. — Unmet water demand within the Urban Policy Area; and~~
  - ~~d. — Water demand for new uses between the Urban Policy Area and the Urban Services Boundary.~~~~
- ~~7. — Procedures will be developed by the Water Forum Successor Effort to advise land use agencies as they assess the consistency of proposed land use decisions with the estimated average annual sustainable yields of the three sub-basins in Sacramento County and the~~

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<sup>9</sup> — North Area: 131,000 acre feet; South Area: 273,000 acre feet; Galt Area: 115,000 acre feet.

diversions from the American River negotiated as part of the *Water Forum Agreement* (See appendix K).

8. ~~The *Water Forum Agreement* contains estimated average annual yields for each of the three sub-areas of the groundwater basin in Sacramento County and limits to diversions from the American River. Beyond these agreements, limits on water from other sources have not been negotiated as part of the *Water Forum Agreement*. Signatories retain the right to support or oppose water projects that would use water from sources that have not been negotiated as part of the *Water Forum Agreement*.~~

9. ~~There is a need for greater information exchange than just having water purveyors provide project-by-project assessments of water supply availability. Therefore, purveyors agree to participate in a proactive program to educate all land use authorities in the region about the provisions of the *Water Forum Agreement*.~~

10. ~~It is recognized that the *Water Forum Agreement* focuses on providing a reliable and safe water supply and protecting the lower American River. As such it is not an agreement on land use planning. Therefore all signatories retain the ability to support or oppose land use decisions on any basis except water supply availability insofar as these water supply decisions are consistent with the *Water Forum Agreement*.~~

## V. FOLSOM RESERVOIR RECREATION

### A. Intent

In the future, Folsom Reservoir levels will be influenced by many factors including [Reclamation the U.S. Bureau of Reclamation](#) operations, flood control operations and water diversions. Even with implementation of the Water Conservation Element and the actions to reduce diversion impacts in drier years, there will be times when Folsom Reservoir will be lower, thereby affecting the opportunities for reservoir recreation<sup>10</sup>.

Because Folsom Reservoir is recognized as an important resource, the Water Forum has consulted closely with the California Department of Parks and Recreation (CDPR) which manages recreation at the reservoir. After extensive discussions and negotiations among Water Forum purveyors and with CDPR, a program to improve recreation facilities at Folsom Reservoir has been developed.

### B. Specific Agreement on Folsom Reservoir Recreation

Water Forum signatories will work with their elected officials, CDPR and other agencies that have an interest in reservoir levels, such as Congress, [Reclamation USBR](#), California Department of Boating and Waterways and Sacramento Area Flood Control Agency ([SAFCA](#)), to obtain at least \$3,000,000 of new funding for improvements to Folsom Reservoir recreation facilities<sup>11</sup>.

The CDPR will develop a list of potential recreation improvement projects as part of the funding request. One type of project could be “mini-dikes” i.e., sculpted embankments within the lake bed to impound water for swimming use when reservoir levels are low. Design of the improvements in the lake would also include consideration of features for improving warm water fishery habitat, such as structural complexity for fish on the lake side of the mini-dike embankment, which would also support recreation fishing. Other projects could include but are not limited to those identified in the Water Forum Environmental Impact Report (EIR). The improvements are intended to help mitigate the anticipated loss of visitor days.

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<sup>10</sup> Historically, many Water Forum purveyors secured water rights prior to the construction of the Folsom Reservoir. After construction of the reservoir, [Reclamation U.S. Bureau of Reclamation](#) assumed responsibility for operating the reservoir to store and manage water for the operation of the Central Valley Project (CVP), among other purposes. The reservoir has historically held and released to CVP customers water that Water Forum purveyors were entitled to but had not diverted. Some purveyors signatory to the *Water Forum Agreement* believe that reservoir declines are properly viewed as being caused by the lack of replacement water supplies for the CVP as senior water rights are exercised and CVP yield is required to be used for environmental purposes. Accordingly, these purveyors believe that California Environmental Quality Act (CEQA) mitigation for reservoir impacts is not a legally required purveyor responsibility. Nonetheless they have agreed to measures that will tend to lessen the effect of the reduction in Folsom Reservoir levels that will occur in the future.

<sup>11</sup> New funding means funding that Water Forum signatories are instrumental in obtaining that was not authorized, appropriated or required as of January 1, 2000.

The CDPR is the agency responsible for managing the recreational resources at Folsom Reservoir. Therefore it is the appropriate agency to receive these funds and manage the recreation improvement projects.

Although previous cooperative efforts between Water Forum stakeholders and other agencies have been successful (such as the securing federal authorization and appropriation for the temperature control device) it is not certain that the \$3 million in funding for Folsom Reservoir recreation improvements will be secured.

It is also recognized that it will take purveyors several years to obtain all necessary approvals for the facilities needed to divert the additional water projected in the *Water Forum Agreement*. It will take additional time for them to construct the facilities necessary to increase their diversions. Later, after their facilities are actually constructed, the diversions will increase gradually over the thirty-year period of the agreement.

Therefore, purveyors signing the *Water Forum Agreement* that plan to increase their diversions of American River water commit that if less than \$3,000,000 of new funds are secured by the year 2008, they would provide a lump sum payment of any amount of the \$3 million not obtained up to a maximum of \$1,000,000 to CDPR no later than June 30, 2009 for projects to improve Folsom Reservoir recreation. This is to provide certainty that some projects can be implemented.

Purveyors in the *Water Forum Agreement* will enter into a contract among themselves committing to share the cost of the \$1 million payment to CDPR if additional new funds are not secured. Costs would be apportioned among purveyors based on their anticipated share of total year 2030 increased diversions of American River water.

Revision - Status update below is not considered an amendment to the *Agreement* and was made for clarity by staff:

May 2012

Upon signing the *Water Forum Agreement* in 2000, signatory stakeholders joined with representatives from California State Parks and Recreation to form a work team that developed a list of projects to be used to obtain federal funding and authorization. This team met with staff of then-U.S. Representative John Doolittle to advance the list in Congress.

The request for funding was originally included in the Water Resources Development Act (WRDA) that was being worked on at the time. At some point in the WRDA process the request for funding for Folsom Lake recreation was cut. Those involved in the process were told that they would be more successful seeking funding for recreation improvements in Placer County associated with the PCWA pump station project.

As part of the PCWA American River Pump Station Project, PCWA received approximately \$10 million through a combination of state and federal appropriations to reconstruct the American River near Auburn to allow the return of safe recreational purposes on the North Fork of the

American River downstream of the Highway 49 Bridge. The project included land side recreation improvements to trails and vehicle access and parking improvements. PCWA contributed \$500,000 towards the construction of a new pedestrian bridge. The project removed some of the impacts that occurred as a result of construction work in the 1960s and early 1970s on the now-suspended Auburn Dam. This project was completed in 2008.

While this was not in the boundaries of the Folsom Lake State Recreation Area, stakeholders agreed that securing funding for recreation on the American River was a Water Forum win for the region.

## **VI. PROCEDURAL AGREEMENTS FOR THOSE NOT IN THE INITIAL WATER FORUM AGREEMENT**

### **A. Background**

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as the effective date of this initial *Water Forum Agreement*. However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

Therefore this section of the *Water Forum Agreement* describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

### **B. Specific Agreements**

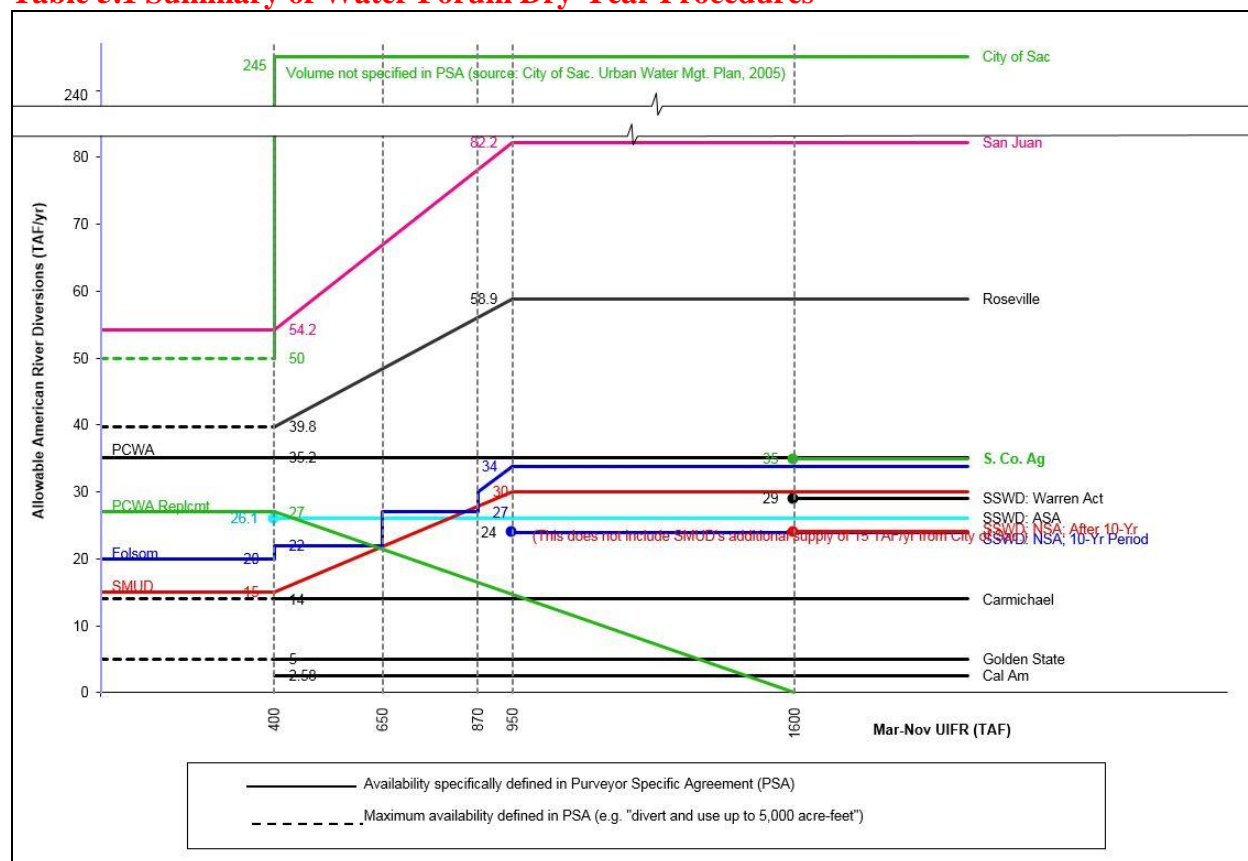
1. All signatories to the *Water Forum Agreement* commit to work in good faith with organizations whose issues were not fully resolved by the effective date of this initial *Water Forum Agreement*. Their goal will be to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.
2. Mutually agreed upon Water Forum Successor Effort expenses related solely to converting that purveyor's procedural agreement into a specific agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a specific agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.
3. Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:
  - a. Amending the *Water Forum Agreement*;
  - b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum Environmental Impact Report (EIR); and
  - c. Decisions regarding expenditures of Habitat Management Funds.
4. Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.
5. Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty day notice to the other party.

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# CHAPTER 5 SECTION FIVE

## I. PURVEYOR SPECIFIC AGREEMENTS

**Table 5.1 Summary of Water Forum Dry-Year Procedures**



Citizen's Utilities Company of California was acquired by the California American Water Company in 2002.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2009

The California American Water Company PSA was renegotiated and ratified by the Water Forum's decision process in August 2010.

## **CALIFORNIA-AMERICAN WATER COMPANY**

### **~~CITIZENS UTILITIES COMPANY OF CALIFORNIA~~**

#### **A. INTRODUCTION**

California-American Water Company (California American Water) (successor to Citizens Utilities Company of California) is an investor owned utility operating under the rules and regulations of the California Public Utilities Commission (CPUC). California American Water has six service areas within the metropolitan area of Sacramento County; (1) Antelope, which serves the communities of Antelope and Elverta; (2) Lincoln Oaks which serves portions of Citrus Heights and North Highlands; (3) Parkway which is located in the Florin area, (4) Suburban/Rosemont which serves Rosemont and the western portion of Rancho Cordova; (5) Arden in the Arden Arcade area; and (6) Security Park in the Sunrise Douglas area. California American Water also provides water service in Placer County for the Sabre City Mobile Home Park and the Morgan Creek area in western Placer County. In addition California American Water serves water to the City of Isleton and the community of Walnut Grove.

California American Water's Arden service area, portions of its Suburban/Rosemont service area, and portions of its Parkway service area are within the Place of Use (POU) for City of Sacramento's American River water rights. California American Water's Placer County Service area is within the Placer County Water Agency POU. All of California American Water's service areas in Sacramento County utilize groundwater. In addition, California American Water's delivers surface water – supplied by the City of Sacramento under the "Southgate Agreement", to its Parkway service area. California American Water's delivers only groundwater to the Sabre City Mobile Home Park. The Placer County Water Agency supplies surface water used in the West Placer service area which is wheeled by the City of Roseville.

As of January 2010, California American Water had 56,663 active connections, 53,341 of which are residential (27,096 are un-metered).

Projected demands for California American Water are included in several areas: the North Central Group, City's POU North, City's POU South, and the South County M&I Group.

## **B. SEVEN ELEMENTS OF THE WATER FORUM AGREEMENT: INTEGRATED PACKAGE**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

## **C. BASELINE DIVERSIONS**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because California American Water does not divert from the American River, no American River diversion was included in its baseline.

## **D. AGREEMENT FOR MEETING CALIFORNIA-AMERICAN WATER COMPANY'S WATER SUPPLY NEEDS TO THE YEAR 2030**

California American Water has six service areas within the metropolitan area of Sacramento County: (1) Antelope, which serves the communities of Antelope and Elverta; (2) Lincoln Oaks, which serves portions of Citrus Heights and North Highlands; (3) Parkway, which serves the Florin and Southgate areas; (4) Suburban/Rosemont, which serves Rosemont and the western portion of Rancho Cordova; (5) Arden in the Arden Arcade area; and (6) Security Park in the Sunrise Douglas area. The projected water demand for California American Water for these six service areas at year 2030 is 58,600 acre-feet, applying demand reduction through full implementation of BMPs.

1. The projected water demand for California American Water service areas within the City of Sacramento's POU including the Arden area, a portion of the Suburban/Rosemont area and a portion of the Parkway area is approximately 24,600 acre-feet per year.

a. California American Water has contracted with the City of Sacramento for delivery of treated surface water and treated groundwater for its service areas within the City of Sacramento's POU. It is anticipated that water produced will be primarily surface water except during periods when lower American River flow is below the "Hodge Flow Criteria", during which, supplemental groundwater will be produced as an offset to increased deliveries. Deliveries shall be as follows:

(1) During off-peak periods (October 15<sup>th</sup> through May 14<sup>th</sup>) deliveries shall not exceed a maximum of 5.76 million gallons per day (mgd) and no supplemental groundwater production will be required.

(2) During on-peak periods (May 15<sup>th</sup> through October 14<sup>th</sup>) deliveries shall not exceed 2.3 mgd as follows:

a. When instantaneous flow in the lower American River is above the "Hodge Flow Criteria" no supplemental groundwater production will be required.

b. When instantaneous flow in the lower American River is below the "Hodge Flow Criteria"

i) For the first 1.13 mgd of water delivered, no supplemental groundwater will be required.

ii) Any deliveries over 1.13 mgd, up to the maximum of 2.3 mgd, shall be supplemented by groundwater from the City water system. During delivery of water under this paragraph, the City shall provide to the City water system not less than the amount of water delivered under this paragraph from new City well-capacity.

3) Water delivered shall not exceed 4,831 acre-feet annually.

California American Water will continue to use its existing well network to obtain groundwater to meet the balance of its demand for these service areas.

b. Should additional deliveries of water from the City be required prior to December 31, 2030 signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.

c. It is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre-feet there may not be sufficient water available to provide the purveyors with the driest year quantities specified in its agreements and provide the expected driest year flows to the mouth of the American River. In those years California American Water will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the

conference year principles described in ~~Chapter 4, Section I~~ ~~Section Four, I~~ of the *Water Forum Agreement*.

2. The projected water demand for California American Water service areas within the North Central Purveyor Group which includes the Antelope and Lincoln Oaks service areas is approximately 20,000 acre-feet per year.

Surface water delivered to these California American Water service areas will likely come from diversions pursuant to the Sacramento Suburban Water District – Placer County Water Agency (SSWD – PCWA) transfer Agreement. The conditions included in SSWD’s Purveyor Specific Agreement (PSA) will apply to surface water delivery to these California American Water service areas.

California American Water will use groundwater to meet the balance of its demand for these service areas.

3. The projected water demand for California American Water service areas outside the City’s POU but within the South County M&I Users Group which includes a portion of the Suburban/Rosemont area, a portion of the Parkway area and Security Park is approximately 14,000 acre-feet per year.

Surface water delivered to these California American Water service areas will likely come from a future contract with the Sacramento County Water Agency (SCWA) consistent with the Sacramento County/SCWA PSA. Those deliveries will be subject to any financial obligations that may be contained in such future contract.

California American Water will use groundwater to meet the balance of its demand for these service areas.

**E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS**  
*(Agreements in italics are common in all Specific Agreements.)*

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA). *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

- a. *Speak before stakeholder boards and regulatory bodies,*
- b. *Provide letters of endorsement,*
- c. *Provide supportive comments to the media,*
- d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

- e. *Otherwise respond to requests from other signatories to make public its endorsement of the Water Forum Agreement.*
2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*
- a. *All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River habitat management element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*
- b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*
- c. *To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference ~~See Chapter 4, Section IV~~ *Section Four IV, Relationship of Water Forum Agreement to Land Use Decision-Making*).*
- d. *In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*
- e. *All signatories retain its existing ability to provide input on specific details of facility design, financing, and construction.*
3. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir,*

*habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

*4. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

*5. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III ~~Section Three, III,~~](#)).*

*6. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*

*7. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*

*8. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*

*9. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII ~~Section Three, VII,~~](#) Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*

*10. All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference [Chapter 3, Section IV ~~Section Three, IV,~~](#) Lower American River Habitat Management Element).*

*11. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference [Chapter 3, Section V ~~Section Three, V,~~](#) Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.*

*12. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 acre-feet.*

13. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 acre-feet.

14. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 acre-feet.

15. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

16. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

17. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and makes the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

18. All signatories agree to endorse, and where appropriate, participate in Sacramento River supply for North Sacramento County and Placer County (Reference ~~Chapter 4, Section III Section Four, III~~).

19. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference ~~Chapter 4, Section IV Four, IV~~).

20. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference ~~Chapter 4, Section V Four, IV~~).

21. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three sub-areas of the groundwater basin in Sacramento County and limits to diversions from the American River in its water master plans and urban water management plans, which are used in

*providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.*

22. *Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.*

## **F. ASSURANCES AND CAVEATS**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore, all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on Table 3.1 ~~the chart in Section Three, I., of the *Water Forum Agreement* "Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,"~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River Habitat Management Element
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on Table 3.1 ~~the chart in Section Three, I., of the *Water Forum Agreement* "Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,"~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet its interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the CEQA, and where applicable, the National Environmental Policy Act, Federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in its project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

- c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.
  - d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I](#) ~~Section Four, I.~~, of the *Water Forum Agreement*.
  - e. Adequate progress in construction of the temperature control device.
  - f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.
4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## **G. REMAINING ISSUES**

1. California American Water is a part of the Sacramento Central Groundwater Authority, which is a Joint Powers Authority and is the successor to the South County M & I users group. While membership is voluntary, it is the intention of California American Water to maintain active participation in this organization.
2. California American Water is governed by the CPUC. California American Water's agreed endorsements in, or continued implementation of, this Purveyor Specific Agreement are subject to review by the CPUC. California American Water may modify or terminate its endorsements agreed to in, or implementation of, this Purveyor Specific Agreement upon receiving an adverse decision relating to said endorsements or implementation by the CPUC.

~~CALIFORNIA-AMERICAN WATER COMPANY  
CITIZENS UTILITIES COMPANY OF CALIFORNIA~~

**~~A.—Introduction~~**

~~California-American Water Company (CAWC) (formerly known as Citizens Utilities Company of California) Citizens Utilities Company of California is an investor-owned utility operating under the rules and regulations of the California Public Utilities Commission (CPUC). CAWC has six service areas within the metropolitan area of Sacramento County; (1) Antelope, which serves the communities of Antelope and Elverta; (2) Lincoln Oaks/Royal Oaks which serves portions of Citrus Heights and North Highlands; (3) Parkway which is located in the Florin area; (4) Rosemont/Suburban which serves Rosemont and the western portion of Rancho Cordova; (5) Arden in the Arden Arcade area; and (6) Security Park in the Sunrise Douglas area. CAWC also provides water service in Placer County for the Sabre City Mobile Home Park and is the exclusive franchisee for water service in western Placer County. In addition CAWC serves water to the City of Isleton and the community of Walnut Grove.~~

~~The Arden, Rosemont and a portion of the Parkway service areas are within the City of Sacramento's Place of Use (POU) for its American River water rights. The Placer County Service area is within the Placer County Water Agency (PCWAs) POU. All of CAWCs service areas utilize groundwater. In addition, surface water supplied by the City of Sacramento is used in the Southgate service area.~~

~~CAWC has 54,164 active connections, 48,610 of which are residential (46,441 are un-metered).~~

~~Projected demands for CAWC are included in several areas: the North Central Group, City's POU North, City's POU South, and the South County Municipal and Industrial (M&I) Group.~~

**~~B.—Seven Elements of the Water Forum Agreement: Integrated Package~~**

~~—REFER TO CHAPTER 5, SECTION I~~

**~~C.—Baseline Diversions~~**

~~Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.~~

~~Because they do not divert from the American River, no American River diversion was included in the baseline for CAWC.~~

**~~D.—Agreement for meeting California-American Water Company's water supply needs to the year 2030~~**

~~CAWC is governed by the CPUC; any and all agreements proposed must be reviewed and approved by the CPUC prior to adoption.~~

~~CAWC has six service areas within the metropolitan area of Sacramento County; (1) Antelope, which serves the communities of Antelope and Elverta; (2) Lincoln Oaks/Royal Oaks which serves portions of Citrus Heights and North Highlands; (3) Parkway which is located in the Florin and Southgate areas; (4) Rosemont/Suburban which serves Rosemont and the western portion of Rancho Cordova; (5) Arden in the Arden Arcade area; and (6) Security Park in the Sunrise Douglas area. The projected water demand for CAWC at year 2030 totals 58,600 acre-feet (AF), applying demand reduction through full implementation of Best Management Practices (BMPs).~~

~~1. The projected water demand for CAWC service areas within the City of Sacramento's POU including the Arden area, a portion of the Rosemont/Suburban area and a portion of the Parkway area is approximately 24,600 AF.~~

~~a. CAWC has contracted with the City of Sacramento for delivery of surface water for its Southgate service area, through the City's E. A. Fairbairn and Sacramento River Water Treatment Plants, with the following conditions:~~

~~(1) During off peak periods (October 15th through May 14th) deliveries shall not exceed a maximum of 5.76 million gallons per day (mgd).~~

~~2) During on peak periods (May 15th through October 14th) deliveries shall not exceed 1.13 mgd.~~

~~3) Water delivered shall not exceed 2,580 acre feet annually (AFA).~~

~~CAWC will use groundwater to meet the balance of its demand for the Southgate service area.~~

~~b. For other CAWC service areas within the POU which include the Arden area, a portion of the Rosemont area, and a portion of the Parkway area, when a contract with the City of Sacramento for delivery of surface water beyond the existing contract for the Southgate area is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.~~

~~CAWC will also use groundwater to meet the balance of its demand for these service areas.~~

~~c. It is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest year quantities specified in their agreements and provide the expected driest year flows to the mouth of the American River. In those years CAWC will participate in a conference with other stakeholders on~~

~~how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Chapter 4, Section I Section Four, I of the Water Forum Agreement.~~

~~2. The projected water demand for CAWC service areas within the North Central Purveyor Group which includes the Antelope and Lincoln Oaks/Royal Oaks service areas is approximately 20,000 AF.~~

~~Surface water delivered to these CAWC service areas will likely come from diversions pursuant to the Sacramento Suburban Water District (SSWD) PCWA transfer agreement. The conditions included in SSWDs Purveyor Specific Agreement (PSA) will apply to surface water delivery to these CAWC service areas.~~

~~CAWC will use groundwater to meet the balance of its demand for these service areas.~~

~~3. The projected water demand for CAWC service areas within the South County M&I users group which includes a portion of the Rosemont/Suburban area, a portion of the Parkway area and Security Park is approximately 14,000 AF.~~

~~Surface water delivered to these CAWC service areas will likely come from a future contract with the Sacramento County Water Agency (SCWA) consistent with the Sacramento County/SCWA PSA.~~

~~CAWC will use groundwater to meet the balance of its demand for these service areas.~~

#### **~~E. Specific Agreements for complying with the Seven Elements~~**

~~Each Purveyor Specific Agreement includes the common agreements related to complying with the Seven Elements. These common agreements are list in Chapter 5, Section I in this edition of the Water Forum Agreement. [These common agreements were repeated in each Purveyor Specific Agreement in the previous edition.]~~

~~Following is CAWC's unique agreement related to the Seven Elements:~~

~~19. CAWC is required to obtain prior CPUC approval for all contracts, Agreements, MOUs, expenditures, etc.~~

#### **~~F. Assurances and Caveats~~**

~~Each Purveyor Specific Agreement includes the common Assurances and Caveats and are listed in Chapter 5, Section I in this edition of the Water Forum Agreement. [These Assurances and Caveats were repeated in each Purveyor Specific Agreement in the previous edition.]~~

### **~~G. Remaining Issues~~**

~~1. Development of a groundwater management arrangement for the Central South Area [this issue was resolved with the creation of Sacramento Central Groundwater Authority].~~

~~2. CAWC is governed by the CPUC; any and all agreements proposed must be reviewed and approved by the CPUC prior to adoption.~~

## **CARMICHAEL WATER DISTRICT**

### **A. Introduction**

Carmichael Water District (CWD) serves the community of Carmichael and currently has 10,850 connections, 10,189 of which are residential.

CWD has American River water rights for 32,600 acre-feet (AF), of which 14,000 AF is licensed. CWD has a “Ranney collector” diversion facility on the American River. CWD also uses groundwater to meet a portion of its demands as well as for meeting peaking needs.

Because of the Surface Water Treatment Rule, the California Department of Health Services is requiring CWD to provide filtration to its water supply from the American River. CWD is constructing a Water Treatment Plant (WTP) at the site of its existing corporation yard on Bajamont Way. CWD will be constructing the plant in two phases; the initial phase includes a 17 million gallon per day (mgd) membrane filter facility which has expansion capacity to 22 mgd. The plant construction will include modification to CWD Ranney collectors which will make them less obtrusive to the environment of the lower American River.

After completion of the WTP, CWD will continue to use groundwater as necessary for peaking.

### **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum’s two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers’ needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for the CWDs American River diversion is 12,000 AF.

### **D. Agreement for meeting Carmichael Water District's water supply needs to the year 2030**

**1. Most years:** As it applies to the CWD portion of the *Agreement*, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.

In most years, CWD will divert and use up to its license amount, 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to its historic baseline level of 12,000 AF by implementation of urban water conservation Best Management Practices (BMPs).

**2. Drier years:** As it applies to the CWD portion of the *Agreement*, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and equal to or greater than 400,000 AF.

In drier years, CWD will divert and use up to its license amount, 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to its historic baseline level of 12,000 AF by implementation of urban water conservation BMPs. There is no reduction in diversion for CWD in drier years, since the 12,000 AF is equivalent to its baseline diversion.

**3. Driest years (i.e. conference years):** Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.

In the driest years, CWD will divert and use up to its license amount, 14,000 AF. By the year 2030, it is most likely that the water demand for the District will be reduced to its historic baseline level of 12,000 AF by implementation of urban water conservation BMP. This agreement specifies no reduction in diversion for CWD in conference years, since the 12,000 AF is equivalent to its baseline diversion.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years CWD will participate in a

conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I Section Four, I](#) of the *Water Forum Agreement*.

4. Signatories to the *Water Forum Agreement* acknowledge and agree that CWD shall not relinquish control of or otherwise abandon the right to any quantity of water that it has foregone delivery and/or diversion of under this agreement, and shall retain the right (if any) to transfer that water for other beneficial uses, after that water has served its purpose of assisting in the implementation of the improved pattern of fishery flow releases, for diversion or re-diversion at, near, or downstream of the confluence of the lower American River and the Sacramento River. The signatories also recognize that any such transfer of water by CWD must be in accordance with applicable provisions of federal and state law.

Signatories to the *Water Forum Agreement* also acknowledge that CWD has the right to use groundwater instead of the surface water diversions (12,000 AF) which have been agreed to. Any reduction of this 12,000 acre-foot diversion could be transferred for other beneficial uses for diversion upstream or downstream of the mouth of the American River, provided that such transfer by CWD must be in accordance with applicable provisions of federal and state law.

**E. Specific Agreements for Complying with the Seven Elements**  
*(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

- c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*
  - d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*
  - e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
- 3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
  - a. Speak before stakeholder boards and regulatory bodies,*
  - b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
- 4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
- 5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III ~~Section Three, III~~](#)).
7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.
8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.
9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.
10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII ~~Section Three, VII~~](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV ~~Section Three, IV~~](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (Reference [Chapter 3, Section V ~~Section Three, V~~](#), Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.
13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III](#) ~~Section Four, III~~).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV](#) ~~Four, IV~~).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V](#) ~~Section Four, V~~).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and

entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or

diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## **G. Remaining Issues**

None

## COUNTY OF SACRAMENTO/SACRAMENTO COUNTY WATER AGENCY

### A. Introduction

The County of Sacramento (County) purveys water in seven separate retail service areas within the unincorporated area. County retail service areas vary in size from as few as 30 connections in the smallest service area to more than 17,000 connections in the Laguna/Vineyard service area. There are a total of approximately 20,000 connections in the County retail service areas, of which about 19,000 are residential customers.

The Sacramento County Water Agency (SCWA) is responsible for providing wholesale water supply to an area of the Laguna, Vineyard, and Elk Grove communities commonly referred to as “Zone 40”. The long-term Master Water Plan for Zone 40 is based on meeting present and future water needs through a program of conjunctive use of groundwater and surface water.

It is anticipated that Zone 40 will be expanded to include large areas in the southern part of Sacramento County which may be developed that are presently unorganized as far as water supply. Both supply and demands for these new growth areas are included in this County/SCWA Purveyor Specific Agreement (PSA).

Neither the County nor SCWA presently has long-term surface water entitlements. However, SCWA has entered into a contract with [Reclamation USBR](#) for 22,000 acre-feet (AF) of American River water, authorized by Public Law (PL) 101-514. Seven thousand acre-feet of the 22,000 AF of water will be sub-contracted to the City of Folsom. The remaining 15,000 AF of the PL 101-514 water for SCWA use will be diverted at or near the mouth of the American River or from the Sacramento River. SCWA has also entered into a three party agreement-in-principle with Sacramento Municipal Utilities District (SMUD) and the City of Sacramento for the assignment to SCWA of 15,000 AF of SMUDs existing contract with [Reclamation the USBR](#), to be diverted at or near the mouth of the American River or from the Sacramento River. SCWA and SMUD have also begun negotiations for purchase by the SCWA and assignment from SMUD of a second 15,000 AF block of SMUDs [Reclamation USBR](#) contract. A portion of the payments to SMUD from the County would be used to construct groundwater facilities which may be operated and maintained by the County. Groundwater from these wells would be available as an alternative supply for SMUD to meet increased demands in the drier and conference years as defined in the PSA for SMUD.

In addition to the 15,000 AF of PL 101-514 contract and pursuing 30,000 AF of SMUD surface water SCWA has applied to the State Water Resources Control Board (SWRCB) for excess flows on the American and Sacramento rivers. That application is pending and is subject to negotiated terms through the Water Forum for delivery. To reduce reliance on intermittent surface water, SCWA intends to pursue upstream water transfers which would be diverted at or near the mouth of the American River or from the Sacramento River.

Delivery of surface water to Zone 40 requires wholesale and wheeling contracts between the City of Sacramento and SCWA. This includes construction of facilities, including treatment plant capacity within the City of Sacramento.

A portion of the expanded Zone 40 area is situated within the Place of Use (POU) for the City of Sacramento's American River water entitlements. It is assumed that these entitlements would be used to serve this expanded Zone 40 area. Conditions for use of this entitlement would be consistent with the conditions outlined in the City of Sacramento's PSA.

All of the County's retail service areas are supplied by groundwater with the exception of the Laguna/Vineyard service area (Zone 40), which is supplied by groundwater in combination with interim surface water. County/SCWA has an agreement with the City of Sacramento for treatment and delivery of interim surface water to Zone 40.

A portion of the Elk Grove Water Works (EGWW) retail service area is located within the boundary of Zone 40. Water used in this area is made up of groundwater pumped by EGWW and groundwater and surface water served to EGWW through a wholesale water purchase agreement with SCWA. The contract between the SCWA and ~~Reclamation the USBR~~ for water available through PL 101-514 requires that EGWW meet the terms and conditions of the PL 101-514 contract including a comprehensive water conservation plan and meter retrofit program to receive Central Valley Project (CVP) contract surface water.

## **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

## **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

No American River diversions were included in the baseline for County/SCWA.

**D. Agreement for meeting the County of Sacramento and the Sacramento County Water Agency's water supply needs to the year 2030**

The County/SCWA surface water needs are included in the South County Municipal and Industrial (M&I) users group. The County/SCWA portion of the demand, 87,000 AF, includes both existing and expanded Zone 40 areas. It is anticipated that Zone 40 will be expanded to include large areas in the southern part of Sacramento County which may be developed that are presently unorganized.

To meet these demands, the firm surface water supply of 45,000 AF (15,000 AF of [Reclamation USBR](#) contract water under PL 101-514 and 30,000 AF of SMUD entitlement transfer), an intermittent surface water supply of 33,000 AF, and groundwater will be necessary. The PL 101-514 and SMUD water will be subject to shortages imposed on all CVP M&I contractors. Intermittent surface water is available only when the water is surplus to the needs of the San Joaquin-Sacramento River and Delta. Upstream water transfers will be pursued to reduce reliance on intermittent surface water. All of the surface water for the County/SCWA is assumed to be diverted at or near the mouth of the American River or from the Sacramento River.

Groundwater will be used in a conjunctive use basis by the South County M&I users group with a total 2030 demand of 117,600 AF. The South County M&I users group also includes a portion of [California American Water Company](#) ~~Citizens Utilities Company~~ and EGWW. The amount of groundwater used will vary from approximately 95,100 AF in the driest years decreasing to approximately 34,000 AF in the wet years.

**E. Specific Agreements for complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

a. All signatories to the *Water Forum Agreement* agree to continue their support for SCWAs contract for 22,000 AF of water authorized by PL 101-514.

b. All signatories to the *Water Forum Agreement* will support transfers of 30,000 AF of SMUDs CVP entitlement to be used for planned growth within the Urban Service Boundary.

c. All signatories agree to support a conjunctive use program to meet SCWAs water needs for planned growth within the Urban Service boundary.

d. All signatories to the *Water Forum Agreement* agree to support additional transfers of existing entitlements or new entitlements needed to support such a conjunctive use program. However, environmental signatory organizations' support for specific additional transfers or new entitlements is subject to: their review of the specifics of the

additional transfers or entitlements; their concurrence on the adequacy of conditions that will be included as part of such additional transfers or new entitlements; and full compliance with all applicable environmental laws and requirements.

e. All signatories anticipate that SCWAs water conservation program, contributions to the Successor Effort and contributions to the lower American River HME would not have to be renegotiated in the context of additional transfers or new entitlements diverted from the Sacramento River.

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

a. *All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

c. *To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

d. *In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

e. *All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. *Speak before stakeholder boards and regulatory bodies,*
  - b. *Provide letters of endorsement,*
  - c. *Provide supportive comments to the media,*
  - d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other*

signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference ~~Chapter 3, Section IV Section Three, IV~~, lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Chapter 3, Section V Section Three, V~~, Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

13. All signatories will endorse and, where appropriate, participate in implementation of the ~~Sacramento Groundwater Authority (SGA) Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to

*53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.*

19. All signatories to the *Agreement* will endorse County/SCWA for completion of PL 101-514 water contracts.

20. All signatories to the *Agreement* will endorse County/SCWA for completion of the assignments of portions of SMUDs CVP water contract.

21. All signatories to the *Agreement* will endorse construction of County/SCWAs water supply facilities (this may include joint facilities constructed by the City of Sacramento) which include diversion at or near the mouth of the American River or from the Sacramento River, treatment plants, pumping stations, wells, storage facilities, and transmission piping. Endorsement is also needed for right of ways, permits, environmental documentation, and other endorsement which may be identified for County/SCWA to meet needs to the year 2030.

22. All signatories to the *Agreement* will endorse County/SCWA agreements with the City of Sacramento for wheeling and wholesaling of surface water prior to and after completion of the City's capacity expansion.

23. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).

24. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV Four, IV](#)).

25. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).

26. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

27. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and

entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or

diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## **G. Remaining Issues**

1. Development of a groundwater management arrangement for the [Central South](#) Area.

Update- This issue was resolved with the creation of Sacramento Central Groundwater Authority in February 2006.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

## DEL PASO MANOR WATER DISTRICT

### **A. Introduction**

Del Paso Manor Water District (DPMWD) serves an area approximately 1 mile square in the Arden area.

DPMWD currently has 1,793 connections, of which 1,690 are residential.

All of the service area of DPMWD is within the City of Sacramento's Place of Use (POU) for its American River water rights. DPMWD has a contract with the City for an assignment of 2,460 acre-feet (AF) of this entitlement. DPMWD has been a supporter of the Arden-Arcade Conjunctive Use Plan and has envisioned using surface water provided by the City of Sacramento when that plan became a reality.

The current water supply for DPMWD is entirely groundwater.

### **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because they do not divert from the American River, no American River diversion was included in the baseline for DPMWD.

**D. Agreement for meeting Del Paso Manor Water District's water supply needs to the year 2030**

DPMWD currently uses groundwater to meet its demands. When a contract between the City of Sacramento and DPMWD for delivery of surface water is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.

**E. Specific Agreements for Complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

- e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
- 3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
  - a. Speak before stakeholder boards and regulatory bodies,*
  - b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
- 4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
- 5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
- 6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
- 7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
- 8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
- 9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII ~~Section Three, VII~~](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV ~~Section Three, IV~~](#), lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water conservation Element of the Agreement. (Reference [Chapter 3, Section V ~~Section Three, V~~](#), Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.

At such time the DPMWD needs discretionary approvals for new or expanded surface water supplies, they agree to annually retrofit at least 3.3% - 5% of the total number of un-metered residential connections and read and bill as set forth in the Water Forum Conservation Element.

If in the future the DPMWD receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) ~~Sacramento North Area Groundwater Management Authority~~](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the [Central ~~South~~](#) Area and where appropriate participate in its development, to maintain a [Central ~~South~~](#) Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the [South ~~Galt~~](#) Area and where appropriate participate in its development, to maintain a [South ~~Galt~~](#) Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III](#) ~~Section Four, III~~).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV](#) ~~Four, IV~~).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V](#) ~~Section Four, V~~).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I.](#), of the *Water Forum Agreement* ~~"Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,"~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element

- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the

diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **G. Remaining Issues**

None

## FLORIN COUNTY WATER DISTRICT

Florin County Water District has not participated in any Water Forum projects, activities or meetings since 2002.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

### **A. Introduction**

Florin County Water District (FCWD) serves an area adjacent to the Sacramento City limits in the Florin area.

FCWD currently has 2,177 connections, of which 2,005 are residential.

All of the service area of FCWD is within the City of Sacramento's Place of Use (POU) for its American River water rights.

The current water supply for FCWD is entirely groundwater.

### **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because they do not divert from the American River, no American River diversion was included in the baseline for FCWD.

**D. Agreement for meeting Florin County Water District's water supply needs to the year 2030**

FCWD currently uses groundwater to meet its demands. When a contract between the City of Sacramento and FCWD for delivery of surface water is proposed, signatories to the *Water Forum Agreement* will meet in good faith with the objective to develop mutually acceptable provisions consistent with the two coequal objectives of the *Water Forum Agreement*.

**E. Specific Agreements for Complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

- e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
- 3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. Speak before stakeholder boards and regulatory bodies,*
- b. Provide letters of endorsement,*
- c. Provide supportive comments to the media,*
- d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
- e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
- 4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
- 5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
- 6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
- 7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
- 8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
- 9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII ~~Section Three, VII~~](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV ~~Section Three, IV~~](#), lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

At such time the FCWD needs discretionary approvals for new or expanded surface water supplies, they agree to annually retrofit at least 3.3% - 5% of the total number of un-metered residential connections and read and bill as set forth in the Water Forum Conservation Element.

If in the future the FCWD receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) ~~Sacramento North Area Groundwater Management Authority~~](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the [Central ~~South~~](#) Area and where appropriate participate in its development, to maintain a [Central ~~South~~](#) Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the [South ~~Galt~~](#) Area and where appropriate participate in its development, to maintain a [South ~~Galt~~](#) Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation

*will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.*

*Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.*

19. *All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).*

20. *All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV Four, IV](#)).*

21. *All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).*

22. *Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.*

23. *Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.*

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:
    - (1) Support for the improved pattern of fishery flow releases
    - (2) Water Forum Successor Effort
    - (3) Water Conservation Element
    - (4) Lower American River HME
    - (5) Support for the updated lower American River flow standard

(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1](#) ~~the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **G. Remaining Issues**

1. Development of a groundwater management arrangement for the [Central South](#) Area.

Update- This issue was resolved with the creation of Sacramento Central Groundwater Authority in February 2006.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

## CITY OF FOLSOM

### A. Introduction

The City of Folsom (Folsom) is located in the northeastern corner of Sacramento County adjacent to both Placer and El Dorado counties. A small portion of Folsom on the north side of the American River is served by the San Juan Water District (SJWD).

Within the portion of Folsom south of the American River, Folsom currently has 9,900 connections, of which 8,500 are residential. All commercial services are metered and billed based on meter readings.

Folsom has a pre-1914 water right to 22,000 acre-feet (AF) of American River water. This right and 10,000 AF of water right owned by the [Golden State Water Company \(GSWC\)](#) ~~Arden Cordova Water Service (ACWS)~~ totaling 32,000 AF are held under a co-tenancy agreement between the two agencies. On March 8, 1994, Folsom and [GSWC](#) ~~(ACWS)~~ entered into an agreement wherein “[GSWC](#) ~~(ACWS)~~ agrees to sell and Folsom agrees to purchase and pay for up to 5,000 AF of water (reallocated water) each fiscal year.”

Folsom is in the process of contracting with [Reclamation](#) ~~the USBR~~ (through the Sacramento County Water Agency) for 7,000 AF of American River water for delivery from Folsom Reservoir, as authorized by Public Law (PL) 101-514.

Update- In 2000 the Sacramento County Water Agency entered into a contract with Folsom to provide 7,000 acre-feet of water, as authorized by Public Law 101-514. This supply is commonly referred to as “Fazio Water.”

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

All of its surface water is diverted from the Folsom Reservoir.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum’s two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers’ needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element

- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions from American River**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995, or a negotiated amount.

In the driest years, the baseline for Folsom's diversion is an agreed upon amount of 20,000 AF. This amount is within the range of uncertainty in the historic diversion data and is equivalent to Folsom's current diversion and treatment plant capacity. Additionally, in conference years, Folsom would encourage conserving an additional 2,000 AF through extra-ordinary conservation for Folsom Reservoir recreational benefits and for release to the lower American River for fishery benefits.

### **D. Agreement for meeting Folsom's water supply needs to the year 2030**

The Water Forum recognizes that the City of Folsom has applied to include the area south of Highway 50 into its sphere of influence. It is agreed that if the Local Agency Formation Commission (LAFCo) grants Folsom's application, the Water Forum Successor Effort will consider the question of whether there can be agreement on a mutually acceptable water supply for development in that area.

Water Forum signatories retain their ability to support or oppose Folsom's LAFCo application on any grounds including water supply. Nothing in the *Water Forum Agreement* provides support for an expanded water service area for that area south of Highway 50. Regardless of support or opposition by other Water Forum signatories, if the City of Folsom were to serve the south of Highway 50 area with any of the surface or groundwater resources covered under the *Water Forum Agreement* then all of the City's obligations under the *Water Forum Agreement* will apply to that area.

Update- LAFCo approved the City of Folsom's application to include the south of Highway 50 area into its sphere of influence in 2013. The Folsom Area Specific Plan, published by the City of Folsom in 2013 stated that the water supply for the south of Highway 50 area would be consist of water conserved from the original City of Folsom.  
 - This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

**1. Most years:** As it applies to the Folsom's portion of the *Agreement*, most years is defined as follows: years when the projected March through

**November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.**

In most years, Folsom will divert and use 34,000 AF.

**2. Drier years:** As it applies to the Folsom's portion of the *Agreement*, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and equal to or greater than 400,000 AF.

In drier years, Folsom will divert and use a decreasing amount of surface water from 34,000 to 22,000 AF (or the equivalent, see example below) in a 3 stage stepped and ramped reduction in proportion to the decrease in the March through November when unimpaired inflow to Folsom Reservoir, from 950,000 to 400,000 AF. Stage 1, a decreasing amount from 34,000 to 30,000 AF in proportion to the decrease in March through November unimpaired inflow to Folsom Reservoir greater than 870,000 AF but less than 950,000 AF. Stage 2, fixed at 27,000 AF when the March through November unimpaired inflow to Folsom Reservoir is greater than 650,000 AF but less than or equal to 870,000 AF. Stage 3, fixed at 22,000 AF when the March through November unimpaired inflow to Folsom Reservoir is equal to or greater than 400,000 AF but less than or equal to 650,000 AF.

As an example of how Folsom will meet its needs during drier years, Folsom will reduce diversions by imposing additional conservation levels, and will continue to divert water from Folsom Reservoir for the balance of its needs. However, Folsom will enter into agreements with other purveyors that have access to both surface water and groundwater for an equivalent exchange of the amount of reduction needed by Folsom as outlined above in the three stages of reduction. Under these arrangements, other purveyors will use groundwater in lieu of surface water equivalent to the amount that Folsom would continue to divert.

**3. Driest years (i.e. conference years): Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.**

In the driest years, when the March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF, Folsom will reduce diversions (or the equivalency, see example below) to 20,000 AF.

Also, Folsom will reduce diversions in the driest years by encouraging additional extra-ordinary conservation to effectively achieve a reduction to 18,000 AF.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years Folsom will participate in a conference with other stakeholders on how the available water should be managed. The

conferees will be guided by the conference year principles described in [Chapter 4, Section I](#) ~~Section Four, I~~, of the *Water Forum Agreement*.

As an example of how Folsom will meet its needs during the driest years, Folsom will reduce diversions by imposing additional conservation levels, and will continue to divert water from Folsom Reservoir for the balance of its needs. However, Folsom will enter into agreements with other purveyors that have access to both surface water and groundwater for an equivalent exchange of the amount of reduction needed by Folsom as outlined above in the 3 stages of reduction. Under these arrangements, other purveyors will use groundwater in lieu of surface water equivalent to the amount that Folsom would continue to divert.

**E. Specific Agreements for Complying with the Seven Elements**  
*(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement*

*will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

*3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

*a. Speak before stakeholder boards and regulatory bodies,*

*b. Provide letters of endorsement,*

*c. Provide supportive comments to the media,*

*d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

*e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*

*4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

*5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

*6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*

*7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*

*8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.
10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV Section Three, IV](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~
13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) Sacramento North Area Groundwater Management Authority](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the [Central South](#) Area and where appropriate participate in its development, to maintain a [Central South](#) Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the [South Galt](#) Area and where appropriate participate in its development, to maintain a [South Galt](#) Area estimated average annual sustainable yield of 115,000 AF.
16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.
17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.
18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

*Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.*

19. All signatories to the Agreement will endorse completion of the PL 101-514 water contract for Folsom.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference [Chapter 4, Section IV Four, IV](#)).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:
    - (1) Support for the improved pattern of fishery flow releases
    - (2) Water Forum Successor Effort
    - (3) Water Conservation Element
    - (4) Lower American River HME
    - (5) Support for the updated lower American River flow standard

(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1](#) ~~the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

**G. Remaining Issues**

None

Revision - When the initial Water Forum Agreement was printed, City of Galt had tentatively approved the following PSA. However, the City of Galt later chose to not execute the PSA. Therefore, City of Galt's Purveyor Specific Agreement has been removed from the revised version of the Water Forum Agreement.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

## **~~CITY OF GALT~~**

### **~~A. INTRODUCTION~~**

~~The City of Galt (Galt) serves an area in the southern part of Sacramento County on both sides of State Highway 99.~~

~~Galt currently has 5,132 connections, 4,975 of which are residential.~~

~~The current water supply for Galt is entirely groundwater.~~

### **~~B. SEVEN ELEMENTS OF THE WATER FORUM AGREEMENT: INTEGRATED PACKAGE~~**

~~In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.~~

- ~~• Increased surface water diversions~~
- ~~• Actions to meet customers' needs while reducing diversion impacts in drier years~~
- ~~• Support for an improved pattern of fishery flow releases from Folsom Reservoir~~
- ~~• Lower American River Habitat Management Element (HME)~~
- ~~• Water Conservation Element~~
- ~~• Groundwater Management Element~~
- ~~• Water Forum Successor Effort~~

~~For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.~~

### **~~C. BASELINE DIVERSIONS~~**

~~Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.~~

~~Because they do not divert from the American River, no American River diversion was included in the baseline for Galt.~~

~~**D. — AGREEMENT FOR MEETING GALT’S WATER SUPPLY NEEDS TO THE YEAR 2030**~~

~~Galt will use groundwater to meet all of their projected demands.~~

~~**E. — SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS**  
*— (Agreements in italics are common in all Specific Agreements.)*~~

~~1. — All signatories to the Water Forum Agreement will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).~~

~~2. — All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of ways, permits, and other endorsements which may be needed, in the context of the following five points:~~

~~a. — All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers’ needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.~~

~~b. — Environmental impacts of facilities to divert, treat and distribute water will be subject to site specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site specific impacts.~~

~~c. — To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making).~~

~~d. — In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.~~

- ~~e. — All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.~~
- ~~3. — Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:~~
- ~~a. — Speak before stakeholder boards and regulatory bodies;~~
- ~~b. — Provide letters of endorsement;~~
- ~~c. — Provide supportive comments to the media;~~
- ~~d. — Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and~~
- ~~e. — Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.~~
- ~~4. — All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.~~
- ~~5. — All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission (CPUC) for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.~~
- ~~6. — All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference Section Three, III).~~
- ~~7. — All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.~~
- ~~8. — All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.~~
- ~~9. — All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.~~

~~10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference Section Three, VII, Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.~~

~~11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference Section Three, IV, lower American River Habitat Management Element).~~

~~12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V, Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

~~At such time the City of Galt needs discretionary approvals for new or expanded surface water supplies, they agree to annually retrofit at least 3.3%—5% of the total number of un-metered residential connections and read and bill as set forth in the Water Forum Conservation Element.~~

~~If in the future the City of Galt receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.~~

~~13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a north area estimated average annual sustainable yield of 131,000 acre-feet (AF).~~

~~14. All signatories will endorse development of a groundwater management arrangement for the south area and where appropriate participate in its development, to maintain a south area estimated average annual sustainable yield of 273,000 AF.~~

~~15. All signatories will endorse development of a groundwater management arrangement for the Galt area and where appropriate participate in its development, to maintain a Galt area estimated average annual sustainable yield of 115,000 AF.~~

~~16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.~~

~~17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.~~

~~18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will~~

~~be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.~~

~~Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.~~

~~19. All signatories agree to endorse, and where appropriate, participate in Sacramento River supply for North Sacramento County and Placer County (Reference Section Four, III).~~

~~20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Section Four, IV).~~

~~21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).~~

~~22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three sub-areas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.~~

~~23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.~~

## **~~F. ASSURANCES AND CAVEATS~~**

~~Because the Water Forum Agreement is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this Water Forum Agreement.~~

~~Two particularly important assurances are the updated lower American River flow standard and Upstream American River Diversion Agreements.~~

~~All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for the U.S. Bureau of Reclamation (Reclamation) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:~~

~~*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the  
release of water for the fisheries.~~

~~The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."~~

~~Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with Reclamation that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.~~

~~In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the Agreement to be operative.~~

~~1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.~~

~~a. If a purveyor receives support from the other signatories to the Agreement for all of its facilities and entitlements as shown on the chart in Section Three, I, of the *Water Forum Agreement*, "*Major water supply projects that will receive support upon signing the Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:~~

- ~~—(1) Support for the improved pattern of fishery flow releases~~
- ~~—(2) Water Forum Successor Effort~~
- ~~—(3) Water Conservation Element~~
- ~~—(4) Lower American River HME~~
- ~~—(5) Support for the updated lower American River flow standard~~
- ~~—(6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.~~

and

- b. ~~— If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I, of the *Water Forum Agreement*, “Major water supply projects that will receive support upon signing the *Water Forum Agreement*,” that would constitute a changed condition that would be considered by the Water Forum Successor Effort.~~
2. ~~All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the Agreement that meet their interests.~~
3. ~~A stakeholder’s support for water supply entitlements and facilities is contingent on:~~
- a. ~~— Project specific compliance with California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.~~
- b. ~~— Purveyors’ commitment in their project specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.~~
- c. ~~— Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and Reclamation. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.~~
- d. ~~— Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in Section Four, I, of the *Water Forum Agreement*.~~
- e. ~~— Adequate progress in construction of the temperature control device.~~
- f. ~~Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.~~

~~4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.~~

#### **~~G. REMAINING ISSUES~~**

~~Development of a groundwater management arrangement for the Galt area.~~

## **GOLDEN STATE WATER COMPANY**

<p>The Golden State Water Company Purveyor Specific Agreement was approved by the Water Forum Successor Effort March 2000.</p>
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### **A. Introduction**

The Golden State Water Company (GSWC) (formerly known as Southern California Water Company, then Arden-Cordova Water Service) has two service areas within Sacramento County. One is located in the Arden Town area the other is located in the Rancho Cordova area.

GSWC currently has 12,779 connections, of which 11,545 are residential.

GSWC has a pre-1914 water right to 10,000 acre-feet (AF) of American River water. Currently 5,000 AF of water has been leased to the City of Folsom (see City of Folsom Purveyor Specific Agreement [PSA]).

All surface water used by GSWC is diverted from the Folsom South Canal.

Groundwater constitutes approximately 70% of the water supply for GSWC in the Rancho Cordova area and is the only source of water in the Arden Town system.

### **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions from American River**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

In the driest years, the baseline for GSWC's diversion is an agreed upon amount of 5,000 AF. This amount is within the range of uncertainty in the historic diversion data for GSWC.

**D. Agreement for meeting Golden State Water Company's water supply needs to the year 2030**

**1. Most years:** As it applies to the GSWC portion of the agreement, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.

In most years, GSWC will divert and use 5,000 AF from the Folsom South Canal.

**2. Drier years:** As it applies to the GSWC portion of the agreement, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and greater than or equal to 400,000 AF.

In drier years, GSWC will divert and use 5,000 AF from the Folsom South Canal.

**3. Driest years (i.e. conference years):** Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.

In the driest years, GSWC will divert and use 5,000 AF from the Folsom South Canal.

However it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years GSWC will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I](#) ~~Section Four, I~~ of the *Water Forum Agreement*.

**4.** Signatories to the *Water Forum Agreement* acknowledge and agree that if the 5,000 AF leased to the City of Folsom returns to GSWC, it will be considered a changed condition and all Water Forum signatories will work in good faith to negotiate the relevant portions of the *Agreement*.

This agreement is entered into with recognition that a groundwater contamination condition currently exists in the GSWC Rancho Cordova service area. All signatories to the *Water Forum Agreement* agree to work with all stakeholders with the objective to support a program to deal with this issue consistent with the Water Forum's two coequal objectives.

**E. Specific Agreements for Complying with the Seven Elements**

*(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

*a. Speak before stakeholder boards and regulatory bodies,*

- b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
- 4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
- 5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
- 6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III](#) ~~Section Three, III~~).*
- 7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
- 8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
- 9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
- 10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII](#) ~~Section Three, VII~~, Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference ~~Chapter 3, Section IV~~ ~~Section Three, IV~~, lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference ~~Chapter 4, Section III~~ ~~Section Four, III~~).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference Chapter 4, Section IV ~~Four, IV~~).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Chapter 4, Section V ~~Section Four, V~~).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

#### **F. Assurances and Caveats**

Because the Water Forum Agreement is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this Water Forum Agreement.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento’s Fairbairn diversion will be required to comply with the diversion limitations of the City’s PSA. The Water Forum Agreement also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor’s commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on Table 3.1 ~~the chart in Section Three, I., of the Water Forum Agreement “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on Table 3.1 ~~the chart in Section Three, I., of the Water Forum Agreement “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of Reclamation~~; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ ~~Section Four, I~~, of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which

was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

**G. Remaining Issues**

1. Development of a groundwater management arrangement for the Central ~~South~~ Area.

Update- This issue was resolved with the creation of Sacramento Central Groundwater Authority in February 2006.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

2. GSWC is governed by the CPUC; any and all agreements proposed must be reviewed and approved by the CPUC prior to adoption.

## NATOMAS CENTRAL MUTUAL WATER COMPANY

### A. Introduction

Natomas Central Mutual Water Company (Natomas) has surface water rights from the Sacramento River for use on 55,000 acres within Natomas, an area just north of the City of Sacramento and extending into Sutter County. Natomas provides only surface water for agricultural use to just those land owners within its service area. Natomas' water supply is founded on a water rights settlement contract that includes six water right licenses and one permit. Five of those licenses allow for irrigation, industrial, municipal, and domestic use. The sixth is an irrigation-only license which actually refers to the use of re-circulated water in the drains. Finally, Natomas has a permit for winter diversions (during the months of November through March) from the Sacramento River up to 10,000 acre-feet (AF) for all purposes. The permit may be converted to a license in 1999.

Natomas has a contract with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ for an annual total of 120,200 AF; the 120,200 AF entitlement is comprised of 98,200 AF of base supply and 22,000 AF of Central Valley Project (CVP) supply. The 98,200 AF is diverted from the Sacramento River each year without payment to ~~Reclamation the USBR~~ however, there are monthly limitations which Natomas can divert during the 7-month period. Also, during critical year reductions, Natomas is required to reduce both its base and CVP diversions from the Sacramento River by 25 %. The reductions required during critical years are based on Shasta inflow criteria. Natomas' present use of water is exclusively for agricultural purposes. Although Natomas has the right to provide municipal and industrial (M&I) supply, it has no present plans to fulfill that role.

Although Natomas provides agricultural water to its landowners, land use changes over the next 30 years will require municipal and industrial water service to landowners. In the past two decades the Natomas agricultural area has experienced the expansion of two major freeways, the construction of the Sacramento County International Airport, the construction of Arco Arena, and the development of South Natomas. In the foreseeable future, another 2,000 acres will be developed adjacent to the airport (Metro Air Park). In addition, Natomas is presently providing landscaping water service to the Sacramento County International Airport and Teal Bend Golf Course. In the next decade, Natomas' water will be used to fill the County of Sacramento's service to Metro Air Park as development proceeds. Another land use commitment will be the Natomas Basin Habitat Plan which will permanently set aside acreage to mitigate impacts of new development. This mitigation will require changes in Natomas' water management techniques.

The long term master plan of Natomas envisions a number of water management changes in order to adapt to the Natomas landowners change of land use. These changes may include agreements with municipal purveyors to provide treated water service to Natomas landowners, a conjunctive use program with the State of California, and a joint diversion with the Placer County Water Agency (PCWA).

## **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

## **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995. Natomas has no American River diversions. Consequently, no baseline figures were applicable to Natomas. The surface water it uses is diverted entirely from the Sacramento River.

Natomas plans no increase in its historic maximum diversions annually from the Sacramento River and consequently is not expected to impact American River flows. Natomas has reduced diversions in a conservation effort since 1986 and has contributed to the net supply south of the mouth of the American River.

## **D. Agreement for meeting Natomas' water supply needs to the year 2030**

Demands to the year 2030 for the Sacramento County portion of Natomas will be met with surface water from the Sacramento River and from groundwater pumping.

## **E. Specific Agreements for Complying with the Seven Elements**

*(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).
2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping.*

*Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

- a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*
  - b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*
  - c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*
  - d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*
  - e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
- 3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. Speak before stakeholder boards and regulatory bodies,*
  - b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

- e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III](#) ~~Section Three, III~~).*
7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII](#) ~~Section Three, VII~~, Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*
11. *All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV](#) ~~Section Three, IV~~, lower American River Habitat Management Element).*
12. *All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~*

13. All signatories will endorse and, where appropriate, participate in implementation of the *Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~* to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the *Central ~~South~~* Area and where appropriate participate in its development, to maintain a *Central ~~South~~* Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the *South ~~Galt~~* Area and where appropriate participate in its development, to maintain a *South ~~Galt~~* Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the Agreement will endorse consolidation of several of Natomas' Sacramento River diversions into an upgraded diversion with a new fish screen which meets the *USFWS's ~~Fish and Wildlife Service's~~* screening criteria.

20. All signatories to the Agreement will endorse Natomas' partnership with other parties to interconnect the Sacramento River with the San Juan/Sacramento Suburban pipeline from Folsom Reservoir which presently terminates at Walerga Road. Support for this water connection is subject to the provisions of *Chapter 4, Section III ~~Section Four, III~~*, Sacramento River supply for North Sacramento County and Placer County. It is recognized that signatories' support for such a pipeline does not include support for water service from that pipeline to areas outside the Urban Services Boundary.

21. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).

22. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference [Chapter 4, Section IV Four, IV](#)).

23. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).

24. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

25. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento’s Fairbairn diversion will be required to comply with the diversion limitations of the City’s PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,

and

Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor’s commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.
3. A stakeholder's support for water supply entitlements and facilities is contingent on:
  - a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.
  - b. Purveyors' commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of Reclamation~~; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.
  - c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.
  - d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ ~~Section Four, I~~, of the *Water Forum Agreement*.
  - e. Adequate progress in construction of the temperature control device.
  - f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.
4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the *Water Forum*

EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

**G. Remaining Issues**

Natomas will continue to negotiate an agricultural water conservation program with the Successor Effort.

## PLACER COUNTY WATER AGENCY

### A. Introduction

The Placer County Water Agency (PCWA) serves areas within Placer County on the west slope of the Sierra. These areas include the communities of Auburn, Loomis, Newcastle, Penryn, Rocklin and Lincoln. PCWA also wholesales water to Roseville and San Juan Water District (SJWD).

PCWA currently has about 29,000 connections, all of which are metered.

In the 1960's, PCWA constructed its Middle Fork American River Project (MFP) which includes several reservoirs on the Middle Fork American River and its tributaries. These reservoirs provide both electrical energy generation and a consumptive water supply. The water afforded through the MFP provides PCWA a water right to 120,000 acre-feet (AF) of American River water. PCWA also has a contract with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ for 117,000 AF of Central Valley Project (CVP) water. There is a difference of opinion between ~~Reclamation the USBR~~ and PCWA as to whether ~~Reclamation the USBR~~ has an obligation to deliver more than 35,000 AF of CVP water in the absence of an Auburn Dam. The Place of Use (POU) for the PCWA water entitlements is within Placer County.

PCWA has contracts with SJWD for delivery of 25,000 AF, the City of Roseville for delivery of 30,000 AF, and Sacramento Suburban Water District (SSWD) for delivery of 29,000 AF.

PCWA also contracts and receives 100,400 acre-feet annually (AFA) from Pacific Gas & Electric Company (PG&E) for water imported into Western Placer County from the Yuba and Bear rivers. PG&E uses this water for power generation and then sells it to PCWA for consumptive use.

PCWA is negotiating with ~~Reclamation the USBR~~ for the right to take its 35,000 AF of CVP entitlement from the Sacramento River and/or Feather River.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element

- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions from American River**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for PCWAs American River diversion is 8,500 AF, which represents PCWAs own usage. Water that PCWA sells to purveyors is discussed in the Purveyor Specific Agreement (PSA) of those purveyors (see San Juan Consortium, City of Roseville, and SSWD specific agreements).

### **D. Agreement for meeting Placer County Water Agency's water supply needs to the year 2030**

**1. Most years:** As it applies to the PCWA portion of the agreement, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.

In most years, PCWA will divert and use 35,500 AF from the American River.

PCWA will also divert and use 35,000 AF from the Sacramento and/or Feather rivers if exchanges of equal amounts can be made with others under terms acceptable to PCWA.

If circumstances prevent PCWA from developing the diversion from the Sacramento and/or Feather rivers referred to above, PCWA and the other members of the Water Forum Successor Effort will enter into negotiations with the objective of finding a mutually agreeable alternative.

**2. Drier years:** As it applies to the PCWA portion of the agreement, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and greater than or equal to 400,000 AF.

During drier years PCWA will divert and use 35,500 AF from the American River and will replace water to the river from re-operation of its MFP reservoirs in the following amounts, with the amount of water released to the river for unimpaired inflow quantities between 950,000 and 400,000 AF linearly proportional to the amounts shown below:

<u>Unimpaired inflow to Folsom Reservoir</u>	<u>Amount of re-operation Water</u>
950,000 AF	0 AF

400,000 AF

27,000 AF

Update- The total amount of reoperation water expected to be released by PCWA in Conference years is 47,000 AF. This includes the 27,000 AF listed above and the 20,000 AF of reoperation water provided under the City of Roseville PSA.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

PCWA would make the releases contingent upon the following conditions:

- a. its ability to sell the released water for use below the lower American River on terms acceptable to PCWA,
- b. PG&Es agreement to such re-operation until the present power purchase contract with PG&E expires (presently anticipated by year 2013), and
- c. PCWAs determination that it has sufficient water in its reservoirs to make the additional releases to mitigate conditions in dry years without jeopardizing the supply for PCWAs customers. (Note: operational modeling for PCWA based on historical hydrology and projected 2030 requirements as set forth in the *Water Forum Agreement* has shown that re-operation water should be available for such release and sale without drawing MFP reservoirs below 50,000 AF.).

The source of this replacement water in drier years would be water not normally released in those years from the PCWA MFP.

PCWA will also divert and use 35,000 AF from the Sacramento and/or Feather River if the exchanges referred to in 1 above are perfected.

**3. Driest years (i.e. conference years): Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.**

In the driest years, PCWA will continue to divert and use 35,500 AF from the American River. Subject to the conditions set forth in 2 above, during the driest years PCWA will replace 27,000 AF of water to the river from re-operation of its MFP reservoirs.

However, it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years PCWA will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I](#) ~~Section Four, I~~ of the *Water Forum Agreement*.

PCWA will also divert and use up to 35,000 AF from the Sacramento and/or Feather River if the exchanges referred to in 1 above are perfected.

#### **4. Concurrent Requirements**

If circumstances prevent PCWA from selling water to the SSWD for groundwater stabilization, PCWA and the other members of the Water Forum Successor Effort will enter into negotiations with the objective of finding a mutual agreeable use of that water in Placer County by diversion at either Auburn or Folsom Reservoir or by an exchange or sale providing for delivery of it below the mouth of the American River.

During drier years, PCWA will make available for purchase, water from its MFP reservoirs as replacement water for the City of Roseville and possibly for the City of Folsom and Georgetown Divide PUD diversions if the conditions in 2 above are met.

All signatories will advocate that the State Water Resources Control Board (SWRCB), Federal Energy Regulatory Commission (FERC), the courts or all other entities taking action under their authority, not affect PCWAs water rights or operation of its MFP in a way that would prevent PCWA from meeting its commitments under either the *Water Forum Agreement* or its Diversion Agreement with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ or prevent ~~Reclamation's the USBRs~~ implementation of the Anadromous Fish Restoration Program (AFRP) flow releases for the lower American River. However, if in any year PCWAs supplies are reduced as a result of any action by the SWRCB, FERC, courts, or other entity, the amount by which PCWAs supplies are reduced shall be credited to PCWA and the City of Roseville as re-operation water under 2 and 3 above, to the extent it flows into Folsom Reservoir.

This agreement is entered into with recognition that PCWA has water rights for 120,000 AF, receives 100,400 AFA from the Yuba/Bear rivers pursuant to a contract with PG&E, and 35,000 AF pursuant to a contract for CVP water. If for any reason those supplies are significantly reduced in amount or duration, other than normal deficiencies imposed by ~~Reclamation the (USBR)~~ on CVP contractors, it will be considered a changed condition and all Water Forum signatories will work in good faith to renegotiate relevant portions of the *Water Forum Agreement*.

PCWAs entitlements to water not used before 2030 will remain available for PCWAs use after 2030.

#### **E. Specific Agreements for Complying with the Seven Elements** *(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).
2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures,*

*treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

- a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*
  - b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*
  - c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*
  - d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*
  - e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
- 3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. Speak before stakeholder boards and regulatory bodies,*
  - b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

- e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*
11. *All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV Section Three, IV](#), lower American River Habitat Management Element).*
12. *All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. ([Reference Section Three, V., Water conservation Element](#)). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~*

13. All signatories will endorse and, where appropriate, participate in implementation of the *Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~* to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the *Central ~~South~~* Area and where appropriate participate in its development, to maintain a *Central ~~South~~* Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the *South ~~Galt~~* Area and where appropriate participate in its development, to maintain a *South ~~Galt~~* Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the Agreement will endorse construction of PCWAs water supply facilities which include diversion, treatment, pumping stations, storage facilities, and transmission piping. They will also provide any endorsements needed for rights-of-way, permits, environmental documentation, and other requirements necessary to enable PCWA to meet its needs to the year 2030. This specifically includes support to divert water from the American River near Auburn with the following conditions:

- a. A wet well including screens and piping to the wet well sized at 225 cubic feet per second (cfs).
- b. A permanent pumping plant and pipe to the tunnel sized at 100 cfs for PCWA.

20. All signatories to the *Agreement* will endorse construction of PCWAs water supply facilities from the Sacramento and/or Feather River which include diversion, treatment, pumping stations, storage facilities, and transmission piping rights of way, etc.
21. All signatories to the *Agreement* will endorse the point of delivery change for PCWAs water from the American River to the Sacramento and/or Feather River.
22. All signatories to the *Agreement* will endorse PCWAs changes of POU, points of diversion, and sale of MFP water consistent with the *Water Forum Agreement*.
23. All signatories to the *Agreement* endorse the release of re-operation water from PCWAs MFP reservoirs as acceptable dry year alternative replacement water.
24. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III](#) ~~Section Four, III~~).
25. All signatories will endorse, and where appropriate, participate in the section of the *Water Forum Agreement* entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference [Chapter 4, Section IV](#) ~~Four, IV~~).
26. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V](#) ~~Section Four, V~~).
27. Purveyors signatory to the *Water Forum Agreement* will reference the *Water Forum Agreement*, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.
28. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the *Water Forum Agreement*.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~"Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,"~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element

- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the

diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## **G. Remaining Issues**

The remaining issues are: 1) environmentalists' support for PCWA pumps at Auburn, 2) how water conservation Best Management Practice (BMP) #5 (Large landscape water audits and incentives for commercial, industrial, institutional and irrigation accounts) will be implemented, and 3) environmentalists' support for conditions related to release of replacement water in drier and driest years (see Sections D, 2 and D, 3 above).

Update- Issue 1 (above) was resolved with the completion of the PCWA American River Pump Station in 2007 which became fully operational in 2008.

Issue 2 (above) was resolved with completed negotiations for Raw Water System BMP outlined below.

Issue 3 (above) was resolved through the PCWA relicensing process with the Federal Energy Regulatory Commission in 2015.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

Addendum to original PSA – Placer County Water Agency negotiated this BMP with the Water Forum Successor Effort in fulfillment of its commitment to resolve the outstanding issues referenced in its PSA. Negotiations were completed in 2003.

**Placer County Water Agency  
Raw Water System Best Management Practices**

(Does not include commercial agriculture)

Within four years of agreement signing, PCWA will:

Distribution system efficiency program

1. Identify and prioritize distribution system sections that need replacement, lining or piping.
2. Identify and prioritize canal automation sites to increase system efficiency and reduce spills.
3. Develop an improved raw-water system operation plan.
4. Analyze alternatives for customer water ordering.
5. Measure distribution canal and lateral spill and prioritize locations for spill recovery systems.
6. Develop a water measurement program to improve the type, accuracy and maintenance of raw-water system customer measurement.
7. Identify and prioritize sites for regulatory reservoirs that would increase system efficiency and reduce spills.
8. Work with PG&E to modify policies and operational constraints that limit system efficiency.

Raw-water customer use program

1. Annually survey at least 5 percent of raw-water accounts – record turnout number and type of measurement device, parcel size, irrigated acres, water uses, and irrigation system type; and record that information in the raw-water customer database. Survey all raw-water customers and complete database within 20 years. Survey means good faith effort to obtain information on voluntary basis.
2. Prioritize the identified raw-water users by water-use per irrigated acre.
3. Offer incentives and/or devices that improve irrigation system control to survey participants.
4. Have certified and/or trained landscape water use auditors on staff or available through cooperative agreements.
5. Prepare and distribute raw water system materials, including information on distribution system procedures, management and operations, customer water management, irrigation system types, and ET-based irrigation scheduling.

6. Offer irrigation water management training for customers, landscape workers and agency staff.
7. Consider/adopt a conservation-oriented water-rate structure.

PCWA will annually:

1. Directly contact raw-water customers with the greatest water-use per irrigated acre (as identified by the customer survey) and offer evaluations to at least 10 percent of the customers surveyed during that year.
2. Sample past program participants to determine if audit recommendations were implemented
3. Provide program participants with information comparing recommended conservation practices and actual irrigation practices.
4. Prioritize, and perform replacement, lining, or piping on the top three sections of distribution system losses identified from the previous year studies. Perform repairs when the analysis proves beneficial
5. Prioritize and install automated monitoring devices when analysis determines it beneficial.

## RIO LINDA/ELVERTA COMMUNITY WATER DISTRICT

### A. Introduction

Rio Linda/Elverta Community Water District (RLECWD) serves an area in the north central part of Sacramento County adjacent to the City of Sacramento and Placer County.

RLECWD currently has 4,060 connections all of which are metered. Within the District, over 1000 individual parcels are served by domestic and/or agricultural wells.

The current water supply for RLECWD is entirely groundwater.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### C. Baseline Diversions from American River

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Because RLECWD does not divert from the American River, no American River diversion is included in the baseline for RLECWD.

### D. Agreement for meeting RLECWDs water supply needs to the year 2030

The 2030 projected water demand within the present geographical boundary of RLECWD is 17,035 acre-feet (AF). This projected demand is included in the North Central Group of Municipal and Industrial (M&I) Purveyors which also includes a portion of the [California-American Water Company \(CAWC\)](#) ~~Citizens Utilities Company, a portion of the Arcade Water~~

~~District~~, McClellan Air Force Base and ~~portions of Sacramento Suburban Water District (SSWD) Northridge Water District.~~

The RLECWD acknowledges that decisions on how to maintain the long-term sustainable yield of the North Area groundwater basin will be made by the ~~Sacramento Groundwater Authority (SGA) Sacramento North Area Groundwater Management Authority (SNAGMA)~~ with representation of RLECWD on ~~SGAs SNAGMAs~~ governing board consistent with the joint powers agreement establishing ~~SGA SNAGMA~~.

As the purveyor of municipal and industrial water within its current and future expanded boundaries, RLECWD will construct appropriate facilities to meet its 2030 projected peak period water demand.

If ~~SGA SNAGMA~~ determines that it is necessary to acquire surface water for use within ~~SGAs SNAGMAs~~ boundaries, the District will cooperate with the Water Forum Successor Effort, ~~SGA SNAGMA~~, and other affected agencies to obtain the surface water to be used as part of ~~SGAs SNAGMAs~~ groundwater management program.

The District acknowledges that the *Water Forum Agreement* does not provide for a baseline quantity of groundwater. The District also acknowledges its responsibility for sharing in the cost to acquire surface water supplies if ~~SGA SNAGMA~~ determines such supplies are necessary to maintain the long-term sustainable yield of the Sacramento North Area groundwater basin.

**E. Specific Agreements for Complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may*

*provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

*3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

*a. Speak before stakeholder boards and regulatory bodies,*

*b. Provide letters of endorsement,*

*c. Provide supportive comments to the media,*

*d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

*e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*

*4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

*5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III ~~Section Three, III~~](#)).
7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.
8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.
9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.
10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII ~~Section Three, VII~~](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV ~~Section Three, IV~~](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~)
13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) ~~Sacramento North Area Groundwater Management Authority~~](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the [Central ~~South~~](#) Area and where appropriate participate in its development, to maintain a [Central ~~South~~](#) Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the [South ~~Galt~~](#) Area and where appropriate participate in its development, to maintain a [South ~~Galt~~](#) Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.
17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.
18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.
- Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.
19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).
20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV Four, IV](#)).
21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).
22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.
23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and

entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or

diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **G. Remaining Issues**

None

## CITY OF ROSEVILLE

### A. Introduction

The City of Roseville (Roseville) is located in the southern part of Placer County adjacent to Sacramento County.

Roseville currently has about 24,500 connections, of which about 22,000 are residential.

Roseville has a contract with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ for 32,000 acre-feet (AF) and a contract with Placer County Water Agency (PCWA) for 30,000 AF of American River water. All surface water is diverted from the Folsom Reservoir.

Roseville also has groundwater wells for emergency backup.

Update- the City of Roseville entered into a water transfer agreement with San Juan Water District that provides Roseville with 3,200 AF in most years (February 2004). The City of Roseville also entered into a water supply agreement with the San Juan Water District that provides Roseville with 800 AF in most years (February 2001).  
- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### C. Baseline Diversions from American River

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for Roseville's American River diversion is 19,800 AF.

**D. Agreement for meeting Roseville's water supply needs to the year 2030**

- 1. Most years:** As it applies to the Roseville's portion of the *Agreement*, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.

In most years, Roseville will divert and use ~~54,900~~ 58,900 AF.

Update- With the addition of its water transfer and water supply agreements with San Juan Water District, Roseville can divert up to 58,900 AF in most years.  
- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

- 2. Drier years:** As it applies to the Roseville's portion of the *Agreement*, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and greater than or equal to 400,000 AF.

In drier years, Roseville will divert and use a decreasing amount of surface water from ~~54,900~~ 58,900 to ~~39,800~~ 43,800 AF in proportion to the decrease in unimpaired inflow, from 950,000 to 400,000 AF, to Folsom Reservoir. During drier years Roseville will continue to meet its customers' needs while reducing diversions by additional conservation, using groundwater, and using reclaimed water. Additionally, Roseville will enter into an agreement with PCWA for replacing water to the river, up to 20,000 AF, from re-operation of PCWA's Middle Fork Project (MFP) reservoirs.

Update- With the addition of its water transfer and water supply agreements with San Juan Water District, Roseville can divert up to 43,800 AF in years with unimpaired runoff of 400,000 AF to Folsom Reservoir.  
The 20,000 AF of re-operation water will be released by PCWA.  
- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

- 3. Driest years (i.e. conference years):** Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.

In the driest years, Roseville will divert and use up to ~~39,800~~ 43,800 AF. In the driest years, Roseville will continue to meet its customers' needs while reducing diversions by additional conservation, using groundwater, and using reclaimed water. Additionally, Roseville will enter into an agreement with PCWA for replacing 20,000 AF of water to the river from re-operation of PCWAs MFP reservoirs.

Update- With the addition of its water transfer and water supply agreements with San Juan Water District, Roseville can divert up to 43,800 AF in years with unimpaired runoff of 400,000 AF to Folsom Reservoir.

The 20,000 AF of re-operation water will be released by PCWA.

- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

However, it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in its agreements and provide the expected driest years flows to the mouth of the American River. In those years Roseville will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I](#) ~~Section Four, I~~ of the *Water Forum Agreement*.

**E. Specific Agreements for Complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may*

*provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

*3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

*a. Speak before stakeholder boards and regulatory bodies,*

*b. Provide letters of endorsement,*

*c. Provide supportive comments to the media,*

*d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

*e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*

*4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

*5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III ~~Section Three, III~~](#)).
7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.
8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.
9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.
10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII ~~Section Three, VII~~](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV ~~Section Three, IV~~](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~
13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) ~~Sacramento North Area Groundwater Management Authority~~](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the [Central ~~South~~](#) Area and where appropriate participate in its development, to maintain a [Central ~~South~~](#) Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the [South ~~Galt~~](#) Area and where appropriate participate in its development, to maintain a [South ~~Galt~~](#) Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.
17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.
18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.
- Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.
19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).
20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV Four, IV](#)).
21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).
22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.
23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and

entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or

diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## **G. Remaining Issues**

None

## CITY OF SACRAMENTO

### A. Introduction

The City of Sacramento (City) purveys water within the City limits and a small area outside the City limits in the Fruitridge area. The City serves approximately 121,000 connections of which about 110,000 are residential customers.

The City of Sacramento has surface water entitlements on both the American and Sacramento rivers and also uses groundwater. The City has a permanent agreement with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ guaranteeing the accessibility of its entitlements. The authorized Place of Use (POU) under the City's water rights does not encompass the entire metropolitan area. The Sacramento River rights apply to the City limits; the American River rights cover an area of approximately 96,000 acres within and adjacent to the City.

The City has existing diversion, treatment, storage and pumping facilities on both rivers. The Sacramento River plant is located just downstream of the confluence with the American River. The American River plant known as the E. A. Fairbairn Water Treatment Plant (FWTP) is located near Howe Avenue approximately 16 miles downstream from Nimbus Dam.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### C. Baseline Diversions

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

Although the City has the physical capacity to divert up to 112,000 acre-feet (AF), the baseline for the City's American River diversion is 50,000 AF. The rest of the City's surface water demand is met by Sacramento River diversion.

**D. Agreement for meeting the City of Sacramento's water supply needs to the year 2030**

**TEXT OF CITY AGREEMENT:**

**1. Use of E. A. Fairbairn Water Treatment Plant (FWTP) Diversion Capacity**

a. In extremely dry years (i.e., years in which the State of California Department of Water Resources [DWR] annual projected unimpaired inflow into Folsom Reservoir would be 550,000 acre-feet annually [AFA] or less, also referenced as the March through November projected unimpaired flow into Folsom Reservoir being less than 400,000 AF) the City would limit its diversions of city water<sup>12</sup> at the FWTP to not greater than 155 cubic feet per second (cfs) and not greater than 50,000 AFA. Any additional water needs would be met by diversions at other locations and/or other sources.

City water diverted at the FWTP in extremely dry years in accordance with the foregoing limitations could be used anywhere within the City's authorized POU as it exists now and in the future<sup>13</sup>.

b. In all other years, (i.e. when DWRs annual projected unimpaired runoff into Folsom Reservoir is greater than 550,000 AF, or the March through November projected unimpaired inflow into Folsom Reservoir is greater than 400,000 AF) the City may divert city water at the FWTP in accordance with the following criteria.

(1) Diversion up to 310 cfs (200 million gallons per day [mgd]) so long as the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria<sup>14</sup>.

(2) Whenever flow bypassing the diversion at the FWTP is less than the Hodge Flow Criteria, City diversions may not be greater than the following:

January through May	120 cfs
June through August	155 cfs
September	120 cfs
October through December	100 cfs

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<sup>12</sup> The term "city water" refers to water diverted pursuant to the City's water rights and entitlements.

<sup>13</sup> The City's POU, as it existed on January 1, 1997, is shown in Attachment I.

<sup>14</sup> The "Hodge Flow Criteria" is defined in Appendix C.

c. **Retail Water Service.** City water diverted at FWTP in accordance with Article (b) of this section may be delivered anywhere: (1) within the City limits as they exist now and in the future, and (2) within the city retail service area<sup>15</sup> as it exists now and in the future but not including the area designated on Attachment II expected to be served by agencies other than the City.

d. **Wholesale Water Service - above Hodge.** Whenever the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria the City may deliver city water diverted or treated at the FWTP to public or private water purveyors on a wholesale basis, pursuant to wholesale agreements, anywhere within the POU as it existed on January 1, 1997. If it is proposed in the future to expand the POU this provision will be revisited by the Water Forum Successor Effort.

e. **Wholesale and Wheeling Water Service - below Hodge.** Whenever flow bypassing the diversion at the FWTP is less than the Hodge Flow Criteria, any water diverted or treated at the FWTP may be delivered on a wholesale (city water) or wheeling (non-city water) basis to any public or private water purveyors provided the rate of pump back<sup>16</sup> is equal to or exceeds the rate of delivery for these purposes on a daily basis.

f. **Wholesale delivery to Sacramento Suburban Water District (Arcade Service Area) and California-American Water Company** ~~Arcade and Citizens Utilities—Interim Period.~~ During the interim period prior to expansion of the FWTP and construction of a pump back facility, delivery of city water may be provided to Sacramento Suburban Water District (SSWD) and California-American Water Company (CAWC) ~~Arcade Water District and Citizens Utilities~~ service areas within the City's POU whenever the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria. Such wholesale deliveries may also be made if it can be demonstrated<sup>17</sup> that such delivery does not originate from diversion at the FWTP. ~~CAWC Citizens Utilities Southgate Service Area~~ is exempt from this specific restriction.

g. **Environmental Signatories support.** Environmental signatories' support for wholesale water deliveries from the City under Articles d, e, and f of this section – is contingent on those purveyors signing and implementing the *Water Forum Agreement*. ~~CAWC Citizens Utilities Southgate Service Area~~ is exempt from this contingency.

## **2. Divert and treat an additional 155 cfs at the Fairbairn Water Treatment Plant.**

a. Currently the 310 cfs diversion capacity at the FWTP is constrained to 155 cfs by the City's ability to treat the water.

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<sup>15</sup> The "city retail service area" refers to the area where the City provides retail water service.

<sup>16</sup> This Agreement uses the term "pump back" which assumes the existence of a metered raw water conveyance facility delivering water from near the confluence of the Sacramento and American rivers to the FWTP.

<sup>17</sup> Demonstration would consist of either the FWTP being out of service and/or the water quality of the water delivered having characteristics (i.e. electrical conductivity, total dissolved solids, hardness, etc.) of Sacramento River water.

The City may rehabilitate its FWTP diversion facility and expand its FWTP treatment capacity by another 100 mgd. This will allow the City to divert and treat an additional 155 cfs consistent with the terms of 1, above.

b. Concurrent with the expansion of the FWTP the City will also construct other facilities such as expansion/rehabilitation of the Sacramento River Water Treatment Plant and river intake to assure that a reliable alternative supply (groundwater, pump back and/or diversion from the Sacramento River) is available whenever it is needed.

### **3. Continuing studies of the lower American River**

a. Upon receipt by the City of all necessary regulatory approvals to construct the additional capacity referred to in 2 (a), above, completion of the City's environmental review for the project, and construction of said additional capacity, the City will commence a study program to monitor and evaluate the impacts of using the additional diversion capacity, in accordance with the diversion limits described in 1 above, upon the public trust values of the American River below the FWTP.

b. Not later than five years after the study program has commenced the results will be evaluated as follows:

(1) If the City and the Water Forum Successor Effort agree that results show that use of the additional diversion capacity pursuant to 1 above would have a significant adverse impact not considered in the City's prior environmental review, the City will reduce its use of the additional diversion capacity to levels that will not have such significant adverse impact.

(2) If at some time in the future, the City determines that it needs additional capacity and the Water Forum Successor Effort agrees that results demonstrate that increased diversions will not have significant adverse impacts, the City will have the support of all signatories if it chooses to pursue regulatory approvals for appropriate higher diversion limits and for the construction of more diversion and treatment capacity at FWTP for use within the POU.

(3) If the City and the Water Forum Successor Effort cannot agree on the results of (1) above, the limits will remain as specified in 1 above, the studies will continue and the evaluation of results will be repeated, as above, at intervals not exceeding three years.

Update- The City of Sacramento and the Environmental caucus have had ongoing periodic discussions about the potential to alter the Hodge Diversion criteria. The most recent facilitated process took place in 2015. The letter (Attachment III) from the City's utilities director, describes the outcome of that process. January 2016.

[ANA – insert letter from Bill at end of this PSA and make it Attachment 3]

**E. Specific Agreements for Complying with the Seven Elements**

*(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

- a. *Speak before stakeholder boards and regulatory bodies,*
  - b. *Provide letters of endorsement,*
  - c. *Provide supportive comments to the media,*
  - d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
  5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
  6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
  7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
  8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
  9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
  10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement.*

*To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference ~~Chapter 3, Section IV~~ *Section Three, IV*, lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the *Agreement* will endorse Sacramento County Water Agency (SCWA) [SCWA](#) agreements with the City of Sacramento for wheeling and wholesaling of surface water prior to and after completion of the City's capacity expansion.
20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).
21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV ~~Four, IV~~](#)).
22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V ~~Section Four, V~~](#)).
23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.
24. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by

purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor’s commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I.](#), of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I.](#), of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive~~

~~*Water Forum Support Upon Signing The Water Forum Agreement,*~~” that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of~~ *Reclamation*; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of~~ *Reclamation*. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ *Section Four, I*, of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

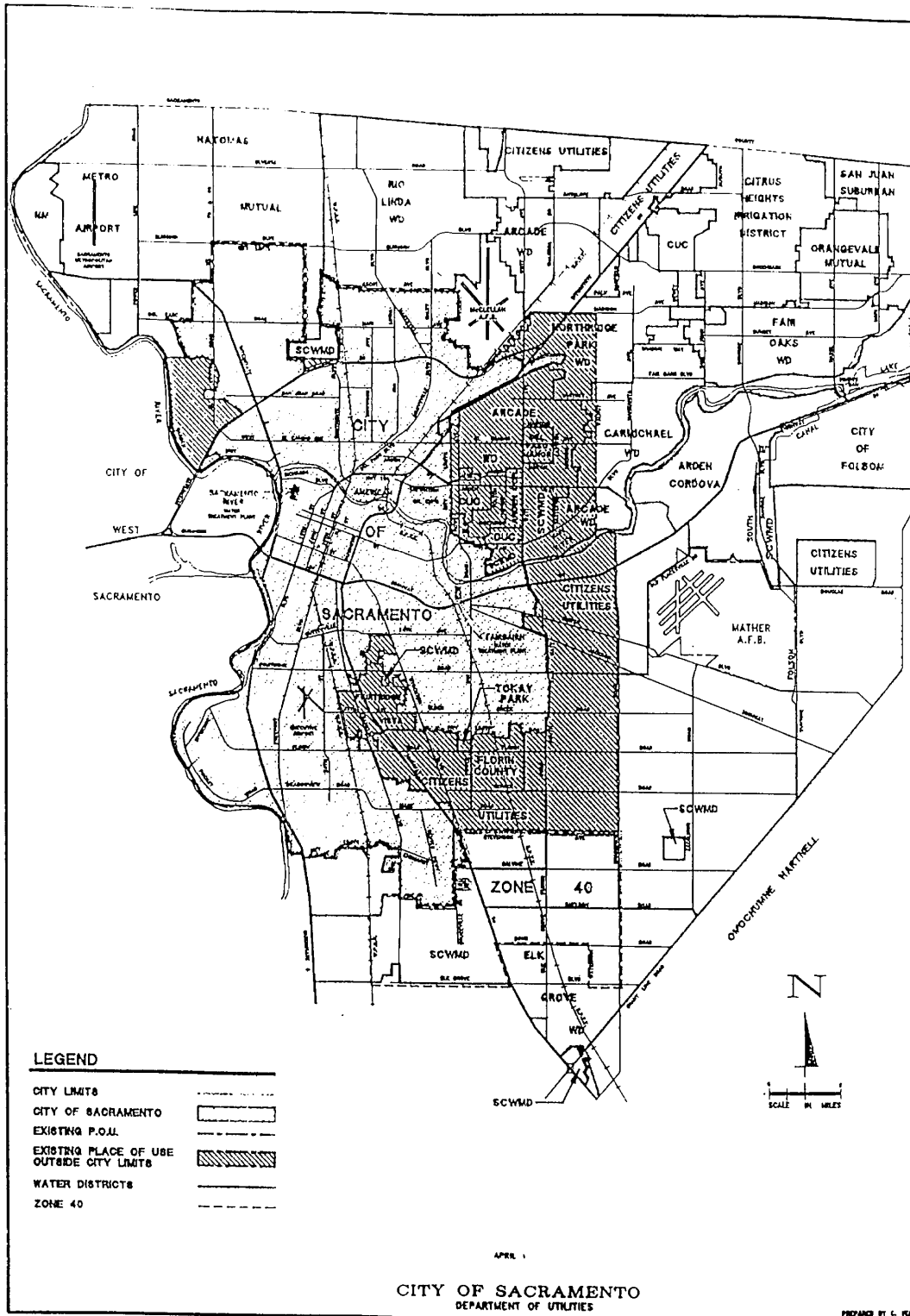
4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

**G. Remaining Issues**

1. Development of a groundwater management arrangement for the ~~Central South~~ Area [this issue was resolved with the creation of Sacramento Central Groundwater Authority].

# Attachment I

## Map of City POU as of 1/1/97



[illegible]

## Attachment III

### Bill Letter

The following letter from the City of Sacramento Director of Utilities is intended to express the City's willingness to reopen Hodge negotiations in the future



December 8, 2015

Mr. Tom Gohring  
Executive Director  
Water Forum  
2831 G Street, Suite 100  
Sacramento, CA 95816

**RE: City of Sacramento and Water Forum Hodge Flow Negotiations**

Dear Tom,

The City of Sacramento appreciates the Water Forum staff participation in the Hodge Flow negotiations between the City and Environmental representatives. During these negotiations, the City indicated an interest in facilitating or investing in efforts to manage the cold water pool in Folsom Reservoir that would offset potential impacts created by modifying the City's Hodge Flow criteria on water diversions off the Lower American River, including a power bypass fund to facilitate bypassing power generation. The City is putting its request to change Hodge Flow limits on hold due to the understanding that NMFS will require the power bypass for temperature improvements on the lower American River in the future, thereby negating the potential benefit of the City's offer. The offer is still active should the environmental caucus be interested in pursuing future negotiations.

Sincerely,

A handwritten signature in black ink, appearing to read "W. O. Busath".

William O. Busath  
Director of Utilities

City of Sacramento Department of Utilities  
916-808-1400  
1395 35<sup>th</sup> Avenue  
Sacramento, CA 95822

# SACRAMENTO MUNICIPAL UTILITY DISTRICT

## A. Introduction

The Sacramento Municipal Utility District (SMUD) serves electricity to all electricity users in Sacramento County and a small portion of Placer County.

In the 1950s and 60s SMUD developed the upper American River system of reservoirs on the south fork of the American River which are used for power generation. They also developed and built the Rancho Seco nuclear generation station in the southeastern part of Sacramento County. The Rancho Seco facility still requires water for cooling and dilution and diverts 15,000 acre-feet (AF) of American River water from the Folsom South Canal for these purposes.

SMUD has an assignment of City of Sacramento water rights for 15,000 AF and a contract with [Reclamation the United States Bureau of Reclamation \(USBR\)](#) for 60,000 AF. The point of diversion for SMUDs entitlement is the Folsom South Canal.

Because of the capital investment in electrical transmission capacity at the Rancho Seco site and the water supply, it is expected that SMUD will construct other energy producing facilities there in the future. The estimated water need for these units is an additional 15,000 AF.

SMUD also has begun a program of constructing co-generation facilities at sites throughout the Sacramento area. Some of these units are already in place and SMUD, the City of Sacramento and the County of Sacramento have proposed a three party arrangement for SMUD to receive a water supply from the City while transferring 15,000 AF of its [Reclamation USBR](#) contract to the County. SMUD anticipates the need for an additional 15,000 AF of water supply within the City of Sacramento's American River Place of Use (POU) and has begun negotiations with the City and County for a similar three party arrangement.

## B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for the SMUDs American River diversion is 15,000 AF which reflects the shut down of the Rancho Seco Power Plant.

### **D. Agreement for meeting SMUDs water supply needs to the year 2030**

**1. Most years:** As it applies to the SMUD portion of the agreement, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.

In most years, SMUD will divert and use 30,000 AF from the Folsom South Canal. SMUD will also use a water supply of 15,000 AF provided from the City of Sacramento used within the City's POU for other generation facilities.

**2. Drier years:** As it applies to the SMUD portion of the agreement, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and greater than or equal to 400,000 AF.

In drier years, SMUD will divert and use a decreasing amount of surface water from 30,000 to 15,000 AF in proportion to the decrease in unimpaired inflow to Folsom Reservoir from 950,000 AF to 400,000 AF. During drier years SMUD will reduce its demand proportionally by up to 5,000 AF and use groundwater to meet its additional demands. SMUD will also use a water supply provided from the City of Sacramento used within the City's POU for other generation facilities.

**3. Driest years (i.e. conference years): Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.**

In the driest years, SMUD will reduce its diversion to 15,000 AF, equivalent to its baseline amount. During driest years, SMUD will accomplish this reduction to baseline by reducing its demand by 5,000 AF and use groundwater to meet its additional demands.

SMUD will also use a water supply provided from the City of Sacramento within the City's POU for other co-generation facilities.

However, it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years SMUD will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I](#) ~~Section Four, I~~ of the *Water Forum Agreement*.

#### **4. Concurrent Requirements:**

SMUD utilizes 15,000 AF of City of Sacramento water rights and has a contract with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ for 60,000 AF. SMUD, the City of Sacramento and the County of Sacramento have executed a set of principles for a three party agreement which includes a purchase by the County and a transfer from SMUD of a 15,000 AF block of SMUDs ~~Reclamation USBR~~ contract. SMUD and the County of Sacramento have also begun negotiations for purchase by the County and transfer from SMUD of a second 15,000 AF block of SMUDs ~~Reclamation USBR~~ contract. A portion of the payments to SMUD from the County would be used to construct groundwater facilities which would be operated and maintained by the County. Groundwater from these wells would be available as an alternative supply for SMUD to meet increased demands in the drier and conference years as defined above.

SMUD also is planning on constructing additional co-generation facilities at locations within the City of Sacramento's POU. SMUD will negotiate with the City of Sacramento for delivery of up to 15,000 AF of water for its planned co-generation facilities within the POU at a rate less than the full retail rate.

SMUD and South Sacramento County agricultural interests have begun negotiations for a transfer of 13,500 AF of a third 15,000 AF block of SMUDs ~~Reclamation USBR~~ contract. Water available from this proposed transfer would be subject to diversion restrictions negotiated as part of the PSA for South Sacramento County agricultural users.

SMUD and the Rancho Murieta Community Services District have also begun negotiations for 1,500 AF of this third 15,000 AF block of SMUDs ~~Reclamation USBR~~ contract. Rancho Murieta and the other Water Forum stakeholders have not come to agreement on a mutually acceptable diversion point.

As conditions precedent to the diversion restrictions identified, SMUD requires: a) approval by ~~Reclamation USBR~~ of assignments of SMUD contract water for a second 15,000 AF increment to Sacramento County, and support for a transfer of a third 15,000 AF increment to Galt Irrigation District (South Sacramento County agricultural water users) and possibly Rancho Murieta CSD; b) collection of fees for the contract assignments; c) a groundwater supply commitment from Sacramento County facilities paid for by SMUD at a capped cost, and d) delivery to SMUD by the City of Sacramento of up to 15,000 AF of water for SMUDs planned co-generation facilities within the City's POU at a rate less than the full retail rate.

If these conditions are not achieved, all signatories to the *Water Forum Agreement* will meet in good faith with the objective of identifying alternative means to meet SMUDs needs consistent with the two coequal objectives of the *Water Forum Agreement*. If agreement cannot be reached after those good faith negotiations, signatories retain the right to pursue, support or oppose SMUDs diversions above the baseline amount.

**E. Specific Agreements for Complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV Section-Four IV](#), Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

- e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
- 3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
  - a. Speak before stakeholder boards and regulatory bodies,*
  - b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
- 4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
- 5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
- 6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
- 7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
- 8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
- 9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV Section Three, IV](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~
13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) Sacramento North Area Groundwater Management Authority](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the [Central South](#) Area and where appropriate participate in its development, to maintain a [Central South](#) Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the [South Galt](#) Area and where appropriate participate in its development, to maintain a [South Galt](#) Area estimated average annual sustainable yield of 115,000 AF.
16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.
17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.
18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from

*beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.*

19. *All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).*

20. *All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference [Chapter 4, Section IV Four, IV](#)).*

21. *All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).*

22. *Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.*

23. *Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.*

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento’s Fairbairn diversion will be required to comply with the diversion limitations of the City’s PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by

purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

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- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I.](#), of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive~~

~~*Water Forum Support Upon Signing The Water Forum Agreement,*~~” that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.
3. A stakeholder’s support for water supply entitlements and facilities is contingent on:
  - a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.
  - b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of~~ *Reclamation*; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.
  - c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of~~ *Reclamation*. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.
  - d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ *Section Four, I*, of the *Water Forum Agreement*.
  - e. Adequate progress in construction of the temperature control device.
  - f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

**G. Remaining Issues**

None

## SACRAMENTO SUBURBAN WATER DISTRICT

This Sacramento Suburban Water District PSA was developed as a result of the consolidation of Northridge Water District and Arden-Arcade Water District. The former Northridge PSA and Arden-Arcade Procedural Agreements have been superseded.

Approved by the WFSE, June 2003

### **A. Introduction**

Sacramento Suburban Water District (SSWD) was organized on February 1, 2002, through consolidation of the former Arcade Water District (AWD) and the former Northridge Water District (NWD).

The initial *Water Forum Agreement* recorded agreements among stakeholder organizations that could be entered into as the effective date of the initial *Water Forum Agreement*, April 24, 2000. However, it was also recognized that there were some stakeholder organizations that had remaining issues that could not be resolved by that time.

The SSWDs Purveyor Specific Agreement (PSA) was completed and is included in the *Water Forum Agreement*. The AWD signed a Procedural Agreement because there remained some unresolved issues between AWD and other stakeholder organizations.

SSWDs two former water districts are referred to hereinafter as the Arcade Service Area (ASA) and the Northridge Service Area (NSA).

#### **Northridge Service Area (NSA)**

The NSA is located in the north central part of Sacramento County. A portion of this service area is contiguous with Placer County. The NSA currently encompasses 22,538 customers, of which 20,049 are residential customers.

Historically, the NSA principally extracted and delivered groundwater to meet its customer demands. Since 1998, however, the NSA has delivered treated surface water to its customers on an intermittent basis through the Cooperative Transmission Pipeline (CTP) and the Sacramento Suburban Transmission Pipeline (SSTP).

The former SSWD and Placer County Water Agency (PCWA) entered into an agreement for delivery of up to 29,000 acre-feet per year (AF/year) under PCWAs water right as part of a groundwater stabilization program. This agreement is referred to hereinafter as the SSWD - PCWA Agreement. Surface water has been delivered within the NSA under this agreement since June 1, 2000.

#### **Arcade Service Area (ASA)**

The ASA currently has about 22,775 connections, of which 20,117 are residential customers. The ASA is divided into the Town & Country and North Highlands sub-areas.

### **Town & Country Sub-area**

The Town & Country sub-area is currently entirely dependent upon groundwater. However, this area lies within the Place of Use (POU) of the City of Sacramento's American River water rights. The former AWD had an agreement with the City of Sacramento for diversion of up to 26,064 AF/year of raw water under the City's American River water rights. This agreement provides for a floating point of diversion from the American River from below Nimbus Dam to the confluence of the American River with the Sacramento River. Current established points of diversion for this entitlement include the City's E.A. Fairbairn Water Treatment Plant (FWTP) and a site referred to as the American River Wells. This agreement was assigned to SSWD under the consolidation. SSWD is working on an agreement with the City for diversion and treatment of this water supply at the FWTP.

### **North Highlands Sub-area**

The North Highlands sub-area is within the North Central Group of water purveyors (as defined by the Water Forum) in Sacramento County. This sub-area is currently entirely dependent upon groundwater. SSWD anticipates, however, that in the future the North Highlands sub-area will utilize a combination of groundwater and surface water supplies as part of the aforementioned groundwater stabilization program. Surface water supplies delivered to the North Highlands sub-area will likely come from the American River pursuant to the SSWD - PCWA Agreement or Section 215 water made available by [Reclamation the U.S. Bureau of Reclamation \(Reclamation\)](#). These supplies will be delivered to North Highlands via the CTP and the Antelope Transmission Pipeline (ATP) (formerly referred to as the Northridge Transmission Pipeline).~~Northridge Transmission Pipeline (NTP)~~. The North Highlands sub-area lies within the POU of PCWA.

## **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

## **C. Baseline Diversions**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

**Northridge Service Area (NSA)**

No American River diversion was included in the baseline for the NSA.

**Arcade Service Area (ASA)**

**Town & Country Sub-area**

Because of operational and economic considerations, the Town & Country sub-area has limited its historical maximum amount of water diverted from the American River at the American River Wells to about 3,500 AF/year. [NOTE: The historical (and existing) nominal capacity of the American River wells is about 10 million gallons per day (mgd) or about 15.5 cubic feet per second (cfs). On a continuous basis, such a diversion is equivalent to an annual volume of water of about 11,200 AF/year.]

**North Highlands Sub-area**

No American River diversion was included in the baseline for the North Highlands sub-area.

**D. Agreement for meeting SSWDs water supply needs to the year 2030**

**Northridge Service Area (NSA)**

**TEXT OF FORMER NORTHRIDGE WATER DISTRICT AGREEMENT THEN NORTHRIDGE SERVICE AREA (NSA) NOW SACRAMENTO SUBURBAN WATER DISTRICT (SSWD)**

**This section is verbatim from the *Water Forum Agreement* and now the provisions, conditions etc. are applicable to SSWD.**

**Introduction**

Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which SSWD should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the following agreement has been entered into. The perspectives of SSWD and the environmental organizations signatory to the *Water Forum Agreement* are also set forth below.

In the interest of coming to an agreement, signatories to the *Water Forum Agreement* agree to the compromise set forth in the agreement below.

**Agreement**

All signatories will support a project to divert, treat and convey Sacramento River water in a pipeline that would connect to the Sacramento Suburban pipeline (Sacramento River pipeline).

They will support a Warren Act contract with ~~Reclamation the U.S. Bureau of Reclamation (Reclamation)~~ for diversion of 29,000 acre-feet (AF) of PCWA water from Folsom Reservoir. They will also support the PCWA petition to the State Water Resources Control Board (SWRCB) for change in its POU for water to be used in north central Sacramento County (expanded POU), with the following conditions included in the SWRCB order:

1. For the first ten years that water is available for diversion by SSWD from Folsom Reservoir under the SSWD - PCWA Agreement, but not more than twelve years from the effective date of the *Water Forum Agreement*, whichever occurs first,<sup>18</sup> SSWDs diversions under the SSWD - PCWA Agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

a. SSWD will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 AF.

b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 AF, SSWD will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

c. In addition to the foregoing, SSWDs diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the SSWD - PCWA Agreement, which allows annually-increasing diversions of up to 24,000 AF per year during the first ten years of water deliveries under that agreement.

d. Nothing in this agreement is intended to restrict SSWDs ability to take delivery of Section 215 water from Folsom Reservoir from ~~Reclamation the U.S. Bureau of Reclamation (Reclamation)~~ whenever it may be available.

2. If SSWD is able to take delivery of Sacramento River water through the Sacramento River pipeline, SSWD will thereafter divert water from Folsom Reservoir under the SSWD - PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 AF (i.e., above-Hodge).

3. If SSWD is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing (SWRCB hearing) if requested by SSWD, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB hearing will be to determine whether to add or revise

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<sup>18</sup> This time period is hereafter referred to as the “ten-year period”, and it may be extended for a period of up to two additional years by agreement of the parties to this agreement.

conditions to PCWAs water rights for diversion of water from Folsom Reservoir under the SSWD - PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City of Sacramento's prior water rights. Nothing in this agreement determines the relative priority of the water rights of the City of Sacramento and PCWA. If SSWD is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, SSWD would thereafter divert water from Folsom Reservoir under the SSWD - PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 AF (i.e., above-Hodge) and under the conditions referred to in Section 1.b. of this *Agreement* unless these conditions are revised by a SWRCB order issued following the SWRCB hearing. In addition, SSWD could divert water under the conditions referred to in Section 1.d. of this *Agreement*.

The diversion restrictions set forth in this agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that the SWRCBs determination following the SWRCB hearing be based upon the best available scientific and other evidence available at the time of the SWRCB hearing. Nothing in this agreement shall affect the right of PCWA to terminate the SSWD - PCWA Agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB hearing is unacceptable.

4. SSWD will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the SSWD - PCWA Agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by the City of Sacramento under its prior water rights.

SSWDs delivery to other purveyors of water diverted from the American River under the SSWD - PCWA Agreement is subject to those purveyors signing and implementing their commitments under the *Water Forum Agreement*.

[End of provisions to be included in SWRCB order.]

In addition, the *Water Forum Agreement* specifies that:

a. With the support of all Water Forum signatories, SSWD will continue to work with other interested parties to pursue a project involving a diversion on the Sacramento River, a new water treatment plant and water conveyance facilities that connect to the Sacramento Suburban pipeline for use of Sacramento River water within the area served by the Sacramento Suburban pipeline.

b. In determining the amount of surface water available for growth in the north part of Sacramento County within the ten-year period referred to in this *Agreement*, the parties agree that the long-term annual average yield of water diverted from Folsom Reservoir under the SSWD - PCWA Agreement would be not more than 17,400 AF, which is the projected average annual water supply that would be available if diversions were restricted to above-Hodge conditions.

### **Perspectives of the parties regarding diversions by Sacramento Suburban Water District of American River water under the SSWD - PCWA Agreement**

Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which SSWD should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the attached agreement has been entered. The perspectives of SSWD and the environmental organizations signatory to the *Water Forum Agreement* are set forth below.

It is the position of the environmental organizations signatory to the *Water Forum Agreement* that:

1. For purposes of a settlement, diversions by SSWD of American River water under the SSWD - PCWA Agreement in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 AF are acceptable to members of the Environmental Caucus during the ten-year period following the effective date of the *Water Forum Agreement*. This is acceptable because other purveyors that divert upstream of the lower American River who have fewer alternatives will not be substantially increasing their diversions under the *Water Forum Agreement* during the ten-year period.
2. After the ten-year period following the signing of the *Water Forum Agreement*, SSWD divert American River water under the SSWD - PCWA Agreement only when the unimpaired March through November inflow into Folsom Reservoir is greater than 1,600,000 AF (i.e., above- Hodge). This reflects the Environmental Caucus' belief that the north Sacramento County area groundwater basin could be stabilized at an acceptable level with SSWD diverting American River water under the SSWD - PCWA Agreement in only above-Hodge years.
3. Diversions of American River water under the SSWD - PCWA Agreement below the Hodge threshold after the initial ten-year period would unreasonably affect the instream, wildlife, recreational and aesthetic values of the lower American River. Such diversion below the Hodge threshold would also unreasonably affect the availability of water for instream uses downstream of the mouth of the American River.

It is the position of the SSWD that:

1. SSWD believes that its dry year diversion restrictions under the *Water Forum Agreement* should be comparable to the requirements of other purveyors who divert water from Folsom Reservoir.
2. SSWD believes that diversions of PCWA water from Folsom Reservoir in below-Hodge years after the conclusion of the ten-year period referred to in the agreement need not be prohibited to avoid significant impacts to instream uses of the lower American River and downstream.

## **Arcade Service Area (ASA)**

### **Town & Country Sub-area**

SSWD is pursuing a contract with the City of Sacramento for delivery of surface water from the FWTP. Water delivered to SSWD by the City will be subject to (1) this Purveyor Specific Agreement (PSA), (2) the contract between SSWD and the City, and (3) the maximum diversion rates from the FWTP agreed to by the City of Sacramento in its PSA to the *Water Forum Agreement*.

- 1. Most years:** As applied to the Town & Country sub-area and the agreement between SSWD and the City for raw surface water from the American River, most years are defined as time periods when the flow bypassing the City's diversion at the FWTP exceeds the Hodge Flow Criteria (see Appendix C).

In most years, SSWD may use up to 26,064 AF/year of surface water diverted from the American River to meet water demands within the Town & Country sub-area and for other conjunctive use purposes consistent with the groundwater management policies of the SGA. Operational considerations (e.g., peak demands during summer months) may require SSWD to use surface water diverted from the American River at an instantaneous rate of diversion up to 30 mgd, or 46.4 cfs. SSWD may also use groundwater to meet a portion of demands within the Town & Country sub-area. (See "4 Additional Considerations" below)

- 2. Drier years:** As applied to the Town & Country sub-area and the agreement between SSWD and the City for raw surface water from the American River, drier years are defined as time periods when the flow bypassing the City's diversion at the FWTP does not exceed the Hodge Flow Criteria (see Appendix C).

In drier years, SSWD will use groundwater to meet the demands within the Town & Country sub-area subject to Additional Considerations (No. 4) below.

- 3. Driest years (i.e. conference years):** Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.

In driest years, SSWD will use groundwater to meet the demands within the Town & Country sub-area subject to Additional Considerations (No.4) below.

It is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years, SSWD will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I Section Four, I](#) of the *Water Forum Agreement*.

#### **4. Additional Considerations**

Signatories to the *Water Forum Agreement* acknowledge and agree that SSWD shall not relinquish control of or otherwise abandon the right to any quantity of water that it has foregone delivery and/or diversion of under this agreement, and that SSWD intends to pursue the potential diversion of these quantities of water from a point of diversion on the Sacramento River.

Signatories to the *Water Forum Agreement* also acknowledge and agree that if SSWD for any reason is not able to enter into a contract with the City for surface water delivery, SSWD is expected to pursue a “project” for resuming the diversion from the American River Well System (including construction of a surface water treatment plant) or from another point of diversion on the American River below Nimbus Dam established pursuant to SSWDs contract assignment from the City. If SSWD develops a specific proposal (project), SSWD will discuss it with other signatories to the *Water Forum Agreement* in the context of both the Water Forum’s two coequal objectives. Water Forum signatories retain their ability to support or oppose such a future proposal.

Recognizing SSWDs diversion points on the American River and that diversions lower on the river will increase flows in the river between the diversion points, SSWD will, taking into consideration economic factors, distribution capacity and legal constraints, make reasonable efforts to divert from the lower diversion point when SSWD has a choice of where to divert water.

#### **North Highlands Sub-area**

As discussed in the introduction, SSWD anticipates that in the future the North Highlands sub-area will utilize a combination of groundwater and surface water supplies as part of the groundwater stabilization program. Surface water supplies delivered to the North Highlands sub-area will come from the American River pursuant to the SSWD - PCWA Agreement or Section 215 water made available by [Reclamation the U.S. Bureau of Reclamation \(Reclamation\)](#). These supplies will be delivered to North Highlands via the CTP and the ATP and will be subject to the same conditions described for the NSA (including the potential for delivery of surface water diverted from the Sacramento River).

**E. Specific Agreements for Complying with the Seven Elements**  
(*Agreements in italics are common in all Specific Agreements.*)

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

*a. Speak before stakeholder boards and regulatory bodies,*

- b. Provide letters of endorsement,*
  - c. Provide supportive comments to the media,*
  - d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
- 4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
- 5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
- 6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
- 7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
- 8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
- 9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
- 10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference ~~Chapter 3, Section IV~~ ~~Section Three, IV~~, lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~ The signatories acknowledge that a portion of SSWDs Arcade service area is within the boundaries of the City of Sacramento.

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the Central ~~South~~ Area and where appropriate participate in its development, to maintain a Central ~~South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the South ~~Galt~~ Area and where appropriate participate in its development, to maintain a South ~~Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Chapter 4, Section III ~~Section Four, III~~).

20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference Chapter 4, Section IV ~~Four, IV~~).

21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Chapter 4, Section V ~~Section Four, V~~).

22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento’s Fairbairn diversion will be required to comply with the diversion limitations of the City’s PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and

Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor’s commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I, of the Water Forum Agreement “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I, of the Water Forum Agreement “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.
3. A stakeholder's support for water supply entitlements and facilities is contingent on:
  - a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.
  - b. Purveyors' commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of Reclamation~~; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.
  - c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.
  - d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ ~~Section Four, I~~, of the *Water Forum Agreement*.
  - e. Adequate progress in construction of the temperature control device.
  - f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.
4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the *Water Forum*

EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

**G. Remaining Issues**

None

## **NORTHRIDGE WATER DISTRICT**

### **~~A. INTRODUCTION~~**

~~Northridge Water District (NWD) is located in the north-central part of Sacramento County; a portion of their District is contiguous with Placer County.~~

~~NWD currently has 19,145 customers of which 17,238 are residential.~~

~~NWD uses groundwater to meet its demands and has used surface water on an intermittent basis supplied by San Juan Water District through an interconnection with the Citrus Heights Water District.~~

~~NWD and the Placer County Water Agency (PCWA) have entered into an agreement for delivery of up to 29,000 acre feet (AF) of PCWA's water right, per year.~~

### **~~B. SEVEN ELEMENTS OF THE WATER FORUM AGREEMENT: INTEGRATED PACKAGE~~**

~~In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions:~~

- ~~X Increased Surface Water Diversions~~
- ~~X Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years~~
- ~~X Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir~~
- ~~X Lower American River Habitat Management Element~~
- ~~X Water Conservation Element~~
- ~~X Groundwater Management Element~~
- ~~X Water Forum Successor Effort~~

~~For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.~~

### **~~C. BASELINE DIVERSIONS FROM AMERICAN RIVER~~**

~~Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.~~

~~No American River diversion was included in the baseline for NWD.~~

## ~~D. — AGREEMENT FOR MEETING NWD's WATER SUPPLY NEEDS TO THE YEAR 2030~~

### ~~TEXT OF NORTHRIDGE WATER DISTRICT AGREEMENT:~~

#### ~~INTRODUCTION~~

~~Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which Northridge Water District ("Northridge") should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the following agreement has been entered into. The perspectives of Northridge and the environmental organizations signatory to the *Water Forum Agreement* are also set forth below.~~

~~In the interest of coming to an agreement, signatories to the *Water Forum Agreement* agree to the compromise set forth in the agreement below.~~

#### ~~Agreement~~

~~All signatories will support a project to divert, treat and convey Sacramento River water in a pipeline that would connect to the Northridge pipeline ("Sacramento River Pipeline"). They will support a Warren Act contract with the U.S. Bureau of Reclamation for diversion of 29,000 acre feet of Placer County Water Agency ("PCWA") water from Folsom Reservoir. They will also support the PCWA petition to the SWRCB for change in its place of use for water to be used in north-central Sacramento County ("Expanded POU"), with the following conditions included in the SWRCB order:~~

~~1. — For the first ten years that water is available for diversion by Northridge from Folsom Reservoir under the Northridge-PCWA agreement, but not more than twelve years from the effective date of the *Water Forum Agreement*, whichever occurs first,<sup>19</sup> Northridge's diversions under the Northridge-PCWA agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:~~

~~a. — Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.~~

~~b. — In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.~~

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~~—<sup>19</sup> This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this agreement.~~

~~e. — In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten year period pursuant to the water use schedule in the Northridge-PCWA agreement, which allows annually increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.~~

~~d. — Nothing in this agreement is intended to restrict Northridge's ability to take delivery of Section 215 water from Folsom Reservoir from the U.S. Bureau of Reclamation whenever it may be available.~~

~~2. — If Northridge is able to take delivery of Sacramento River water through the Sacramento River pipeline, Northridge will thereafter divert water from Folsom Reservoir under the Northridge PCWA agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above Hodge").~~

~~3. — If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten year period, the SWRCB would hold a hearing ("SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge PCWA agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under Carmichael Water District and the City of Sacramento's prior water rights. Nothing in this agreement determines the relative priority of the water rights of the City of Sacramento, Carmichael Water District and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge PCWA agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above Hodge") and under the conditions referred to in Section 1.b. of this agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1.d. of this agreement.~~

~~The diversion restrictions set forth in this agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten year period. It is the intention of the parties that the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing in this agreement shall affect the right of PCWA to terminate the Northridge PCWA agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.~~

~~4. — Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge PCWA agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by Carmichael Water District or the City of Sacramento under their prior water rights.~~

~~Northridge's delivery to other purveyors of water diverted from the American River under the Northridge PCWA agreement is subject to those purveyors signing and implementing their commitments under the *Water Forum Agreement*.~~

~~[End of provisions to be included in SWRCB order.]~~

~~In addition, the *Water Forum Agreement* specifies that:~~

~~—— a. — With the support of all Water Forum signatories, Northridge will continue to work with other interested parties to pursue a project involving a diversion on the Sacramento River, a new water treatment plant and water conveyance facilities that connect to the Northridge pipeline for use of Sacramento River water within the area served by the Northridge pipeline.~~

~~—— b. — In determining the amount of surface water available for growth in the north part of Sacramento County within the ten-year period referred to in this agreement, the parties agree that the long-term annual average yield of water diverted from Folsom Reservoir under the Northridge PCWA agreement would be not more than 17,400 acre feet, which is the projected average annual water supply that would be available if diversions were restricted to above-Hodge conditions.~~

#### ~~**PERSPECTIVES OF THE PARTIES REGARDING DIVERSIONS BY NORTHRIDGE WATER DISTRICT OF AMERICAN RIVER WATER UNDER THE NORTHRIDGE-PCWA AGREEMENT**~~

~~Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which Northridge Water District should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the attached agreement has been entered. The perspectives of Northridge Water District and the environmental organizations signatory to the *Water Forum Agreement* are set forth below.~~

~~It is the position of the environmental organizations signatory to the *Water Forum Agreement* that:~~

~~1. — For purposes of a settlement, diversions by Northridge Water District of American River water under the Northridge PCWA agreement in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet are acceptable to members of the Environmental Caucus during the ten-year period following the effective date of the *Water Forum Agreement*. This is acceptable because other purveyors that divert upstream of the Lower American River who have fewer alternatives will not be~~

substantially increasing their diversions under the *Water Forum Agreement* during the ten-year period.

2. — After the ten-year period following the signing of the *Water Forum Agreement*, Northridge Water District should divert American River water under the Northridge PCWA agreement only when the unimpaired March through November inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above Hodge"). This reflects the Environmental Caucus' belief that the north Sacramento County area groundwater basin could be stabilized at an acceptable level with Northridge diverting American River water under the Northridge PCWA agreement in only above Hodge years.

3. — Diversions of American River water under the Northridge PCWA agreement below the Hodge threshold after the initial ten-year period would unreasonably affect the instream, wildlife, recreational and aesthetic values of the Lower American River. Such diversion below the Hodge threshold would also unreasonably affect the availability of water for instream uses downstream of the mouth of the American River.

It is the position of the Northridge Water District that:

1. — Northridge believes that its dry-year diversion restrictions under the *Water Forum Agreement* should be comparable to the requirements of other purveyors who divert water from Folsom Reservoir.

2. — Northridge believes that diversions of PCWA water from Folsom Reservoir in below-Hodge years after the conclusion of the ten-year period referred to in the agreement need not be prohibited to avoid significant impacts to instream uses of the lower American River and downstream.

**E. — SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS**  
(*Agreements in italics are common in all Specific Agreements.*)

1. — All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.

2. — *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. — All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative*

~~impacts on the Lower American River caused by diversions included in the Water Forum Agreement.~~

~~b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site specific impacts.~~

~~c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)~~

~~d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.~~

~~e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.~~

~~3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:~~

~~a. Speak before stakeholder boards and regulatory bodies;~~

~~b. Provide letters of endorsement;~~

~~c. Provide supportive comments to the media;~~

~~d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and~~

~~e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.~~

~~4. All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir,~~

~~habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.~~

~~5. — All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.~~

~~6. — All signatories will endorse an Improved Pattern of Fish Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River.~~

~~7. — All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.~~

~~8. — All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.~~

~~9. — All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.~~

~~10. — All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.~~

~~11. — All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV., Lower American River Habitat Management Element).~~

~~12. — All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

~~13. — All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.~~

~~14. — All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.~~

~~15. — All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.~~

~~16. — Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.~~

~~17. — This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.~~

~~18. — Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.~~

~~Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.~~

~~19. — All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).~~

~~20. — All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision Making” (Reference Four, IV).~~

~~21. — All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).~~

~~22. — Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.~~

~~23. — Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.~~

## ~~F. — ASSURANCES AND CAVEATS~~

~~Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.~~

~~Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.~~

~~All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:~~

~~*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the  
release of water for the fisheries.~~

~~The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."~~

~~Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.~~

~~In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.~~

~~1. — As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.~~

~~a. — If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water*~~

~~Forum Agreement, “Major Water Supply Projects that Will Receive Support Upon Signing the Water Forum Agreement” and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the Water Forum Agreement:~~

- ~~—— (1) — Support for the Improved Pattern of Fishery Flow Releases~~
- ~~—— (2) — Water Forum Successor Effort~~
- ~~—— (3) — Water Conservation Element~~
- ~~—— (4) — Lower American River Habitat Management Element~~
- ~~—— (5) — Support for the Updated Lower American River flow standard~~
- ~~—— (6) — Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.~~

~~and~~

~~b. — If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the Water Forum Agreement, “Major Water Supply Projects that will Receive Support Upon Signing the Water Forum Agreement,” that would constitute a changed condition that would be considered by the Water Forum Successor Effort.~~

~~2. — All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the Water Forum Agreement is contingent on implementation of those provisions of the Agreement that meet their interests.~~

~~3. — A stakeholder’s support for water supply entitlements and facilities is contingent on:~~

~~a. — Project specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.~~

~~b. — Purveyors’ commitment in their project specific EIRs and CEQA findings to: all seven elements of the Water Forum Agreement; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.~~

~~c. — Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the Water Forum Agreement shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the Water Forum Agreement as a third party beneficiary to the diversion agreements is dependent on that signatory~~

~~complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.~~

~~d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.~~

~~e. Adequate progress in construction of the Temperature Control Device.~~

~~f. Adequate progress in addressing the Sacramento River and Bay Delta conditions associated with implementation of the *Water Forum Agreement*.~~

~~4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.~~

#### ~~G. REMAINING ISSUES~~

None

## SAN JUAN WATER DISTRICT CONSORTIUM

(Includes Citrus Heights Water District, Fair Oaks Water District, Orange Vale Water Company, San Juan Water District, and a portion of the City of Folsom)

### A. Introduction

The San Juan Consortium service area is comprised of the San Juan Water District (SJWD) located in both Sacramento and Placer Counties, Citrus Heights Water District (CHWD), Fair Oaks Water District (FOWD), Orange Vale Water Company (OVWC), and a portion of the City of Folsom. These referenced Districts and the relevant portion of the City of Folsom are hereinafter collectively referred to as the SJWD.

SJWD has a pre-1914 water right to 33,000 acre-feet (AF), a contract with [Reclamation the United States Bureau of Reclamation \(USBR\)](#) for 11,200 AF and a contract with Placer County Water Agency (PCWA) for 25,000 AF. The Place of Use (POU) for the PCWA contract is within Placer County. SJWD has contracted with [Reclamation USBR](#) for an additional 13,000 AF of American River water, as authorized by Public Law (PL) 101-514.

Update – SJWD combined its two Reclamation contracts into a single contract under PL 101-514. The combined contract amount is 24,200 AF.  
- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

Update – The SJWD, under its contract with PCWA, entered into a water supply agreement (February 2001) with the City of Roseville to supply the City with 800 AF in most years. Also, the SJWD, under its contract with PCWA, entered into a water transfer agreement (February 2004) with the City of Roseville to transfer 3,200 AF to the City in most years.  
- This change is not considered an amendment to the Water Forum Agreement and was made for clarity by staff: January 2016.

All of SJWD surface water is diverted from the Folsom Reservoir and treated at the Sidney N. Peterson Treatment Plant. Treated water is then stored in a 62 million gallon treated storage reservoir.

CHWD, FOWD and OVWC supplement their surface water supply with groundwater to meet their peak needs.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water*

*Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. Baseline Diversions from American River**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

The baseline for the SJWDs American River diversion is 54,200 AF. This includes the full amount of the SJWDs Central Valley Project (CVP) contract (11,200 AF) and water right (33,000 AF) entitlements in Sacramento County and 10,000 AF of the PCWA contract amount in Placer County.

### **D. Agreement for meeting SJWDs water supply needs to the year 2030**

- 1. Most years:** As it applies to the SJWD portion of the agreement, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 950,000 AF.

In most years, SJWD will divert and use 82,200 AF.

- 2. Drier years:** As it applies to the SJWD portion of the agreement, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 950,000 AF and equal to or greater than 400,000 AF.

In drier years, SJWD will divert and use a decreasing amount of surface water from 82,200 to 54,200 AF in proportion to the decrease in the unimpaired inflow to Folsom Reservoir from 950,000 to 400,000 AF. During drier years SJWD will reduce its demand proportionally by additional conservation (up to 15%) and use groundwater to meet its additional demands.

**3. Driest years (i.e. conference years): Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.**

In the driest years, SJWD will reduce its diversion to 54,200 AF, equivalent to its baseline amount. During driest years SJWD will reduce its demand by additional conservation (up to 15%) and use groundwater to meet its additional demands.

However, it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years SJWD will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in [Chapter 4, Section I](#) ~~Section Four, I~~ of the *Water Forum Agreement*.

**E. Specific Agreements for Complying with the Seven Elements**  
*(Agreements in italics are common in all Specific Agreements.)*

1. All Signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be*

served by those water facilities (Reference [Chapter 4, Section IV ~~Section Four IV~~](#), *Relationship of Water Forum Agreement to Land Use Decision-Making*).

d. *In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

e. *All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

a. *Speak before stakeholder boards and regulatory bodies,*

b. *Provide letters of endorsement,*

c. *Provide supportive comments to the media,*

d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*

4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III ~~Section Three, III~~](#)).*

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.
8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.
9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.
10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV Section Three, IV](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. ~~(Reference Section Three, V., Water conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~
13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) Sacramento North Area Groundwater Management Authority](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the [Central South](#) Area and where appropriate participate in its development, to maintain a [Central South](#) Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the [South Galt](#) Area and where appropriate participate in its development, to maintain a [South Galt](#) Area estimated average annual sustainable yield of 115,000 AF.
16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.
17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories to the Agreement will endorse completion of the PL 101-514 water contract for SJWD.

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV Four, IV](#)).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the Water Forum Agreement is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven

elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for ~~Reclamation the U.S. Bureau of Reclamation~~ releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.
  - a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* "~~Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,~~" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms

of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **G. Remaining Issues**

None

## **SOUTH SACRAMENTO COUNTY AGRICULTURE**

**(Includes Clay Water District, Galt Irrigation District, Omochumne-Hartnell Water District and Sacramento County Farm Bureau)**

### **A. Introduction**

South Sacramento County Agriculture (SSCA) is composed of three organized districts (Clay Water District, Galt Irrigation District and the Omochumne-Hartnell Water District) and other unorganized areas represented by the Sacramento County Farm Bureau in the southeast and southwest part of the County.

SSCA currently meets its water needs primarily from groundwater, with a small amount of surface water available along the Cosumnes River by riparian users, purchase of tail water from Sacramento Municipal Utilities District (SMUD) downstream of the Rancho Seco facility and spill water contracts with ~~Reclamation the United States Bureau of Reclamation (USBR)~~ diverted from the Folsom South Canal.

The Folsom South Canal traverses the three districts and a portion of the southeast unorganized area referred to as other Folsom South Canal users.

Prior to the Central Valley Project Improvement Act (CVPIA), signed into law in October 1992, surface water was used intermittently through temporary contracts between the Districts and ~~Reclamation the USBR~~.

### **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### C. Baseline Diversions

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

No American River diversions were included in the baseline for South Sacramento County agricultural users.

### D. Agreement for meeting South Sacramento County Agricultural users water supply needs to the year 2030

- 1. Most years:** As it applies to the South Sacramento County agricultural users portion of the agreement, most years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 acre-feet (AF), also referenced as 1,900,000 acre-feet annually (AFA).

In most years, ~~SSCA South Sacramento County agricultural~~ users will use up to 35,000 AF which is diverted into the Folsom South Canal from the American River at Nimbus. The balance of their need would be met by groundwater pumping.

- 2. Drier years:** As it applies to the South Sacramento County agricultural users portion of the agreement, drier years is defined as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 1,600,000 AF, also referenced as 1,900,000 AFA.

In drier years, ~~SSCA South Sacramento County agricultural~~ users will not divert American River water from the Folsom South Canal. Their need would be met by groundwater pumping.

- 3. Driest years (i.e. conference years):** Defined for purposes of the *Water Forum Agreement* as follows: years when the projected March through November unimpaired inflow to Folsom Reservoir is less than 400,000 AF.

In the driest years, ~~SSCA South Sacramento County agricultural~~ users will not divert American River water from the Folsom South Canal. Their needs would be met by groundwater pumping.

However, it is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years ~~SSCA South Sacramento County agricultural~~ users will participate in a conference with other stakeholders on how the available water should be managed. The conferees will be guided by the conference year principles described in ~~Chapter 4, Section I Section Four, I~~ of the *Water Forum Agreement*.

### E. Specific Agreements for Complying with the Seven Elements

*(Agreements in italics are common in all Specific Agreements.)*

1. All signatories to the *Water Forum Agreement* will support transfer of a portion of SMUDs Central Valley Project (CVP) entitlement to be used by SSCA. Signatories will also support continued supply of CVP non-storable water under Section 215 to SSCA. All signatories to the *Water Forum Agreement* also agree that the Water Forum Successor Effort will consider supporting any additional transfers or new entitlements that may be proposed by SSCA.

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

- a. *Speak before stakeholder boards and regulatory bodies,*
  - b. *Provide letters of endorsement,*
  - c. *Provide supportive comments to the media,*
  - d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
  5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
  6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
  7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
  8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
  9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
  10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement.*

*To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference ~~Chapter 3, Section IV~~ ~~Section Three, IV~~, lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

13. All signatories will endorse and, where appropriate, participate in implementation of the Sacramento Groundwater Authority (SGA) ~~Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III Section Four, III](#)).
20. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled “Relationship of Water Forum Agreement to Land Use Decision-Making” (Reference [Chapter 4, Section IV Four, IV](#)).
21. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V Section Four, V](#)).
22. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.
23. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.

## **F. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento’s Fairbairn diversion will be required to comply with the diversion limitations of the City’s PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and

Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with ~~Reclamation the Bureau~~ that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor’s commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on ~~Table 3.1 the chart in Section Three, I,~~ of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.
3. A stakeholder's support for water supply entitlements and facilities is contingent on:
  - a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.
  - b. Purveyors' commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of Reclamation~~; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.
  - c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.
  - d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ ~~Section Four, I~~, of the *Water Forum Agreement*.
  - e. Adequate progress in construction of the temperature control device.
  - f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.
4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the *Water Forum*

EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## **G. Remaining Issues**

1. Development of a groundwater management arrangement for the ~~Central South~~ Area and the ~~South Gate~~ Area. [The Central Sacramento County Groundwater Management Plan was adopted in 2006 by the Sacramento Central Groundwater Authority (SCGA) and the South Basin Groundwater Management Plan was adopted by the Southeast Sacramento County Agricultural Water Authority in 2011.]
2. Water Forum signatories' support for new or increased surface water diversions to serve agricultural uses is dependent on acceptable assurances that those diverters will implement mutually agreed upon agricultural conservation programs.

## II. ENVIRONMENTAL INTERESTS AGREEMENT

- Environmental Council of Sacramento (ECOS)
- Friends of the River (FOR)
- Save the American River Association (SARA)
- Sierra Club - Mother Lode Chapter - Sacramento Group

### A. Introduction

The lower American River's fishery, wildlife, recreational and aesthetic value resulted in it being designated as a state and federal Wild and Scenic River. With over five million visitor days annually, the lower American River Parkway is already one of the most heavily used parks west of the Mississippi. It is anticipated that the *Water Forum Agreement* will preserve the public trust interests of the lower American River.

One of the ways these public trust interests will be preserved is through an updated lower American River flow standard. This new flow standard will be based on conditions in each Purveyor Specific Agreement (PSA) as to how much water can be diverted under different hydrologic conditions. It will also incorporate the improved pattern of fishery flow releases from Folsom Dam.

The improved pattern of fishery flow releases reflects biologists' balancing of the opportunities for two important species, fall-run Chinook salmon and steelhead. The improved pattern will somewhat reduce summer flows to conserve water to allow increased releases in the fall to benefit fall-run Chinook salmon. Increased diversions will also reduce the quantity of water available to be released in the summer. Reduced summer flows will result in slightly higher summer water temperatures which adversely affects steelhead. That is one reason the Habitat Management Element (HME) is essential to the *Water Forum Agreement*. Additionally, in 1998, steelhead were listed under the Endangered Species Act as threatened. Therefore, [Reclamation the U.S. Bureau of Reclamation](#) is required to operate Folsom Dam in a way that does not jeopardize the continued existence of the steelhead.

The Water Conservation Element of the *Agreement* will benefit the environment by reducing the amount of water that will have to be diverted from the region's rivers, including the American River. Action to meet customer's needs while reducing diversion impacts in drier years will also be effective in minimizing diversions in the drier years when water is critical to the lower American River.

The Groundwater Management Element will ensure that our groundwater supply is sustained for future generations.

Good water quality is another benefit of the *Agreement*. Protecting surface and groundwater will ensure that our drinking water continues to meet increasingly stringent federal and state standards.

Another benefit is the ability of environmental stakeholders to participate in the implementation of the *Water Forum Agreement*. Their participation in the Water Forum Successor Effort will continue the opportunity to incorporate environmental objectives in regional water planning and ensure that the coequal objective of preserving the lower American River is achieved.

In addition, environmental stakeholders' participation in the Water Forum Successor Effort will be guided by their principle that Sacramento River and Bay Delta conditions associated with implementation of the *Water Forum Agreement* be addressed.

## **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

## **C. Specific Agreements for complying with the Seven Elements**

*(Agreements in italics are common in all Specific Agreements.)*

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

- a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow*

*standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV Section-Four IV](#), Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

*3. Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*

*a. Speak before stakeholder boards and regulatory bodies,*

*b. Provide letters of endorsement,*

*c. Provide supportive comments to the media,*

*d. Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*

*e. Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*

*4. All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future*

will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.

5. All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.

6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).

7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.

8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.

9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.

10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV Section Three, IV](#), lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element~~). ~~This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) Sacramento North Area Groundwater Management Authority](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. Environmental, business, and citizens groups signatory to the Water Forum Agreement will acknowledge in writing their endorsement of the Water Forum's final Environmental Impact Report (EIR).

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference ~~Chapter 4, Section III~~ ~~Section Four, III~~).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference ~~Chapter 4, Section IV~~ ~~Four, IV~~).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference ~~Chapter 4, Section V~~ ~~Section Four, V~~).

23. *Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.*

24. *Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.*

#### **D. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the  
release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and [Reclamation the U.S. Bureau of Reclamation](#). Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in [Chapter 4, Section I Section Four, I](#), of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

### III. CITIZENS ORGANIZATIONS INTERESTS AGREEMENT

- League of Women Voters of Sacramento
- Sacramento County Alliance of Neighborhoods (SCAN)
- Sacramento County Taxpayers League

Update- SCAN representative have not engaged in the Water Forum for over five years. An internet search failed to find any presence of this organization. March 2016.

#### A. Introduction

Both existing and new residents will benefit from the *Water Forum Agreement*. The public will benefit by a more reliable, safe water supply especially during the inevitable drought periods. They will avoid the inconvenience and losses resulting from severe rationing. The local economy will also have a reliable water supply so that our local jobs can be preserved and new jobs can be created.

Good water quality is another benefit of the *Agreement*. Protection of surface and groundwater will ensure that our drinking water continues to meet increasingly stringent federal and state standards.

The public will also benefit from maintaining the fishery, wildlife, recreational and aesthetic values of the lower American River. With over five million visitor days annually, the lower American River Parkway is already one of the most appreciated parks west of the Mississippi. The *Water Forum Agreement* will preserve the values that make the Parkway so popular.

Another benefit to the public is the participation of citizens' organizations in the implementation of the *Water Forum Agreement*. This participation in the Water Forum Successor Effort will continue the communication and education of citizen organizations in regional water planning.

Any solution that provides for our future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigations will be needed. This *Agreement* identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money. This *Agreement* also identifies that capital costs associated with water acquisition, treatment, or delivery be divided equitably. It is also recommended that any costs for facilities funded through bonds be recovered as provided by law. In addition, signatories to the *Water Forum Agreement* agree that operational maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

## **B. Seven Elements of the *Water Forum Agreement*: Integrated Package**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

## **C. Specific Agreements for complying with the Seven Elements**

*(Agreements in italics are common in all Specific Agreements.)*

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

- c. *To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV](#) ~~Section Four IV~~, Relationship of Water Forum Agreement to Land Use Decision-Making).*
  - d. *In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*
  - e. *All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. *Speak before stakeholder boards and regulatory bodies,*
  - b. *Provide letters of endorsement,*
  - c. *Provide supportive comments to the media,*
  - d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

6. All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).
7. All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.
8. All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.
9. All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.
10. All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.
11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference [Chapter 3, Section IV Section Three, IV](#), lower American River Habitat Management Element).
12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. (~~Reference Section Three, V., Water conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~
13. All signatories will endorse and, where appropriate, participate in implementation of the [Sacramento Groundwater Authority \(SGA\) Sacramento North Area Groundwater Management Authority](#) to maintain a North Area estimated average annual sustainable yield of 131,000 AF.
14. All signatories will endorse development of a groundwater management arrangement for the [Central South](#) Area and where appropriate participate in its development, to maintain a [Central South](#) Area estimated average annual sustainable yield of 273,000 AF.
15. All signatories will endorse development of a groundwater management arrangement for the [South Galt](#) Area and where appropriate participate in its development, to maintain a [South Galt](#) Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. Environmental, business, and citizens groups signatory to the Water Forum Agreement will acknowledge in writing their endorsement of the Water Forum's final Environmental Impact Report (EIR).

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III](#) ~~Section Four, III~~).

21. All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV](#) ~~Four, IV~~).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V](#) ~~Section Four, V~~).

23. Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

24. *Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the Water Forum Agreement.*

#### **D. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”* and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement “Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”* that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with [Reclamation the U.S. Bureau of Reclamation](#); commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

- c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of Reclamation~~. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.
  - d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ [Section Four, I](#), of the *Water Forum Agreement*.
  - e. Adequate progress in construction of the temperature control device.
  - f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.
4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## IV. BUSINESS INTERESTS AGREEMENT

- Associated General Contractors (AGC)
- Building Industry Association of Superior California (BIA)
- Sacramento Association of Realtors (SAR)
- Sacramento Metropolitan Chamber of Commerce
- Sacramento-Sierra Building and Construction Trades Council

### A. Introduction

Both existing and new businesses will benefit from the *Water Forum Agreement*. A reliable and affordable water supply is important for all businesses and crucial for the health of the regional economy. For instance major employers such as Campbell Soup and Hewlett-Packard as well as land developers need to know that they will have a reliable water supply. Some of these businesses receive water from their own wells.

We need to demonstrate a reliable water supply for the region to support the planned development and to attract the new jobs needed by our residents. The types of clean industries favored by our region are not going to locate here if they believe water supplies will have to be reduced or curtailed during periodic droughts. The reliable water supply provided by an agreement will provide for our region's economic development and planned growth.

Like all other stakeholders, business will also have to contribute to the solution. Their support for environmental improvements and conservation programs will add a powerful voice. In addition they will have to pay their fair share for facilities and programs needed to make the overall solution work.

### B. Seven Elements of the *Water Forum Agreement*: Integrated Package

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- Increased surface water diversions
- Actions to meet customers' needs while reducing diversion impacts in drier years
- Support for an improved pattern of fishery flow releases from Folsom Reservoir
- Lower American River Habitat Management Element (HME)
- Water Conservation Element
- Groundwater Management Element
- Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

**C. Specific Agreements for complying with the Seven Elements**  
*(Agreements in italics are common in all Specific Agreements.)*

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement (PSA).

2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this PSA and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

*a. All signatories agree that implementation of the Water Forum Agreement including an improved pattern of fishery flow releases, the updated lower American River flow standard, the lower American River Habitat Management Element, actions to meet customers' needs while reducing diversion impacts in drier years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the lower American River caused by diversions included in the Water Forum Agreement.*

*b. Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*

*c. To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities (Reference [Chapter 4, Section IV Section Four IV](#), Relationship of Water Forum Agreement to Land Use Decision-Making).*

*d. In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*

*e. All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*

3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. *Speak before stakeholder boards and regulatory bodies,*
  - b. *Provide letters of endorsement,*
  - c. *Provide supportive comments to the media,*
  - d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum, and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*
5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the CPUC for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*
6. *All signatories will endorse an improved pattern of fishery flow releases from Folsom Reservoir and reduced daily flow fluctuations for the lower American River (Reference [Chapter 3, Section III Section Three, III](#)).*
7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an improved pattern of fishery flow releases from Folsom Reservoir will be implemented.*
8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this Agreement.*
9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*
10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement (Reference [Chapter 3, Section VII Section Three, VII](#), Water Forum Successor Effort). This includes participating with other*

signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.

11. All signatories will endorse and, where appropriate, financially participate in the lower American River Habitat Management Element (Reference ~~Chapter 3, Section IV Section Three, IV~~, lower American River Habitat Management Element).

12. All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement. ~~(Reference Section Three, V., Water conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement.~~

13. All signatories will endorse and, where appropriate, participate in implementation of the ~~Sacramento Groundwater Authority (SGA) Sacramento North Area Groundwater Management Authority~~ to maintain a North Area estimated average annual sustainable yield of 131,000 AF.

14. All signatories will endorse development of a groundwater management arrangement for the ~~Central South~~ Area and where appropriate participate in its development, to maintain a ~~Central South~~ Area estimated average annual sustainable yield of 273,000 AF.

15. All signatories will endorse development of a groundwater management arrangement for the ~~South Galt~~ Area and where appropriate participate in its development, to maintain a ~~South Galt~~ Area estimated average annual sustainable yield of 115,000 AF.

16. Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.

17. This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.

18. Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.

Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.

19. Environmental, business, and citizens groups signatory to the *Water Forum Agreement* will acknowledge in writing their endorsement of the Water Forum's final Environmental Impact Report (EIR).

20. All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference [Chapter 4, Section III](#) ~~Section Four, III~~).

21. All signatories will endorse, and where appropriate, participate in the section of the *Water Forum Agreement* entitled "Relationship of Water Forum Agreement to Land Use Decision-Making" (Reference [Chapter 4, Section IV](#) ~~Four, IV~~).

22. All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference [Chapter 4, Section V](#) ~~Section Four, V~~).

23. Purveyors signatory to the *Water Forum Agreement* will reference the *Water Forum Agreement*, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the statutes of 1995.

24. Any transfers of American River water by signatories will be delivered in a manner consistent with an improved pattern of fishery flow releases as referenced in the *Water Forum Agreement*.

#### **D. Assurances and Caveats**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats section of this *Water Forum Agreement*.

Two particularly important assurances are the updated lower American River flow standard and upstream American River diversion agreements.

All signatories agree they will recommend to the State Water Resources Control Board (SWRCB) an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the lower American River. The recommendation will include requirements for [Reclamation the U.S. Bureau of Reclamation](#) releases to the lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's PSA. The *Water Forum Agreement* also includes agreed upon dry year reductions by

purveyors upstream of Nimbus Dam. The recommendation for an updated lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the improved pattern of fishery flow releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing “Declaration of Full Appropriation for the American River.”

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with [Reclamation the Bureau](#) that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor’s commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive Water Forum Support Upon Signing The Water Forum Agreement,”~~ and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the improved pattern of fishery flow releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River HME
- (5) Support for the updated lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its PSA.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on [Table 3.1 the chart in Section Three, I,](#) of the *Water Forum Agreement* ~~“Major Water Supply Projects that will Receive~~

~~*Water Forum Support Upon Signing The Water Forum Agreement,*~~” that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories’ obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder’s support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act (CEQA), and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors’ commitment in their project-specific Environmental Impact Reports (EIRs) and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with ~~Reclamation the U.S. Bureau of~~ *Reclamation*; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its PSA into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and ~~Reclamation the U.S. Bureau of~~ *Reclamation*. Other signatories to the *Water Forum Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the PSA for the purveyor’s project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated lower American River standard. The schedule for obtaining the updated standard is in ~~Chapter 4, Section I~~ *Section Four, I*, of the *Water Forum Agreement*.

e. Adequate progress in construction of the temperature control device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

## V. PROCEDURAL AGREEMENTS

This Sacramento Suburban Water District PSA was developed as a result of the consolidation of Northridge Water District and Arden-Arcade Water District. The former Northridge PSA and Arden-Arcade Procedural Agreements have been superseded.

Approved by the WFSE, June 2003

### ~~ARCADE WATER DISTRICT~~

~~The initial Water Forum Agreement will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.~~

~~The Water Forum Agreement will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the Water Forum Agreement will be amended to include them.~~

~~Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:~~

- ~~a. Amending the Water Forum Agreement~~
- ~~b. Decisions regarding any litigation associated with the Water Forum Agreement or the Water Forum EIR~~
- ~~c. Decisions regarding expenditures of Habitat Management funds.~~

~~Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the Water Forum Agreement they will first attempt to resolve the dispute through mediation in the Successor Effort.~~

~~Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.~~

## EL DORADO COUNTY WATER AGENCY

### A. Preamble

A diverse group of business and agricultural leaders, environmentalists, citizen groups, water managers, and local governments has carefully reviewed the region's water future. They found that unless we act now, our region is looking at a future with water shortages, environmental degradation, contamination, threats to groundwater reliability and limits to economic prosperity. Well intentioned but separate efforts by individual stakeholders have left everyone in gridlock.

Joining together as the Water Forum, these community leaders from Sacramento along with water managers from Placer and El Dorado counties have spent thousands of hours researching the causes for this gridlock, agreeing on principles to guide development of a regional solution, and negotiating the *Water Forum Agreement*.

This diverse group agrees that the only way to break the gridlock is to implement a comprehensive package of linked actions that will achieve two coequal objectives:

**Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;**

**and**

**Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.**

### B. Background

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as the effective date of the initial *Water Forum Agreement*. However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

The following describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

### C. Specific Agreements

1. All signatories to the *Water Forum Agreement* have committed to continue to work in good faith with organizations whose issues were not fully resolved by the effective date of the initial *Water Forum Agreement* (see Chapter 4, Section VI ~~Section 4, VI~~ of the

*Water Forum Agreement* and more specifically item B. 16 of the Memorandum of Understanding [MOU] for the *Water Forum Agreement*). Their goal will be to exert their best efforts to negotiate mutually acceptable agreements to resolve remaining issues as quickly as possible. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

2. Mutually agreed upon Water Forum Successor Effort expenses related solely to converting Georgetown Divide Public Utility District's and El Dorado Irrigation District's Procedural Agreements into specific agreements will be reimbursed by El Dorado County Water Agency as provided in paragraph D below. As soon as a stakeholder organization has negotiated a specific agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other stakeholder organizations that have specific agreements.

3. Stakeholder organizations having Procedural Agreements will participate on the same basis as other parties in the Water Forum Successor Effort, except that they will not participate in the following three matters:

- a. Amending the *Water Forum Agreement*;
- b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum Environmental Impact Report (EIR); and
- c. Mandatory payment of Habitat Management Funds and decisions regarding expenditures of Habitat Management Funds.

4. Stakeholder organizations having Procedural Agreements with the Water Forum agree that if disputes arise over the negotiations to convert the Stakeholder organization's Procedural Agreement into a Purveyor Specific Agreement (PSA), the Water Forum EIR, or the implementation of the *Water Forum Agreement* they will first attempt to resolve the dispute through mediation in the Successor Effort.

5. If mediation is unsuccessful as related to in C. 4 above, either the Stakeholder organization with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.

#### **D. Existing Agreement**

The El Dorado County Water Agency (on behalf of the agency, Georgetown Divide Public Utility District, and El Dorado Irrigation District, hereinafter "El Dorado interests") and the City of Sacramento (on behalf of the City-County Office of Metropolitan Water Planning and the Water Forum) have entered into an agreement to cover the expenses for the El Dorado interests to develop specific agreements described in C.2 above. The termination, expiration, or lapse of the agreement to cover expenses shall automatically terminate this Procedural Agreement after expiration of sixty days.

**EL DORADO COUNTY WATER AGENCY**

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Name

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Title

## El Dorado County Interests Update

In January 2006, shortly after the adoption of the El Dorado County's General Plan, the El Dorado County Water Agency requested that the Water Forum host discussions among local water, development, agriculture, government interests and individuals with an environmental perspective to discuss future water supplies for their county. Before initiating these discussions, the Water Forum had informal one-on-one interviews with a range of key leaders from various perspectives in El Dorado County to determine the issues requiring further exploration.

Issues that surfaced in these interviews include: the level of future water demand for municipal and industrial use, current and future drought protection, and water for future agricultural growth. The relationship between water supplies and the El Dorado General Plan was also discussed.

After thoughtful discussions, the group concluded that the zone of potential agreement among the participants was not sufficient to identify a future water supply strategy based on consensus. The individuals participating in the conversations also acknowledged in their conversations that individuals, agencies and organizations in El Dorado County will need to pursue various policy strategies based on what they think is best for the future of El Dorado County. At times, these strategies may place some of the individuals participating in these discussions in a position in which they will need to publicly disagree with each other.

All who participated in these discussions affirmed the value of dialogue and open conversation regarding the vision for the future of their community.

## **~~EL DORADO IRRIGATION DISTRICT~~**

~~The initial Water Forum Agreement will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.~~

~~The Water Forum Agreement will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the Water Forum Agreement will be amended to include them.~~

~~Mutually agreed upon Successor Effort expenses related solely to developing the purveyor's Specific Agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a Specific Agreement and it signs the Water Forum Agreement, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.~~

~~Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:~~

- ~~a. — Amending the Water Forum Agreement~~
- ~~b. — Decisions regarding any litigation associated with the Water Forum Agreement or the Water Forum EIR.~~
- ~~c. — Decisions regarding expenditures of Habitat Management funds.~~

~~Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the Water Forum Agreement they will first attempt to resolve the dispute through mediation in the Successor Effort.~~

~~Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.~~

## **~~GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT~~**

~~The initial Water Forum Agreement will record those agreements among stakeholder organizations that could be entered into as of the effective date of the initial agreement. However it is recognized that there may be some stakeholder organizations whose issues cannot be resolved by that time.~~

~~The Water Forum Agreement will include procedural agreements committing all stakeholders to work in good faith to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the Water Forum Agreement will be amended to include them.~~

~~Mutually agreed upon Successor Effort expenses related solely to developing the purveyor's Specific Agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a Specific Agreement and it signs the Water Forum Agreement, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.~~

~~Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:~~

- ~~a. ——— Amending the Water Forum Agreement~~
- ~~b. ——— Decisions regarding any litigation associated with the Water Forum Agreement or the Water Forum EIR.~~
- ~~c. ——— Decisions regarding expenditures of Habitat Management funds.~~

~~Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the Water Forum Agreement they will first attempt to resolve the dispute through mediation in the Successor Effort.~~

~~Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel the Procedural Agreement upon sixty days notice to the other party.~~

## FLORIN RESOURCE CONSERVATION DISTRICT

Amendment – The Florin Resource Conservation District signed its procedural agreement in 2002.

### A. Preamble

A diverse group of business and agricultural leaders, environmentalists, citizen groups, water managers, and local governments has carefully reviewed the region's water future. They found that unless we act now, our region is looking at a future with water shortages, environmental degradation, contamination, threats to groundwater reliability, and limits to economic prosperity. Well-intentioned but separate efforts by individual stakeholders have left everyone in gridlock.

Joining together as the Water Forum, these community leaders from Sacramento, along with water managers from Placer and El Dorado Counties, have spent thousands of hours researching the causes for this gridlock, agreeing on principles to guide development of a regional solution and negotiating the *Water Forum Agreement*.

This diverse group agrees that the only way to break the gridlock is to implement a comprehensive package of linked actions that will achieve two coequal objectives:

**Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;**

**and**

**Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.**

### B. Introduction

Florin Resource Conservation District (FRCD) serves an area approximately thirteen (13) miles square in the City of Elk Grove and southern Sacramento County. FRCD currently has approximately 10,500 connections, of which 10,122 are residential.

The water service area boundaries are north to Sheldon Road, west to Highway 99, and southeast to Grantline Road, omitting the Union Industrial Park.

Water production is from twelve (12) groundwater wells. Additional water sources include treated surface and groundwater from Sacramento County, Zone 40.

### C. Background

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as of the effective date of the initial *Water Forum Agreement*.

However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

The following describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

**D. Specific Agreement**

1. All signatories to the *Water Forum Agreement* commit to work in good faith with organizations whose issues were not fully resolved by the effective date of the initial *Water Forum Agreement*. The goal will be to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.
2. As soon as the purveyor has negotiated a mutually acceptable Purveyor Specific Agreement (PSA) and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as the other purveyors that have specific agreements.
3. Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these issues:
  - a. Amending the *Water Forum Agreement*;
  - b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum Environmental Impact Report (EIR); and
  - c. Decisions regarding expenditures of Habitat Management Funds.
4. Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement*, they will first attempt to resolve the dispute through mediation in the Successor Effort.
5. Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel this Procedural Agreement upon sixty days' notice to the other party.

**FLORIN RESOURCE CONSERVATION DISTRICT**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

## **RANCHO MURIETA COMMUNITY SERVICES DISTRICT**

### **A. Preamble**

A diverse group of business and agricultural leaders, environmentalists, citizen groups, water managers, and local governments has carefully reviewed the region's water future. They found that unless we act now, our region is looking at a future with water shortages, environmental degradation, contamination, threats to groundwater reliability and limits to economic prosperity. Well-intentioned but separate efforts by individual stakeholders have left everyone in gridlock.

Joining together as the Water Forum, these community leaders from Sacramento along with water managers from Placer and El Dorado counties have spent thousands of hours researching the causes for this gridlock, agreeing on principles to guide development of a regional solution, and negotiating the *Water Forum Agreement*.

This diverse group agrees that the only way to break the gridlock is to implement a comprehensive package of linked actions that will achieve two coequal objectives:

**Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030;**

**and**

**Preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River.**

### **B. Background**

The initial *Water Forum Agreement* records those agreements among stakeholder organizations that could be entered into as the effective date of the initial *Water Forum Agreement*. However, it is recognized that there are some stakeholder organizations that have remaining issues that could not be resolved by that time.

The following describes the process by which those remaining issues will be addressed and how the *Water Forum Agreement* will be amended to include those agreements as soon as they are complete.

### **C. Specific Agreements**

1. All signatories to the *Water Forum Agreement* commit to work in good faith with organizations whose issues were not fully resolved by the effective date of the initial *Water Forum Agreement*. Their goal will be to negotiate mutually acceptable agreements to resolve remaining issues. As soon as these issues are agreed to, the *Water Forum Agreement* will be amended to include them.

2. Mutually agreed upon Water Forum Successor Effort expenses related solely to converting that purveyor's procedural agreement into a specific agreement will be reimbursed by that purveyor. As soon as the purveyor has negotiated a specific agreement and it signs the *Water Forum Agreement*, it will contribute to the Water Forum Successor Effort on the same basis as other purveyors that have specific agreements.
3. Purveyors having Procedural Agreements will participate in the Water Forum Successor Effort, except on these three issues:
  - a. Amending the *Water Forum Agreement*;
  - b. Decisions regarding any litigation associated with the *Water Forum Agreement* or the Water Forum Environmental Impact Report (EIR); and
  - c. Decisions regarding expenditures of Habitat Management Funds.
4. Purveyors having Procedural Agreements with the Water Forum agree that if disputes arise over the Water Forum EIR or implementation of the *Water Forum Agreement*, they will first attempt to resolve the dispute through mediation in the Successor Effort.
5. Either the purveyor with a Procedural Agreement or the Water Forum Successor Effort may cancel this Procedural Agreement upon sixty days notice to the other party.

#### **RANCHO MURIETA COMMUNITY SERVICES DISTRICT**

\_\_\_\_\_  
Name

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Title

# Glossary

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Sources of definitions indicated in italics

## **Acre foot (AF)**

An acre is about the size of a football field. An acre foot is the amount of water that would cover one acre of land one foot deep. It equals 325,800 gallons. That is about how much water five people use a year for drinking, washing, and landscape watering.

## **Aquifer**

A geologic formation that stores, transmits and yields significant quantities of water to wells and springs. *Water Education Foundation*

## **Anadromous Fish**

Pertaining to fish that spend a part of their life cycle in the sea and return to freshwater streams to spawn.

## **Bay-Delta Standards**

Standards to balance and protect all beneficial uses of San Francisco Bay-Delta water - including fishery and other instream uses - and to modify existing water rights if necessary to achieve that balance. *Volume I of United States Bureau of Reclamation American River Water Resources Investigation (USBR ARWRI)*

## **Best Management Practices (Water Conservation)**

A policy, program, practice, rule, regulation or ordinance of the use of devices, equipment or facilities which is an established and generally accepted practice that results in more efficient use or conservation of water, or a practice that has been proven to indicate that significant conservation benefits can be achieved. *MOU Regarding Water Conservation in California*

## **California Environmental Quality Act**

An act conceived primarily as a means to require public agency decision makers to document and consider the environmental implications of their actions. *Guide to the California Environmental Quality Act: Remy & Thomas*

## **Central Valley Project Improvement Act (CVPIA)**

This Act amends the Central Valley Project (CVP) reauthorization act of 1937 and reauthorized the CVP to add mitigation, protection, and restoration of fish and wildlife as project purposes equal to agricultural and domestic uses, and to make fish and wildlife enhancement a project purpose equal to power. *USBR ARWRI*

## **cfs**

cubic feet per second. One cubic foot is about 7 ½ gallons.

## **Change of Service**

Point of time at which a water service account is transferred.

**Changed Conditions**

This refers to significant changes in circumstances such as laws, regulations, and even the health of the river which may occur after a *Water Forum Agreement* is signed. If there are changed conditions which may interfere with implementation of the agreement, the Successor Effort would reopen negotiations.

**Conjunctive Use**

The planned joint use of surface and groundwater to improve overall water supply reliability.  
*Water Education Foundation*

**Conservation Pricing**

Pricing which provides an incentive to reduce average or peak use, or both. *MOU Regarding Water Conservation in California*

**Contractual Entitlement**

A water entitlement based on a contract, such as a contract with the United States Bureau of Reclamation for Central Valley Project water.

**Cost-Effective**

A case where the financial benefits of a project are greater than the overall cost.

**CVPIA Programmatic Environmental Impact Statement**

The program level document prepared by the United States Bureau of Reclamation on the Central Valley Project Improvement Act to comply with the requirements of the National Environmental Policy Act.

**Deal Breaker**

A person, organization, or entity who causes a bargain or agreement to fail.

**Equity**

The state, ideal, or quality of being just, impartial, and fair.

**Fishery Flow Pattern**

Pattern of river flows needed for spawning, incubation and rearing of young fish as well as migration of juvenile and adult fish. Water Education Foundation For purposes of the Water Forum Agreement, the Improved Pattern of Fishery Flow Releases is defined as the AFRP flow objective for the Lower American River as set forth in the November 20, 1997 “*Department of the Interior Final Administrative Proposal on the Management of Section 3406(b)(2) Water.*”

**Groundwater**

The water in an aquifer. For human use and consumption this water is generally pumped to the surface through a well.

**Inter-basin Transfer**

Water transfers from entities outside of a watershed to entities within a watershed.

**Interior Audit Program**

A program which identifies the top water users and offers a water use audit service that will identify where water can be saved and provides incentives sufficient to achieve customer implementation. *MOU Regarding Water Conservation in California*

**Landscape Efficiencies**

What is achieved through skillful planting and irrigation design, appropriate use of plant materials, and intelligent management to assure landscape development that avoids excessive demands and is less vulnerable to periods of severe drought. *Water Conservation Ordinance for Landscape Water Conservation*

**Memorandum of Understanding (MOU)**

A means of gaining formal consensus between two or more parties on a particular complex issue.

**Meter Retrofit Programs**

Programs targeted toward unmetered homes and businesses which either install a new meter or repair an existing meter to provide for billing based on volume of use. *MOU Regarding Water Conservation in California*

**mgd**

million gallons per day

**Point of Diversion**

The place along the stream channel where a diverter takes control of the water. How to File an Application to Appropriate Water, State Water Resources Control Board Public Trust The legal doctrine that protects the rights of the public to use water courses for commerce, navigation, fisheries, recreation, open space, preservation of ecological units in their natural state, and similar uses for which those lands are uniquely suited. It is based on the California State Constitution and goes back to English Common Law. The California Supreme Court stated, “*The state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible.*” *National Audubon (33Cal.3d 419 1983)*

**Purveyor**

An agency or district that provides water to customers for a fee.

**Reasonable-Feasible**

Practicable and in accord with reason.

**Reclaimed Water**

Municipal, industrial or agricultural wastewater treated and/or managed to produce water of quality suitable for additional uses.

**Riparian Vegetation**

Of, adjacent to, or living on, the bank of a river or, sometimes, of a lake, pond, etc. *Webster's Ninth New Collegiate Dictionary*

**Stakeholder**

In a negotiation, a person, organization or entity entrusted to represent those with an interest in the outcome. There are 46 stakeholder organizations participating in the Water Forum.

**State Water Project**

California's state - owned and operated water project consisting of 22 dams and reservoirs which delivers water 600 miles from the Sacramento Valley to Los Angeles. *Water Education Foundation*

**Surface Water Diversions**

Water that is diverted and/or pumped from above ground sources such as rivers, streams, reservoirs and lakes as opposed to groundwater which is water pumped from the aquifer.

**Sustainable Yield**

Sustainable yield is a balance between pumping and basin recharge and is expressed as the number of acre feet of water per year which can be pumped from the basin on a long term average annual basis.

**Subsidence**

Sinking of the land surface due to a number of factors, of which groundwater extraction is one. *Water Education Foundation*

**Ultra-Low Flush (ULF) Toilet**

A 1.6 gallon toilet. *MOU Regarding Water Conservation in California*

**Water Forum**

A community collaboration process involving stakeholder organizations and commitment to the coequal objectives of *providing a reliable and safe water supply for the region's economic health and planned development through the year 2030 and preserving the fishery, wildlife, recreational, and aesthetic values of the Lower American River.*

**Water Forum Agreement**

The formal agreement among the Water Forum representatives that will be presented to stakeholder organizations in fall 1999 for ratification without revision. The *Water Forum Agreement* will include an Implementation and Monitoring Plan. The agreement will include many interrelated pieces that could not be separated without destroying the overall solution.

## Acronyms Guide

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Full-length	Acronym
and	<b>&amp;</b>
acre feet	<b>acre-feet or AF</b>
acre feet per year	<b>AF/year</b>
acre-feet annually	<b>AFA</b>
Anadromous Fish Restoration Program	<b>AFRP</b>
Antelope Transmission Pipeline	<b>ATP</b>
Arcade Service Area	<b>ASA</b>
Arden Cordova Water Services	<b>Sacramento Suburban Water District or SSWD</b>
Arden Water District	<b>AWD</b>
Associated General Contractors	<b>AGC</b>
ave	<b>average</b>
Best Management Practices	<b>BMPs</b>
Building Industry Association of Superior California	<b>BIA</b>
California Department of Fish and Game	<b>California Department of Fish &amp; Wildlife (CFWS)</b>
California Environmental Quality Act	<b>CEQA</b>
California Public Utilities Commission	<b>CPUC</b>
Carmichael Water District	<b>CWD</b>
Central Valley Project	<b>CVP</b>
Central Valley Project Improvement Act	<b>CVPIA</b>
Citizens Utilities Company of California	<b>California-American Water Company or CAWC or Cal-Am</b>
Citrus Heights Water District	<b>CHWD</b>
Cooperative Transmission Pipeline	<b>CTP</b>
cubic feet per second	<b>cfs</b>
Del Paso Manor Water District	<b>DPMWD</b>
Elk Grove Water Works	<b>EGWW</b>
Environmental Council of Sacramento	<b>ECOS</b>
Environmental Impact Report	<b>EIR</b>
Environmental Impact Statement	<b>EIS</b>
evapotranspiration	<b>ET</b>
Fair Oaks Water District	<b>FOWD</b>
Fairbairn Water Treatment Plant	<b>FWTP</b>

Federal Energy Regulatory Commission	<b>FERC</b>
Florin County Water District	<b>FCWD</b>
Florin Resource Conservation District	<b>FRCD</b>
Friends of the River	<b>FOR</b>
Golden State Water Company	<b>GSWC</b>
Habitat Management Plan	<b>HME</b>
Local Agency Formation Commission	<b>LAFCo</b>
Lower American River	<b>LAR</b>
Lower American River Task Force	<b>LARTF</b>
Memorandum of Understanding	<b>MOU</b>
Middle Fork Project	<b>MFP</b>
million gallons per day	<b>mgd</b>
municipal and industrial	<b>M &amp; I</b>
Northridge Service Area	<b>NSA</b>
Northridge Transmission Pipeline	<b>NTP</b>
Northridge Water District	<b>Sacramento Suburban Water District or SSWD</b>
Operations Criteria and Plan	<b>OCAP</b>
Orange Vale Water Company	<b>OVWC</b>
Pacific Gas & Electric Company	<b>PG&amp;E</b>
Place of Use	<b>POU</b>
Placer County Water Agency	<b>PCWA</b>
Public Law	<b>PL</b>
Public Utility District	<b>PUD</b>
Purveyor Specific Agreement	<b>PSA</b>
Rio Linda/Elverta Community Water District	<b>RLECWD</b>
River Corridor Management Plan	<b>RCMP</b>
Sacramento Area Flood Control Agency	<b>SAFCA</b>
Sacramento Area Water Works Association	<b>SAWWA</b>
Sacramento Association of Realtors	<b>SAR</b>
Sacramento County Alliance of Neighborhoods	<b>SCAN</b>
Sacramento County Water Agency	<b>SCWA</b>
Sacramento Metropolitan Water Authority	<b>SMWA</b>
Sacramento Municipal Utility District	<b>SMUD</b>
Sacramento North Area Groundwater Management Authority	<b>Sacramento Groundwater Authority or SGA</b>
Sacramento Suburban Transmission Pipeline	<b>SSTP</b>
San Juan Water District	<b>SJWD</b>
Save the American River Association	<b>SARA</b>

Section 1, 2,...	<b>Chapter 1, 2,...</b>
South Sacramento County Agriculture	<b>SSCA</b>
State of California Department of Water Resources	<b>DWR</b>
State Water Resources Control Board	<b>SWRCB</b>
Table 1, etc.	<b>Table 1.1, etc.</b>
U.S. Bureau of Reclamation or USBR	<b>Reclamation</b>
U.S. Fish and Wildlife Service	<b>USFWS</b>
with	<b>w/</b>
Water Forum Successor Effort	<b>WFSE</b>
Water Treatment Plant	<b>WTP</b>

# Appendix B

## **Cultural Resources Survey**





# CITY OF ROSEVILLE AQUIFER STORAGE AND RECOVERY PROGRAM

## Cultural Resources Survey Report (Redacted)

Prepared for the  
City of Roseville

August 2020





# CITY OF ROSEVILLE AQUIFER STORAGE AND RECOVERY PROGRAM

## Cultural Resources Survey Report (Redacted)

Prepared for the  
City of Roseville

August 2020

Prepared by  
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ESA Project #191396



# STATEMENT OF CONFIDENTIALITY

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This report has *redacted* the locations of cultural resources in the vicinity of the City of Roseville Aquifer Storage and Recovery Program. Disclosure of sensitive cultural resources information to the public may be in violation of both federal and State laws. Federal regulations applicable to the project include, but may not be limited to, Section 304 of the National Historic Preservation Act (54 United States Code [U.S.C.] 307103) and the Archaeological Resources Protection Act (16 U.S.C. Section 470h). The applicable State regulations include, but may not be limited to, Government Code Section 6250 et seq. and Section 6254 et seq. Disclosure of site location information to individuals other than those meeting the U.S. Secretary of the Interior's professional standards or the California State Personnel Board criteria for Associate State Archaeologist or State Historian II violates the California Office of Historic Preservation records access policy.

# SUMMARY OF FINDINGS

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Environmental Science Associates (ESA) has prepared this Cultural Resources Survey Report for the City of Roseville (City) Aquifer Storage and Recovery (ASR) Program, consisting of six (6) new ASR production well locations and two alternate locations. This report has been prepared to support a Supplemental Environmental Impact Report (SEIR) and satisfy the requirements of the California Environmental Quality Act (CEQA). The City is the lead agency under CEQA. Because the City intends to seek State Revolving Fund (SRF) Program funding, the proposed project also needs to comply with the State Water Resources Control Board (SWRCB) CEQA Plus requirements. The SRF Program is partially funded by the U.S. Environmental Protection Agency, which is administered by the SWRCB. Consultation with the State Historic Preservation Officer (SHPO) and other consulting parties required under Section 106 of the National Historic Preservation Act (NHPA), as amended, will be completed by the SWRCB as federal lead agency.

Results of the records search indicate that no cultural resources have been previously recorded within the proposed project Area of Potential Effects (APE). An ESA archaeologist completed a field survey of the eight (8) new ASR production well locations on February 24, May 15, and July 24, 2020. The survey did not identify cultural resources or other evidence of past human use or occupation in the APE.

The results of the background research and survey effort conclude that the proposed project would not impact historic properties (including archaeological resources). ESA recommends a finding of **No Historic Properties Affected** for the proposed project.

Based on the survey results, nearby site distribution, previous disturbance, and environmental setting, the proposed ASR production well locations have a low archaeological sensitivity and a low potential to uncover archaeological resources. While unlikely, the inadvertent discovery of archaeological resources or human remains in areas of low archaeological sensitivity cannot be entirely discounted. The City provides recommendations for the inadvertent discovery of archaeological resources or human remains.

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## Introduction

Environmental Science Associates (ESA) has prepared this Cultural Resources Survey Report for the City of Roseville (City) Aquifer Storage and Recovery (ASR) Program. The proposed project, consisting of eight (8) new (including two alternate locations)<sup>1</sup> ASR production well locations, is in the City of Roseville, Placer County (**Figure 1**) as shown on the United States Geological Survey (USGS) Roseville and Citrus Heights 7.5-minute topographic quadrangles (**Figure 2**).

This report has been prepared to support a Supplemental Environmental Impact Report (SEIR) and satisfy the requirements of the California Environmental Quality Act (CEQA). The City is the lead agency under CEQA. Because the City intends to seek State Revolving Fund (SRF) Program funding, the proposed project also needs to comply with the State Water Resources Control Board (SWRCB) CEQA Plus requirements. The SRF Program is partially funded by the U.S. Environmental Protection Agency, which is administered by the SWRCB. Consultation with the State Historic Preservation Officer (SHPO) and other consulting parties required under Section 106 of the National Historic Preservation Act (NHPA), as amended, will be completed by the SWRCB as federal lead agency.

The purpose of this report, in accordance with Section 106 of the NHPA and CEQA, is to:

- Delineate a Project Area of Potential Effects (APE)/project area (herein referred to as the APE);
- Identify cultural resources, including buildings, structures, archaeological sites, and places of traditional cultural importance to Native Americans within the APE;
- Evaluate cultural resources according to the criteria set forth by the National Register of Historic Places (National Register) and the California Register of Historical Resources (California Register) to determine whether they are historic properties/historical resources;
- Determine whether there would be an adverse effect on historic properties/historical resources; and
- Recommend procedures for avoidance or mitigation of adverse effects to historic properties/historical resources.

This report documents the methods and findings of the background research and surface survey conducted for the proposed project. Heidi Koenig, M.A., Cultural Resources Management, Registered Professional Archaeologist (RPA), with 20 years of archaeological experience throughout California, completed this study. She meets the Secretary of the Interior's Professional Qualifications Standards for archaeologist. Matthew A. Russell, Ph.D., RPA, with over 25 years of experience in California cultural resources studies, reviewed the report.

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<sup>1</sup> The project includes a total of six ASR production wells.

## Project Description

The ASR process consists of the injection of treated surplus surface water through specially designed groundwater wells into underground aquifers during periods of normal and above normal precipitation. The stored water is then available for later extraction (i.e. recovery), to meet later demands for municipal use. The source of water for ASR consists predominately of excess surface water supplies such as flood flows or through the transfer of surface water from other entities. The City is working on expanding ASR as a component of an overall water supply strategy to fully utilize available surface water and manage the groundwater aquifer for its cost-effective, large-scale storage capability, which is not readily available aboveground within the City.

This report identifies a total of eight (8) new ASR production well locations that include two alternate locations which would only be used if two of the primary wells were found to be insufficient. The well locations generally require approximately 0.5 acres of land for construction and operation. Municipal wells typically include what is referred to as “top side” or above ground infrastructure that includes a small structure to house and secure the above ground ASR well equipment and support infrastructure such as pumps, electrical and disinfection equipment. Municipal wells also include underground components, infrastructure that includes well casing, filter pack, cement, a downhole control valve, the pump, column pipe, etc. Top side improvements can be protected by perimeter fencing to enclose and secure above ground infrastructure. The type of top side improvement generally depends on site specific conditions and the potential need for noise mitigation (i.e. normally accomplished with a building).

## Area of Potential Effects

According to federal guidelines, the APE is defined as:

...the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16[d]).

The APE includes all areas of potential ground-disturbing activity, both surface and subsurface, as well as associated work areas and access. **Table 1** below describes the horizontal area of direct impact (ground disturbance) at each of the ASR production well locations. The vertical APE for top side improvements would be up to 10 feet below ground surface. ASR wells are drilled to a depth of about 500 feet. **Figures 3a-2h** show the ASR locations. The construction footprint is the area where facilities would be cited. The construction impact area includes the work area for personnel and the staging area.

**TABLE 1**  
**ESTIMATED PROJECT SITE DIMENSIONS (IN ACRES)**

ASR Name	Construction Footprint	Construction Impact Area
Pleasant Grove	0.52	1.73
Campus Oaks	0.34	1.47
Misty Woods	0.31	1.50
Galilee	0.80	0.94
Vencil Brown	0.42	1.20
Central Park	0.30	1.38
Marlin	0.26	0.84
Maidu	0.51	1.32

## Regulatory Context

Archaeological resources are protected through the NHPA of 1966, as amended (16 USC 470f), and its implementing regulations. Prior to implementing an “undertaking” (e.g., issuing a federal permit or federal funding), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing or listed in the National Register of Historic Places.

The State of California oversees NHPA compliance through its statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical Resources Inventory. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the state’s jurisdictions.

CEQA, as codified at California Public Resources Code Sections 21000 et seq., is the principal statute governing the environmental review of projects in the state. CEQA requires lead agencies to determine if a proposed project would have a significant impact on historical resources and unique archaeological resources.

## Sources Consulted

### Records Search and Literature Review

ESA staff completed a records search at the North Central Information Center (NCIC) of the California Historical Resources Information System on February 24, 2020 (File No. PLA-20-19). The purpose of the records search was to (1) determine whether known cultural resources have been recorded within or within a ½-mile radius of each ASR production well location; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby cultural resources; and (3) develop a context for the identification and

preliminary evaluation of cultural resources. The records search consisted of an examination of the following documents:

- **NCIC digitized base maps** (USGS Roseville and Citrus Heights 7.5-minute topographic maps), to identify recorded archaeological sites and studies within a ½-mile radius of each ASR production well location.
- **NCIC digitized base maps** (USGS Roseville and Citrus Heights 7.5-minute topographic maps), to identify recorded historic-era resources of the built environment (building, structures, and objects) within and adjacent to each ASR production well location.
- **Resource Inventories:** *California Inventory of Historical Resources*, *California Historical Landmarks*, *Archaeological Determinations of Eligibility for Placer County* (through May 2012); *Built Environment Resource Directory (BERD)* (through January 2020).

Numerous cultural resources investigations have been completed in the vicinity of the proposed project. **Table 2** lists these studies and their correlation to specific ASR production well location.

**TABLE 2**  
**CULTURAL RESOURCES STUDIES IN THE VICINITY OF ASR PRODUCTION WELL LOCATION**

Study	Title	Author	Year	Type	Notes
<b>Pleasant Grove</b>					
274	Cultural Resource Inventory and Evaluation of Rich, Shenker, and Carlsberg Parcels, Roseville, Placer County	Public Anthropology Research	1986	Areal Survey	Included ASR impact area, no resources identified
2076	Cultural Resource Assessment of Two Properties in the Northwest Roseville Vicinity, Placer County	Peak & Assoc.	1992	Areal Survey	Included ASR impact area, no resources identified
<b>Campus Oaks</b>					
454	Survey of Section 21, T11N-R6E, Roseville	ARS	1978	Areal Survey	Included ASR impact area, adjacent site P-31-00008 recorded
3865	Cultural Resource Assessment of the Hewlett Packard Property, Roseville	Peak & Assoc.	1991	Areal Survey	No resources identified
11494	Cultural Resources Survey Report of 35 Acres for a Proposed Sacramento FBI Field Office, Roseville, Placer County	ECORP	2014	Areal Survey	Included ASR Impact Area, adjacent site P-31-00008 not found
<b>Misty Woods</b>					
368	An Archaeological Reconnaissance of the Roseville, Placer County, Rocklin West Sewer Assessment District	Foothill Research	1981	Linear Survey	Kaseburg Creek, no resources identified
<b>Galilee</b>					
None					
<b>Vencil Brown</b>					
None					

**TABLE 2**  
**CULTURAL RESOURCES STUDIES IN THE VICINITY OF ASR PRODUCTION WELL LOCATION**

Study	Title	Author	Year	Type	Notes
<b>Central Park</b>					
367	An Archaeological Reconnaissance of the Diamond Oaks North Property, Placer County	Foothill Research	1982	Areal Survey	Numerous sites identified in vicinity – none in ASR impact area
<b>Marlin</b>					
6259	Archaeological Survey Report for the Roseville Orlando/Cirby and Orland/Riverside Intersection Improvement Project, Placer County	Jones & Stokes	1995	Linear Survey	No resources identified
<b>Maidu</b>					
98	The Archaeological Survey of Strap Ravine, Placer County	Peck	1966	Overview	No resources identified in ASR impact area
251	Dry Creek: An Archaeological Survey and Site Report – Master's Thesis Sacramento State College	Palumbo, Patti	1966	Thesis	No resources identified in ASR impact area
8651	Cultural Resource Survey of a Portion of Maidu Regional Park, Roseville	ARS	1981	Areal Survey	P-31-003097 identified – no resources in ASR impact area

Source: NCIC, 2020

Results of the records search indicate that 22 previously recorded cultural resources are in the ½-mile records search radius (**Table 3**). There are no previously recorded cultural resources within any of the ASR production well locations.

**TABLE 3**  
**CULTURAL RESOURCES IN THE RECORDS SEARCH RADIUS**

Primary	Age	Description	Author	Date	Distance
<b>Pleasant Grove</b>					
P-31-000855	P	Bedrock mortar outcropping	Peak	1989	████████
P-31-003280	H	Transmission Line	JRP	2001	██████
<b>Campus Oaks</b>					
P-31-000003	P	Activity area – pestles, manos, fire cracked rock	ARS	1978	████████
P-31-000006	P	Isolate – hammerstone	ARS	1978	████████
P-31-000008	P	Scatter of groundstone artifacts, not relocated in subsequent surveys	ARS	1978	██████
P-31-001463	P	Scatter of groundstone artifacts	Peak	1991	████████
<b>Misty Woods</b>					
P-31-000040	H	Historic-age clear glass bottle	Maniery	1985	████████
P-31-003280	H	Transmission Line	JRP	2001	██████
<b>Galilee</b>					
P-31-000005	P	Groundstone artifacts – destroyed	Windmiller	2012	████████
P-31-000026	P	Isolated mano – not relocated	Windmiller	2018	████████
P-31-000027	P	Isolated mano – not relocated	Windmiller	2018	████████
P-31-000549	P	Artifact scatter - destroyed	Windmiller	2012	████████
P-31-001462	H	Historic-era artifact scatter	Windmiller	1994	████████
<b>Vencil Brown</b>					
P-31-000075	H	Possible stone dam	Russo	1991	████████
<b>Central Park</b>					
P-31-000430	P	Bedrock mortar outcrop	Foothill	1982	████████
P-31-000431	P	Bedrock mortar outcrop	Foothill	1982	████████
P-31-000432	P	Bedrock mortar outcrop	Foothill	1982	████████
P-31-000433	P	Bedrock mortar outcrop	Foothill	1982	████████
P-31-000434	P	Bedrock mortar outcrop with artifacts	Foothill	1982	████████
<b>Marlin</b>					
P-31-003052	H	Gully filled with historic-era artifacts	Hale	1991	████████
P-31-003053	P	Isolated handstone	Hale	1991	████████
<b>Maidu</b>					
P-31-000332	NA	Subsurface testing revealed no indigenous artifacts or features	Chavez	1982	████████
P-31-003097	P	Concentration of groundstone fragments	ARS	1982	████████
P-31-005918	P	Possible habitation site with artifacts	ECORP	2014	████████
---	P	Strap Ravine Nisenan Maidu Indian Site	National Register	1973	████████

Source: NCIC, 2020

## Background Context

### Natural Environment

The proposed project is in the southern portion of the Sacramento Valley, within the northern portion of California's Great Valley Geomorphic Province. The Great Valley, also called the Central Valley, is a nearly flat alluvial plain that is between the Sierra Nevada on the east and the Coast Ranges on the west. Subdivided into the Sacramento Valley to the north and the San Joaquin Valley to the south, the Great Valley has an average width of about 50 miles and is about 400 miles long overall (Bartow, 1991:1; Norris and Webb, 1990:412–417). The Sacramento Valley contains thousands of feet of accumulated fluvial, overbank, and fan deposits resulting from erosion of the surrounding ranges (Hackel, 1966: 217–238). The sediments vary from a thin veneer at the edges of the valley to 50,000 feet in the west-central portion. The Sacramento River is the main drainage of the northern Sacramento Valley, flowing generally south from the Klamath Mountains to its discharge point into the Suisun Bay in the San Francisco Bay area.

The underlying surficial geology of the proposed project consists of older Pleistocene age deposits that have been disturbed by historic-era and modern artificial fill and other development. This geologic framework has very low potential to contain archaeological resources buried by natural alluvial processes, since the geologic deposit was formed prior to human occupation of the area (Meyer and Rosenthal, 2008: Appendix B). Prehistoric archaeological resources in this geologic context would be at or very near to the existing ground surface.

### Prehistoric Background

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given timeframe, thereby creating a regional chronology. Rosenthal et al. (2007) provide a framework for the interpretation of the Central Valley prehistoric record and have divided human history in the region into three basic periods: *Paleo-Indian* (11550 to 8550 B.C.), *Archaic* (8550 B.C. to A.D. 1100), and *Emergent* (A.D. 1100 to 1700). The Archaic period is subdivided into three sub-periods: *Lower Archaic* (8550 to 5550 B.C.), *Middle Archaic* (5550 to 550 B.C.), and *Upper Archaic* (550 B.C. to A.D. 1100) (Rosenthal et al., 2007). Economic patterns, stylistic aspects, and regional phases further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

### Ethnohistorical Context

The proposed project is within the lands occupied and used by the Nisenan, or Southern Maidu. The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was “the line in the Sierra Nevada mountains where the snow lay on the ground all winter” (Littlejohn, 1928).

Nisenan settlement locations depended primarily on elevation, exposure, and proximity to water and other resources. Permanent villages were usually located on low rises along major watercourses. The Nisenan occupied settlements from which specific task groups set out to harvest the seasonal bounty of flora and fauna that the rich valley environment provided. The Valley Nisenan economy involved riparian resources—this contrasted with the Hill Nisenan, whose resource base consisted primarily of acorns and game (Wilson and Towne, 1978).

As with other California Native American groups, the gold rush of 1849 had a devastating effect on the Valley Nisenan. The flood of miners that came to the area in search of gold brought diseases with them that decimated the Nisenan population. Those who survived were subjected to violence and prejudice at the hands of the miners, and the Nisenan eventually were pushed out of their ancestral territory. Although this contact with settlers had a profound negative impact on the Nisenan population through disease and violent actions, the Nisenan people survived and continue to maintain strong communities and action-oriented organizations (Castillo, 1978). The Strap Ravine Nisenan Maidu Indian Site, listing in the National Register of Historic Places in 1973, is on the north side of Maidu Park. The adjacent Maidu Museum is dedicated to the history, education, and preservation of the indigenous people of the area.

## Historical Background

The Spanish made forays into the Central Valley starting in the mid-18th century, and the earliest significant non-indigenous presence in the region began in 1808 when Gabriel Moraga led an expedition from Mission San Jose to the northern Sacramento Valley. However, the Sacramento Valley was still predominantly occupied by Native Americans with only the occasional Spanish expedition into the interior to search for mission sites or escaped neophytes. By the late 1820s, English, American, and French fur trappers, attracted by the Valley's abundance of animal life, had established operations throughout the region. The earliest Euro-American settlement of the area occurred in the 1840s with the establishment of land grants by the Mexican government (Hoover et al., 2002:310-311).

The Sacramento Valley remained relatively isolated and sparsely populated until the advent of the Gold Rush period. Given Sacramento's proximity to mining areas, and its accessibility to maritime traffic, the area quickly became a trading and economic center. Commerce along the Sacramento River encouraged continued population growth, with many of the miners and farmers settling along the natural levees of the Sacramento River. Settlers recognized that the active flood plain deposited fertile soils in the lands nearest to the river, which supported bountiful crops and provided easy access to transportation corridors along the river itself. Ranchers and farmers found economic success in providing food and supplies for the miners, although frequent flooding troubled settlers' agricultural efforts and additional settlement (Hoover et al., 2002: 310-311).





With an excellent climate, rich soil, and an abundant water supply, as well as both river and railroad transportation access, the Sacramento Valley became one of California's principal agricultural regions. In the late 19th and early 20th centuries, urban development began to spread beyond Sacramento's original city limits.

## Survey Methods and Findings

ESA archaeologist Heidi Koenig completed a field survey of each ASR production well location on February 24, 2020 and May 15, 2020. ESA archaeologist Mariko Falke completed a field survey of the updated Galilee well location on July 23, 2020. The archaeologists walked each ASR production well location in narrow transects where feasible or observed from vantage points to provide an overall assessment of site conditions. In areas of dense ground cover or landscaping, rodent holes or bare areas were observed and vegetation was periodically scraped back to expose the surface soils.

No cultural resources or other evidence of past human use or occupation was identified during the field survey. **Table 4** below provides a summary of each ASR production well location and the environmental conditions. Soil types were derived from USDA, 2020.

**TABLE 4**  
**SURVEY RESULTS**

Location	Visibility	Soil Type	Conditions	Photograph
Pleasant Grove	Dense ground cover throughout impact area, weeds, many rodent holes, bare spots, visibility approximately 40 percent	Light brown silty clay; <i>Fiddymment-Kaseberg loam</i>	Slightly sloped, no exposed outcrops or other features	
Campus Oaks	Gravel road leading to construction footprint, excellent visibility throughout impact area, visibility approximately 90 percent	Artificial fill, gravel, light brown silty clay; <i>Cometa-Fiddymment complex</i>	Level area, no exposed outcrops or other features	
Misty Woods	Dense ground cover throughout impact area, weeds, many rodent holes, bare spots, visibility approximately 40 percent	Light brown silty clay; <i>Cometa-Fiddymment complex</i>	Slightly sloped to the east, no exposed outcrops or other features	
Galilee	Moderate visibility; high native grasses; highly disturbed from plowing, very low visibility	Light brown silty clay with cobble and gravel inclusions; <i>Cometa-Fiddymment complex</i>	Slightly sloped, one boulder outcrop with no cultural features; small earthen ditch	

**TABLE 4**  
**SURVEY RESULTS**

Location	Visibility	Soil Type	Conditions	Photograph
Vencil Brown	Landscaped with grasses (baseball field), some rodent holes, visibility approximately 30 percent	Light brown silty clay; <i>Exchequer-Rock outcrop complex, Cometa-Fiddymont complex</i>	Level area of field, adjacent rock lined drainage (for field maintenance)	
Central Park	Landscaped with grasses (park), some rodent holes, paved parking lot for staging, visibility approximately 20 percent	Light brown silty clay observed in tree roots; <i>Exchequer-Rock outcrop complex</i>	Level area of field, small drainage (unlined) in southwest	
Marlin	Fenced area, dense vegetation, cut area with exposed soils, visibility approximately 30 percent	Medium brown silty clay; <i>Cometa-Ramona sandy loam</i>	Area disturbed by adjacent road cut, slightly sloped, adjacent steep drainage channel with culverts	
Maidu	Highly disturbed from batting cages, exposed soil to west of cages and in impact area to east	Medium brown silts clay; <i>Ramona sandy loam</i>	Area highly disturbed, built upon, trees in impact area to east	

## Recommendations

Based on the survey results, nearby site distribution, previous disturbance, and environmental setting, the ASR production well locations have a low archaeological sensitivity and a low potential to uncover archaeological resources. ESA recommends a finding of **No Historic Properties Affected**.

While unlikely, the inadvertent discovery of archaeological resources or human remains in areas of low archaeological sensitivity cannot be entirely discounted. In the event of inadvertent discovery, the City recommends the following measures be implemented:

### **Initial Pause and Assessment for All Discoveries, Regardless of Cultural Affiliation**

In the event of an unanticipated discovery during construction, all ground disturbing work must pause within a 100-foot radius of the discovery, and the construction manager must take reasonable measures to protect the discovery from damage by equipment or personnel. This may include placement of plywood or steel plates over the excavation area (if feasible), or placement of exclusionary fencing. Work may continue on other parts of the project while the following procedures are carried out, but construction personnel are strictly prohibited from disclosing the discovery to the public, which includes posting on social media.

Immediately upon taking reasonable measures to protect the discovery, the construction manager must notify the City's Development Services Department by phone, regardless of the presence of an archaeological or tribal monitor. A City representative will immediately coordinate with the monitoring archaeologist (if present) or contact the project archaeologist, or, in the absence of either, contact a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeologist.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, the City shall consult with culturally affiliated tribes in making the determination. Whenever a tribal monitor is present, he or she shall be consulted.

### **Response to False Alarms**

If the professional archaeologist determines that the find is negative for any cultural indicators, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or tribal consultation is necessary, because the discovery is not a cultural resource of any kind. Should tribal representatives or monitors desire to take possession of non-cultural materials, the tribe may execute a voluntary agreement with the property owner to take possession as long as removal has been approved in writing by the property owner (if not the City). In this case, where the find is determined to not be a cultural resource, then the maximum delay to the project activities is expected to be one business day.

If the find represents a paleontological resource, then the City's representative will notify a professionally qualified paleontologist to address the find separately and notice to resume work at that location cannot occur until authorized by the City's representative, and the time required to do so is not addressed in this guidance. Tribal representatives may not remove paleontological materials without permission from the City and property owner (if not the City).

If the find is determined to be a cultural resource, then the procedures below apply.

### **Response to Non-Tribal Discoveries**

If a tribal monitor is not present at the time of discovery and the professionally qualified archaeologist determines that the discovery is a cultural resource but is not reasonably associated with Native American culture, then the City shall notify by e-mail any tribes that specifically requested notification of such discoveries, with a description and a photograph of the find. These requests for notification must be provided to the City in writing in advance of a discovery. Notified tribes shall be afforded up to 24 hours (none of which time period may fall on weekends or City holidays) to review the information (which may or may not include a site visit) and determine whether or not the tribe possesses information about the discovery that would differ from the determination made by the professionally qualified archaeologist. If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then work may not resume at the location until the City, in consultation with the tribe(s), addresses the find in accordance with CEQA.

If the tribe fails to respond within 24 hours or responds to concur with the archaeologist that the discovery does not constitute a tribal resource, then the archaeologist shall submit to the City, within two business days, a brief plan for evaluating the significance and recommended treatment. The City shall have up to two business days to review and approve the implementation of the plan.

Upon receiving a notice to proceed from the City, the professional archaeologist must complete the evaluation within five business days, unless additional time is granted by the City in light of the nature of the find. The results of the evaluation may be communicated to the City in an email; formal reporting may continue during construction, after the data collection is completed and the City authorizes a notice to resume work at the location.

If the evaluation results in a finding that the discovery is not a historical resource under CEQA, then work may resume at the location of the discovery immediately upon notification of such from the City's representative. The delay to project construction at that location would be expected to be no more than 10 business days.

If the evaluation results in a finding that the discovery is a historical resource under CEQA, then the professional archaeologist shall immediately implement the treatment specified in the work plan. Work may not resume at the location of the discovery until the City issues a notice to proceed. The amount of delay to the discovery location depends on the nature and extent of the discovery; however, the City shall issue a notice to resume work at that location as soon as data collection is completed by the archaeologist. Formal reporting and analysis may continue during construction, after the City authorizes a notice to resume work at the location.

### **Response to Tribal Discoveries**

If the professional archaeologist determines within one business day that the find does represent a cultural resource, and that it is reasonably believed to be associated with Native American culture, or when a notified tribe responds that the find does, in fact, represent tribal resources, then the City shall notify by email, within one business day of receiving such information, all culturally affiliated tribes that specifically requested such tribal consultation notification during environmental review and planning. Tribes that did not respond to offers to consult or declined consultation without such request for notification will not be contacted. Each notified tribe will have one business day from the time of notification to request a visit of the discovery location (if so desired). Tribal representatives who wish to visit the location must notify the City's representative in its response to obtain access and safety information and all non-agency and non-contracted personnel are subject to approval by private property owners. However, it should be noted that while a property owner has the legal right to approve non-agency and non-contracted personnel, the City will not authorize work to resume until appropriate personnel have been approved for entry so that the project conditions can be satisfied. Notified tribes that do not respond or visit the location within one business day may submit comments to the City in writing; however, field visits may or may not be accommodated.

Each visiting tribe will have two business days from the time of the site visit to submit written recommendations to the City for appropriate treatment. Recommendations must be accompanied by supporting information that constitutes substantial evidence for any determination of a tribal cultural resource. Only those recommendations that are determined by the City, as lead agency and engaging in good faith consultation, to be both appropriate and allowable under CEQA would be subject to payment for tribal representatives or monitors.

The City shall have three business days from the close of the two-day comment period to review the information submitted and determine: 1) whether or not the find is subject to state law; 2) whether or not the find represents either a tribal cultural resource or a historical resource; 3) whether or not the find has been significantly impacted; and if so, then 4) the

appropriate treatment. In the absence of substantial evidence or in the case of conflicting tribal comments, the City may elect to exercise one or more of the options specified in Section 21084.3(b), if feasible. Any recommendations submitted by tribes that are not implemented by the City shall be documented in the administrative record with an explanation as to why the recommendations were rejected. If the City determines that the find is either a tribal cultural resource or a historical resource, then work cannot resume at that location until the resource is treated to the satisfaction of the City, acting as the Lead Agency.

If the City determines that the find is neither a tribal cultural resource nor a historical resource, then no additional treatment is necessary under state law, and the City's representative shall issue a notice to proceed with activity at that location. In this case, the maximum delay to project activities is expected to be eight business days.

The amount of delay to the discovery location depends on the nature and extent of the discovery; however, the City shall issue a notice to resume work at that location as soon as possible. If other areas outside of the 100-foot radius of the discovery are available to continue with work, notice to resume work may be given for these locations. Formal reporting or other types of mitigation (such as public interpretation) may continue during construction, after the City authorizes a notice to resume work at the location.

### **Response to Human Remains Subject to State Law**

If it is determined that human remains are found, or remains that are potentially human, then the treatment shall conform to the requirements of state law under California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. For the purposes of this project, the definition of remains subject to state law (Section 5097.98) shall apply. This definition states: "(d)(1) Human remains of a Native American may be an inhumation or cremation, and in any state of decomposition or skeletal completeness. (2) Any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. "The City understands that Native American tribes ascribe importance to objects and surrounding soil matrix associated with human remains that is broader than what is defined in state law. The City will consider requests from tribes to treat additional objects and matrix in the same manner as human remains and will exercise its discretion in doing so on a case-by-case basis.

If the find includes human remains, or remains that are potentially human (as defined in state law), then the individual making the discovery shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641, Native American human remains and multiple human remains). The archaeologist shall notify the Placer County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, then the Coroner will notify the Native American Heritage Commission (Commission), which then will designate a Native American most likely descendant (MLD) for the project (Section 5097.98 of the Public

Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the landowner does not agree with the recommendations of the MLD, then the Commission can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the Commission or the appropriate Information Center, using an open space zoning designation or deed restriction as appropriate, and/or recording a reinternment document with Placer County (AB 2641).

## References Cited

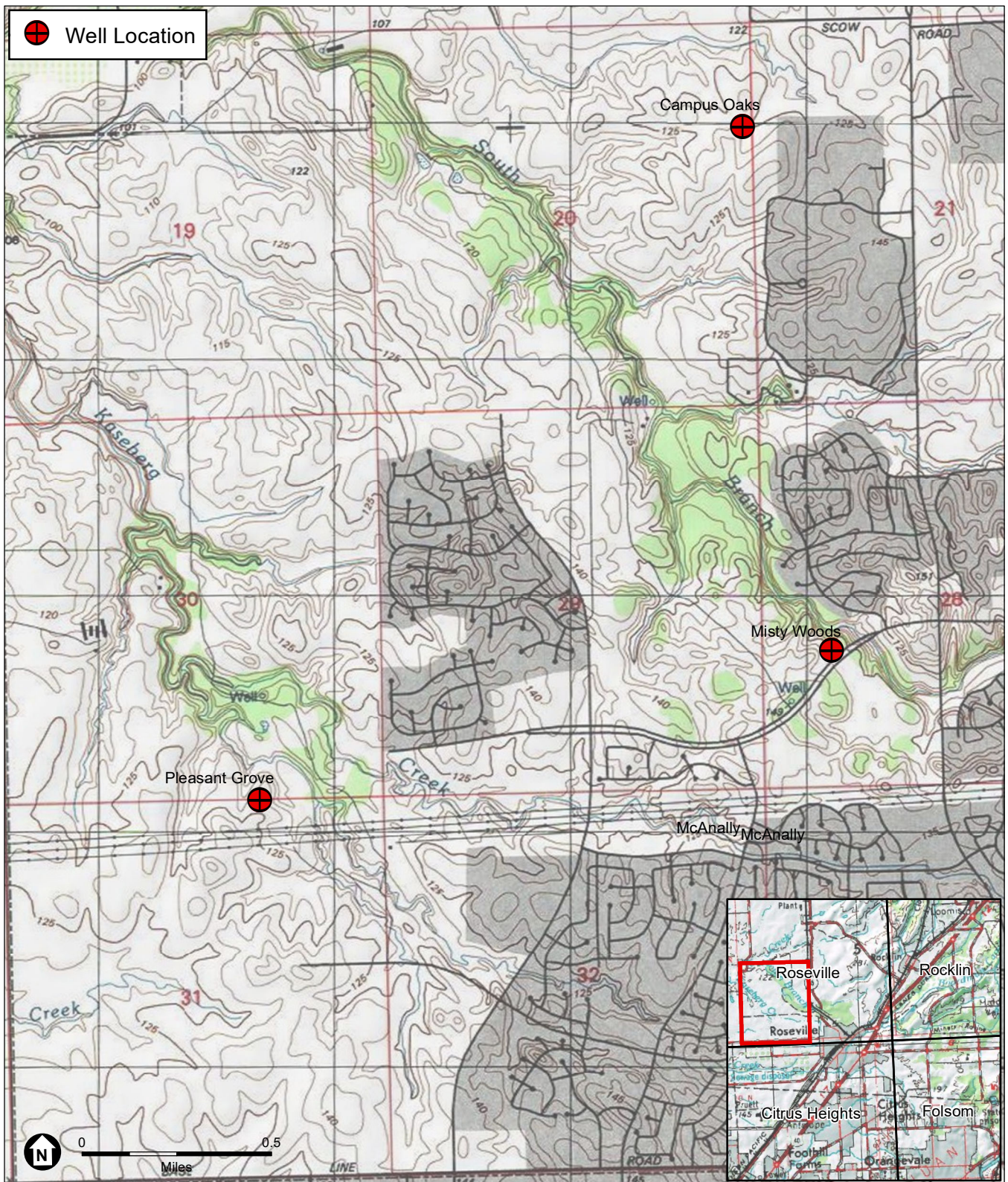
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## FIGURES

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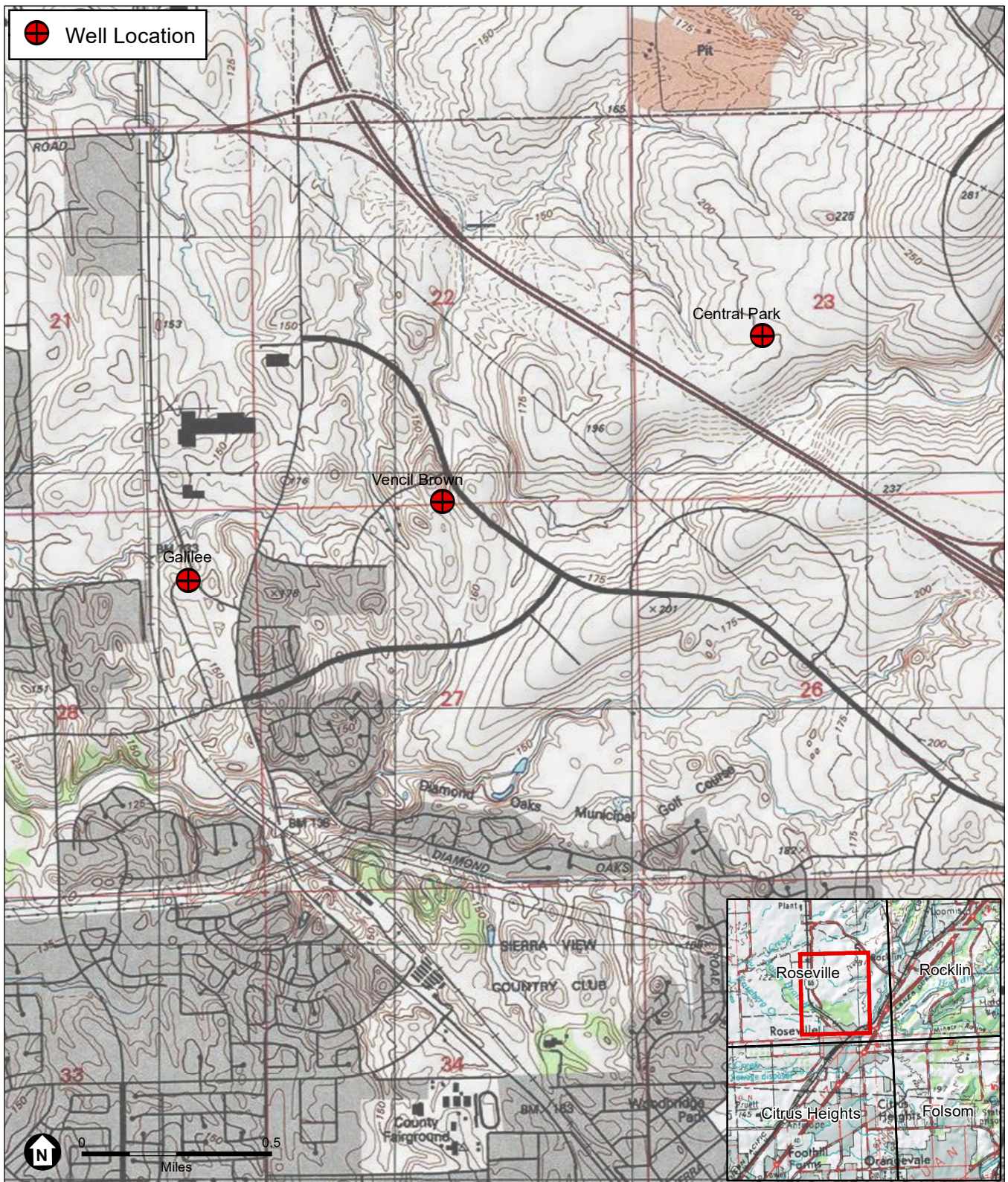
**Figure 1**  
Project Location



SOURCE: USGS

City of Roseville ASR Project . D191396

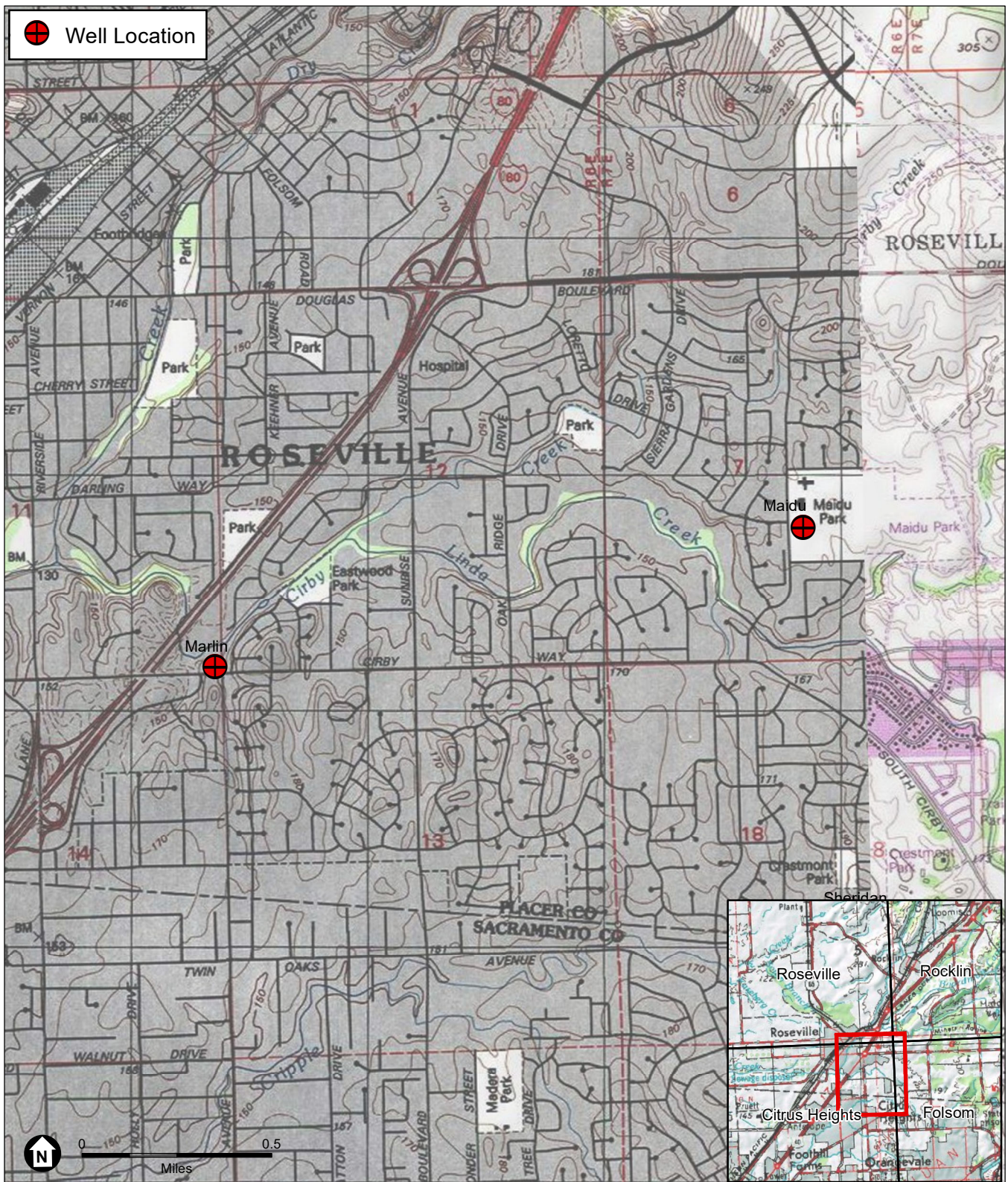
**Figure 2a**  
Project Area



SOURCE: USGS

City of Roseville ASR Project . D191396

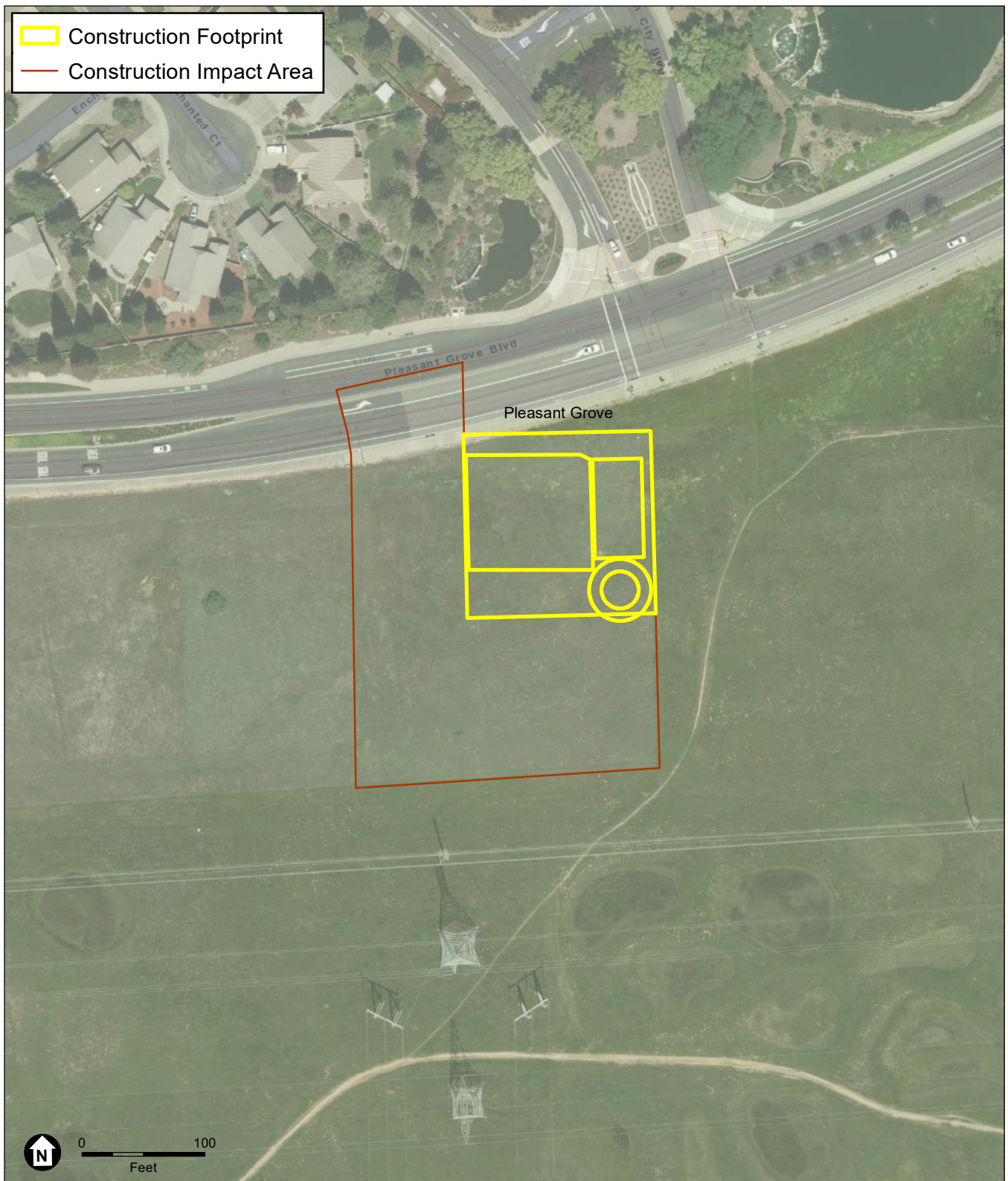
**Figure 2b**  
Project Area



SOURCE: USGS

City of Roseville ASR Project . D191396

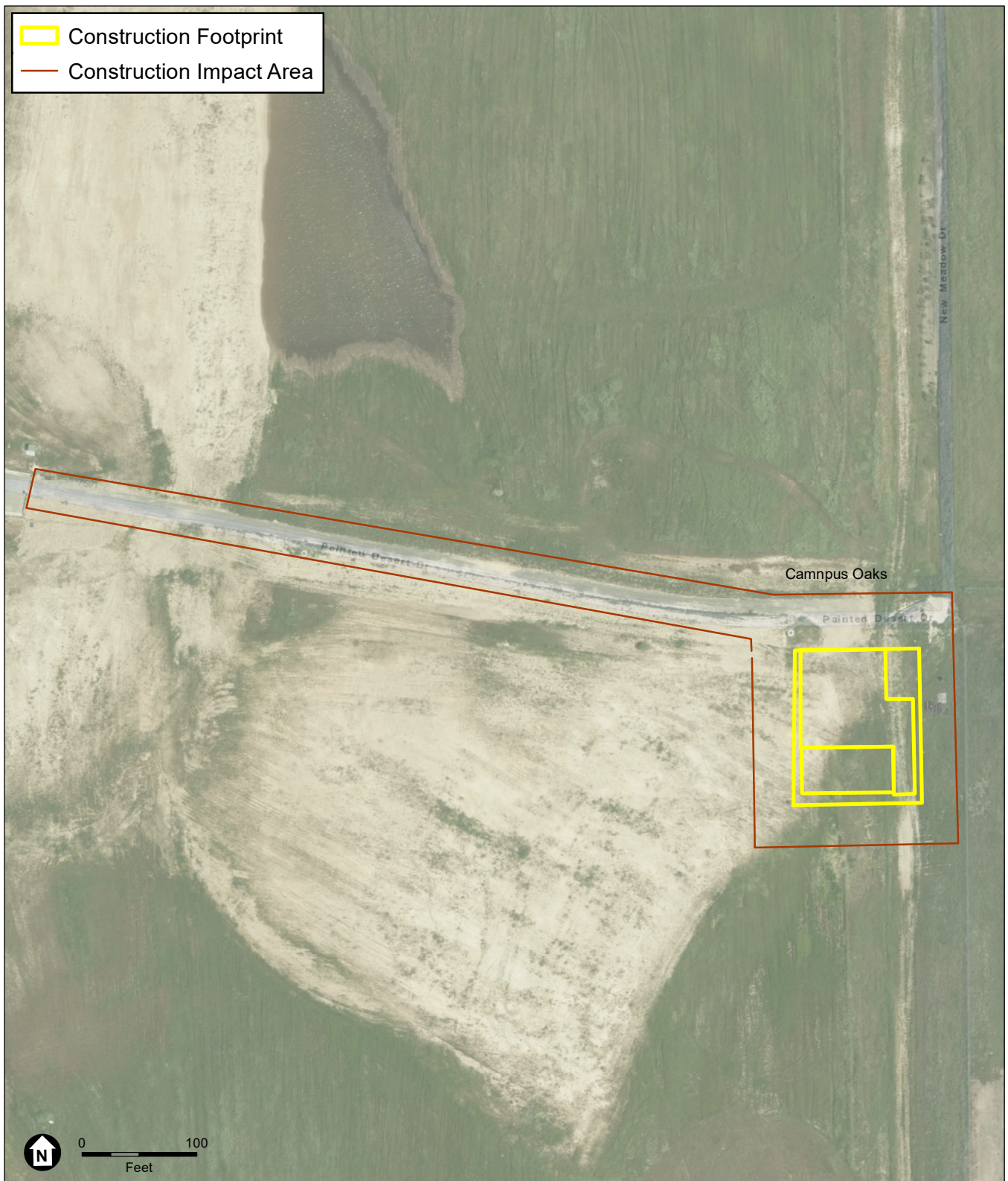
**Figure 2c**  
Project Area



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3a**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3b**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3c**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3d**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3e**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

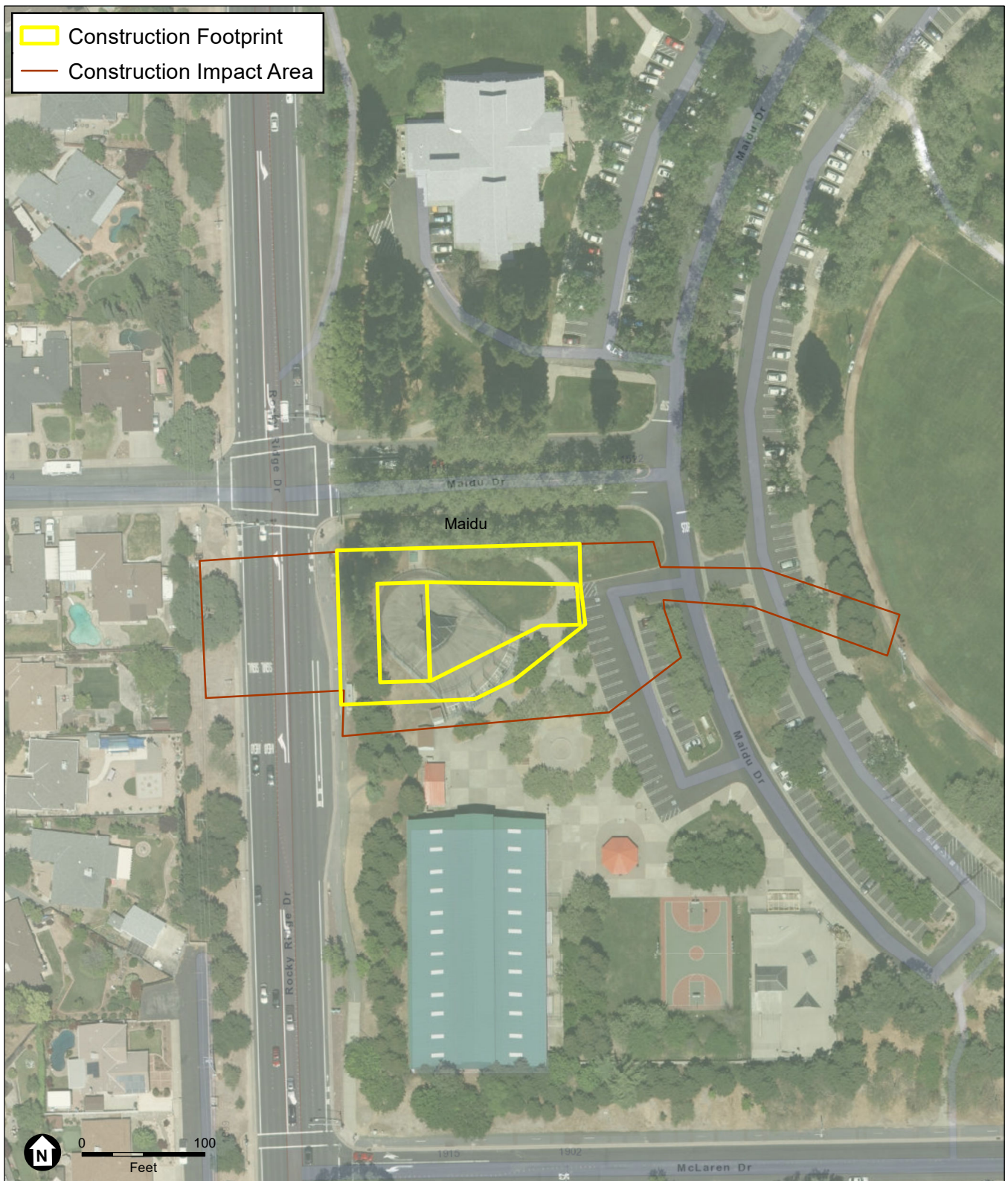
**Figure 3f**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3g**  
Area of Potential Effects



SOURCE: USGS

City of Roseville ASR Project . D191396

**Figure 3h**  
Area of Potential Effects

# Appendix C

## **Biological Resources Survey**







2600 Capitol Avenue  
Suite 200  
Sacramento, CA 95816  
916.564.4500 **phone**  
916.564.4501 **fax**

[www.esassoc.com](http://www.esassoc.com)

# Biological Resources Technical Memorandum

date July 24, 2020

from Kelly Bayne  
Environmental Science Associates

subject City of Roseville Expansion of the Aquifer Storage and Recovery Program Biological Resources Technical Memorandum

Environmental Science Associates (ESA) conducted a biological resources survey for the City of Roseville Expansion of the Aquifer Storage and Recovery Program Modified Project (modified Project or Project) in the City of Roseville, California. This memorandum documents the methodology and results of a biological survey and recommends measures to avoid impacts to special-status species. The project site includes 8 ASR well sites. The 8 ASR well sites include the well footprints and the staging areas. A Regional Location Map and a Project Vicinity Map are included as **Figures 1** and **2**. The project site corresponds to the Roseville and Citrus Heights United States Geological Survey (USGS) 7.5-minute topographic quadrangles (quadrangle).

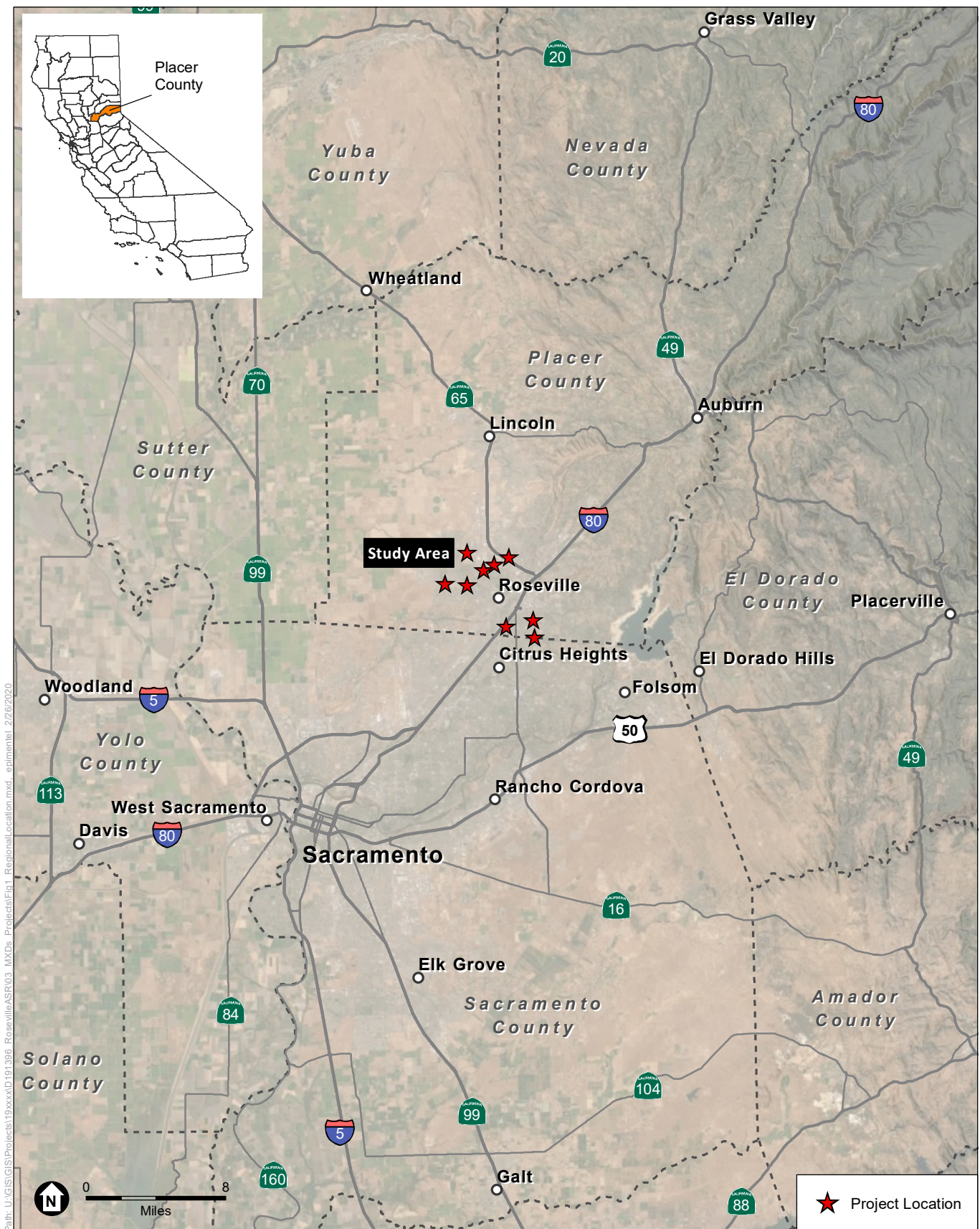
## Methodology

Information in this memorandum is based on data collected during reconnaissance-level biological field surveys conducted by ESA biologist Kelly Bayne on February 25, 2020, May 8, 2020, and July 24, 2020 and review of other relevant documentation for the project site and surrounding vicinity including:

- The environmental commitments identified in the Aquifer Storage and Recovery Program Final Environmental Impact Report (FEIR; City of Roseville, 2012).
- A records search of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) for the Roseville and eight surrounding USGS quadrangles (CDFW, 2020) (**Attachment A**).<sup>1</sup>
- A species list for the project site from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation database (IPaC) (USFWS, 2020) (**Attachment A**).
- A search of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants Database for the Roseville and eight surrounding USGS quadrangles (CNPS, 2020) (**Attachment A**).

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<sup>1</sup> The Roseville quadrangle was used as the center quadrangle because 6 of the 8 proposed well locations occur within it and it includes the Citrus Heights quadrangle, which contains the other 3 well locations.



SOURCE: Esri, 2015; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 1**  
Regional Location



SOURCE: Esri, 2012; USDA, 2016; City of Roseville, 2020; ESA, 2020

Roseville Aquifer Storage and Recovery

**Figure 2**  
Project Vicinity

## **Regulatory Requirements**

### ***Federal Endangered Species Act***

Federal Endangered Species Act (FESA) prohibits the unauthorized “take” of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. The term “take” is defined by the Endangered Species Act as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

### ***California Endangered Species Act***

The California Endangered Species Act (CESA) prohibits the take of plant and animal species that the California Fish and Game Commission have designated as either threatened or endangered in California. “Take” in the context of the CESA means to hunt, pursue, kill, or capture a listed species, as well as any other actions that may result in adverse impacts when a person is attempting to take individuals of a listed species. The take prohibitions also apply to candidates for listing under the CESA.

### ***California Fish and Game Code***

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation under it. Section 3503.5 prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Code Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) allow the designation of a species as fully protected. This is a greater level of protection than that afforded by the CESA. Except for take related to scientific research, all take of fully protected species is prohibited.

### ***Migratory Bird Treaty Act***

Federal law protects raptors, migratory birds, and their nests. The federal Migratory Bird Treaty Act (15 USC 703–711 and 16 USC Section 7.3, Supp I 1989), 50 CFR Part 21, and 50 CFR Part 10, prohibits killing, possessing or trading in migratory birds. Executive Order 13186 (January 11, 2001) requires that any project with federal involvement address the impact of federal actions on migratory birds.

### ***Wetlands and Waters of the U.S.***

The federal government defines wetlands in Section 404 of the Clean Water Act (CWA) as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3(b) and 40 CFR 230.3). In 1986, the term “waters of the U.S.” was defined as follows (33 CFR 328.3(a)): (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; (4) All impoundments of waters otherwise defined as waters of the U.S. under the definition; (5) Tributaries of waters identified in paragraphs (a)(1) through (4) of this section; (6) The territorial seas; and (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.

CWA Section 401 gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the U.S. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to federal CWA Section 401(a)(1), which specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State or appropriate interstate water pollution control agency in/where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of CWA Sections 301, 302, 303, 306, and 307.

### ***Waters of the State***

Most projects involving water bodies or drainages are regulated by the RWQCB, the principal State agency overseeing water quality of the State at the local/regional level. Where waters of the State overlap with waters of the U.S., pending verification from the USACE, those waters would be regulated under Section 401 of the CWA which is described in the Regulatory Framework in Section 3.1.

In the absence of waters of the U.S., waters may be regulated under the Porter-Cologne Water Quality Control Act if project activities, discharges, or proposed activities or discharges could affect California's surface, coastal, or ground waters. The permit submitted by the applicant and issued by RWQCB is either a Water Quality Certification in the presence of waters of the U.S. or a Waste Discharge Requirement (WDR) in the absence of waters of the U.S.

### ***City of Roseville Tree Preservation***

Roseville Municipal Code, Title 19 Zoning, Article IV, Special Area and Specific Use Requirements, Chapter 19.66 Tree Preservation prohibits conducting any regulated activities within the protected zone of a protected tree; including harming, destroying, killing, or removing any protected tree unless authorized by a tree permit. Regulated activities are any activity done within the protected zone of a native oak tree, (with the exception of routine maintenance performed by or under the direct supervision of a certified arborist) which would adversely impact the health of a native oak tree, including, but not limited to, cutting, grading, irrigating and trenching. Protected trees include native valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), or hybrids thereof with a trunk 6 inches or greater diameter at breast height (DBH) measured as a total of a single trunk or multiple trunks.

### **Environmental Setting**

Land uses surrounding the project site include commercial, mixed use, and residential development with ornamental landscape trees.

The project site includes the following habitat types: annual grassland, developed, ruderal/disturbed, and oak woodland. **Table 1** summarizes the habitat types within the well locations. It also includes trees that provide habitat for nesting birds or potentially occurring sensitive biological resources within 250 feet of the well locations. A comprehensive list of plants observed within the project site are provided in **Attachment B**. Photographs of the well locations are provided in **Attachment C**.

**TABLE 1**  
**HABITAT TYPE BY WELL LOCATION WITHIN THE PROJECT SITE**

<b>Well Location within the modified Project Site</b>	<b>Habitat Types at each Well Location</b>	<b>Habitat Features Within 250 Feet of each Well Location</b>
Pleasant Grove	Annual grassland, developed	Wetlands
Campus Oaks	Ruderal/disturbed associated with a graded road and earthmoving soils	Wetlands
Misty Woods	Annual grassland (includes valley oak trees)	Potential seasonal wetland swale and mature trees
Galilee	Ruderal/disturbed grassland, developed	Ornamental trees
Vencil Brown	Ruderal/disturbed associated with a park lawn (includes mature ornamental trees), annual grassland, potential seasonal wetlands	Ornamental trees, riparian, drainage, and potential wetlands to southeast
Central Park	Ruderal/disturbed associated with a park lawn (includes mature ornamental trees), developed	Ornamental trees
Marlin	Oak woodland	Oak trees
Maidu	Ruderal/disturbed associated with a park lawn (includes mature ornamental trees), developed	Ornamental trees

## Special-Status Species

Special-status species are legally protected under the state and federal Endangered Species Acts or other regulations or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species are classified under the following categories:

1. Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);
2. Species that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act (61 FR 40, February 28, 1996);
3. Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 California Code of Regulations [CCR] 670.5);
4. Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
5. Animal species of special concern to CDFW;
6. Animals fully protected under Fish and Game Code (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
7. Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380); and
8. Plants considered under the CNPS and CDFW to be “rare, threatened or endangered in California” (California Rare Plant Rank [CRPR] 1A, 1B, and 2).

Several species known to occur on or in the vicinity of the project site are protected pursuant to federal and/or State endangered species laws, or have been designated as species of special concern by the CDFW. In addition, Section 15380(b) of the CEQA Guidelines provides a definition of rare, endangered, or threatened species that are not included in any listing. For example, vascular plants listed as rare or endangered or as List 1 or 2 by the

CNPS are considered to meet Section 15380(b) requirements. Species recognized under these terms are collectively referred to as “special-status species.”

Special-status species considered for this analysis are based on the CNDDDB, CNPS, and USFWS lists. A comprehensive list of special-status plant and wildlife species that were considered in the analysis is provided in **Attachment D**. The list includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and a discussion of the potential for occurrence within the project site. The following set of criteria has been used to determine each species potential for occurrence within the project site:

- **Present:** Species observed within the project site.
- **High:** Species known to occur on or near the project site (based on CNDDDB records within 5 miles) and there is suitable habitat within the project site.
- **Moderate:** Species is not known to occur on or near the project site, but suitable habitat is present.
- **Low:** Species known to occur in the vicinity of the project site and there is no or marginally suitable habitat within the project site.
- **None:** Species is not known to occur on or in the vicinity of the project site and there is no suitable habitat.

Species with no or low potential for occurrence are excluded from the discussion below.

### ***Special-Status Species***

#### **Special-Status Plants**

The project site provides little to no habitat for special-status plants.

#### **Special-Status Wildlife**

##### **Nesting Raptors**

The following non-listed raptors were observed foraging within the vicinity of the project site: red-tailed hawk (*Buteo jamaicensis*) and turkey vulture (*Cathartes aura*). While no raptors were observed nesting, both non-listed and special-status raptors have the potential to nest within and in the vicinity of the project site during the nesting season. State species of special concern burrowing owl (*Athene cunicularia*) have the potential to nest within the annual grassland and ruderal/disturbed areas. The State-threatened Swainson’s hawk (*Buteo swainsoni*) and State fully protected white-tailed kite (*Elanus leucurus*) have the potential to nest within the ornamental landscape and mature oak trees. The generally accepted nesting season that encompasses the extent of all potentially nesting raptors extends from February 15 to September 15 (Swainson’s hawk nests from March 1 through September 15; all other nesting raptors nest from February 15 through August 31).

##### **Nesting Birds**

The non-listed commonly occurring birds were observed foraging within the vicinity of the project site: northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), California scrub jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), rock pigeon (*Columba livia*), and black phoebe (*Sayornis nigricans*). While no active nests were observed during the February 25, 2020 biological survey, the annual grassland and ornamental landscape and oak trees within and in the vicinity of the project site provide suitable nesting habitat for birds during the nesting season. The generally accepted nesting season that encompasses the extent of all potentially nesting birds extends from February 15 to September 15.

## ***Natural Communities including Waters of the U.S. and Waters of the State***

The Vencil Brown well location may contain seasonal wetlands within the staging area. Potentially occurring seasonal wetlands, a seasonal wetland swale, emergent wetlands, and/or drainages occur within 250 feet of the Pleasant Grove, Campus Oaks, Misty Woods, and Vencil Brown well locations. Riparian vegetation occurs within 15 feet of the Vencil Brown well location. These are considered sensitive natural communities, waters of the U.S., and/or waters of the State.

## ***Protected Trees***

The Marlin well location contains several native interior live oak and valley oak trees. The Misty Woods well location contains approximately three valley oak trees. Native oak trees with single or multiple trunks 6 inch DBH or greater are considered protected. A permit is required for any regulated activity around a protected tree, as defined by the Roseville Municipal Code.

## **Recommended Mitigation Measures**

### ***Nesting Birds and Raptors***

Most birds are protected under the MBTA (16 U.S.C 703-711) and all raptors, including common species not considered special-status, are protected under California Fish and Game Code (Section 3503.5). Noise and disturbance associated with construction activities that occur during the breeding season (generally between February 15 and September 15) could disturb nesting activities if an active nest is located near these activities. Any disturbance that causes nest abandonment and subsequent loss of eggs or developing young at active nests would violate California Fish and Game Code Sections 2800, 3503, and 3503.5; and the MBTA.

The DEIR Environmental Commitment I.S.-Bio-3: *Conduct Construction Outside the Nesting Season or Conduct Preconstruction Raptor Nesting Surveys* is insufficient because it only addresses raptors, the 30 day preconstruction survey window prior to construction is too long, and the March through August nesting season does not encompass the nesting window of all nesting birds and raptures.

The following mitigation measures should be conducted to reduce impacts to nesting birds and raptors to less than significant:

- If construction (including equipment staging) occurs during the breeding season for nesting birds and raptors (between February 15 and September 15), a qualified biologist should conduct a preconstruction nesting bird and raptor survey before the onset of construction activities. The preconstruction nesting bird and raptor surveys should be conducted within 14 days prior to commencement of construction activities between February 15 and September 15. Surveys for raptor nests (excluding Swainson's hawk) should extend 500 feet from the project site. In addition, a 0.25-mile windshield level survey should be conducted to determine whether Swainson's hawk nests occur in the vicinity. If no active nests are detected, a letter report documenting the results of the survey should be submitted to the City and no additional mitigation is recommended so long as construction commences within 14 days of the survey and does not halt for more than 14 days.
- If MBTA-protected birds or raptors are found to be nesting in or adjacent to the project site, a no-disturbance buffer should be established around the nest to avoid disturbance of the nest area and to avoid take. The buffer should be maintained around the nest area and monitored until the end of the breeding season or until the biological monitor determines that the young have fledged and are foraging on their own or the nest is no longer active. The extent of these buffers should be determined by the biologist and would depend on the species identified, the level of noise or construction disturbance, the line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Generally accepted avoidance buffers are 100 feet for nesting birds and 250 to 500 feet for nesting raptors. A

letter report documenting the rationale for the established buffer and the results of monitoring should be submitted to the City within 14 days of the date the biologist determines that the nest is no longer active and the avoidance buffer is no longer required.

Therefore, the Environmental Commitment I.S.-Bio-3 is no longer necessary once the mitigation measures identified above are implemented.

### ***Natural Communities including Waters of the U.S. and Waters of the State***

Seasonal wetlands may be within the Vencil Brown well location and may be potentially jurisdictional wetlands and other waters of the U.S. and State jurisdictional waters/wetlands. An aquatic resources delineation should be conducted within the Vencil Brown well location and verified by the USACE. If avoidance of jurisdictional wetlands and other waters of the U.S. and State jurisdictional waters/wetlands is not possible, then federal and state laws and regulations, including the USACE Section 404 and Regional Water Quality Control Board 401 permitting process, would apply to project development. Section 404 of the CWA requires that a permit be obtained from the USACE prior to the discharge of dredged or fill materials into any “waters of the United States,” which includes wetlands. Section 404 permits generally require mitigation to offset losses of these habitat types, in accordance with Executive Order 11990, which is intended to result in no net loss of wetland values or acres. Waters of the State are defined as any surface or subsurface water and are protected by the Porter-Cologne Act. Adherence to identified State and federal laws and regulations and the “no-net-wetland-loss” policy currently in place would reduce impacts on jurisdictional waters of the U.S. and wetlands.

In addition, project activities could impact the seasonal wetlands, a seasonal wetland swale, emergent wetlands, drainages, and/or riparian habitat within 250 of the Pleasant Grove, Campus Oaks, Misty Woods, and Vencil Brown well locations.

Environmental Commitments I.S.-Bio-1: Survey for Wetlands and I.S.-Bio-2: Survey for Riparian Habitat and Special Status Species are insufficient because they do not discuss measures to avoid impacts to potentially jurisdictional wetlands and waterways and riparian habitat.

The following mitigation measures should be conducted to reduce impacts to natural communities, including waters of the U.S., to less than significant:

- Prior to the start of construction, silt fencing should be placed around the edges of avoided wetlands and waterways and riparian areas. Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond the fencing. No vegetation removal or ground disturbing activities will be permitted beyond the fencing. The fencing should remain intact through the duration of the construction activities.

Therefore, the Environmental Commitments I.S.-Bio-1 and I.S.-Bio-3 are no longer necessary once the mitigation measures identified above are implemented.

### ***Protected Trees***

The Marlin and Misty Woods well locations contain native interior live oak and valley oak trees that may be considered protected. A permit is required for any regulated activity around a protected tree, as defined by the Roseville Municipal Code. Consistent with the FEIR, compliance with the requirements of the City’s tree ordinance would effectively offset this impact, and no additional mitigation would be required.

## **References**

- California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Data Base (CNDDB: Roseville and 8 Surrounding U.S. Geological Survey (USGS) 7.5-minute series quadrangles (quadrangles)), Sacramento, CA. Accessed February 14, 2020.
- Calflora. 2020. The Calflora Database: Information on California Plants for Education, Research, and Conservation. Berkeley, California. Available online at <http://www.calflora.org/>. Accessed on February 28, 2020.
- California Native Plant Society (CNPS). 2020. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed February 14, 2020.
- City of Roseville. 2012. City of Roseville Aquifer Storage and Recover Program Final Environmental Impact Report. SCH No. 2009072018. March 2012.
- U.S. Fish and Wildlife Service. 2020. List of Threatened and Endangered Species that may Occur in your Proposed Project Location, and/or may be Affected by your Proposed Project. Accessed February 14, 2020.

## **Attachments**

**Attachment A – USFWS, CDFW, and CNPS Lists**

**Attachment B – Plants Observed within the Project Site**

**Attachment C – Photographs of the Project Site**

**Attachment D - Regionally Occurring Special-Status Species Considered in the Project Site**

# Attachment A

## **USFWS, CDFW, and CNPS Lists**



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

February 14, 2020

Consultation Code: 08ESMF00-2020-SLI-1052

Event Code: 08ESMF00-2020-E-03341

Project Name: Roseville ASR

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

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## Project Summary

Consultation Code: 08ESMF00-2020-SLI-1052

Event Code: 08ESMF00-2020-E-03341

Project Name: Roseville ASR

Project Type: Water Withdrawal / Depletion

Project Description: Well construction

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.76072915686701N121.27967787575244W>



Counties: Placer, CA

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## Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4482">https://ecos.fws.gov/ecp/species/4482</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

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## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7850">https://ecos.fws.gov/ecp/species/7850</a> Habitat assessment guidelines: <a href="https://ecos.fws.gov/ipac/guideline/assessment/population/436/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/assessment/population/436/office/11420.pdf</a>	Threatened

## Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

CALIFORNIA DEPARTMENT OF  
FISH and WILDLIFE **RareFind**

**Query Summary:**

Quad **IS** (Sheridan (3812184) **OR** Lincoln (3812183) **OR** Gold Hill (3812182) **OR** Pleasant Grove (3812174) **OR** Roseville (3812173) **OR** Rocklin (3812172) **OR** Rio Linda (3812164) **OR** Citrus Heights (3812163) **OR** Folsom (3812162))

Print

Close

**CNDDB Element Query Results**

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	118	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous forest
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	955	26	None	Threatened	G2G3	S1S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Wetland
Alkali Meadow	Alkali Meadow	Herbaceous	CTT45310CA	8	1	None	None	G3	S2.1	null	null	Meadow & seep, Wetland
Alkali Seep	Alkali Seep	Herbaceous	CTT45320CA	10	1	None	None	G3	S2.1	null	null	Meadow & seep, Wetland
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	27	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Valley & foothill grassland
Andrena subapasta	An andrenid bee	Insects	IIHYM35210	5	2	None	None	G1G2	S1S2	null	null	null
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	2	None	None	G5	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Ardea alba	great egret	Birds	ABNGA04040	43	4	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Ardea herodias	great blue heron	Birds	ABNGA04010	155	9	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1989	13	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern,	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert

											USFWS_BCC-Birds of Conservation Concern	scrub, Sonoran desert scrub, Valley & foothill grassland
Balsamorhiza macrolepis	big-scale balsamroot	Dicots	PDAST11061	51	2	None	None	G2	S2	1B.2	BLM_S-Sensitive, USFS_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Branchinecta conservatio	Conservancy fairy shrimp	Crustaceans	ICBRA03010	43	1	Endangered	None	G2	S2	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	770	78	Threatened	None	G3	S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland, Vernal pool, Wetland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2518	28	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	Dicots	PDSCR0J0D1	35	1	None	None	G2T1	S1	1B.1	BLM_S-Sensitive	Alkali playa, Meadow & seep, Wetland
Clarkia biloba ssp. brandegeae	Brandegee's clarkia	Dicots	PDONA05053	89	3	None	None	G4G5T4	S4	4.2	BLM_S-Sensitive	Chaparral, Cismontane woodland, Lower montane coniferous forest
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	156	1	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Riparian forest
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	1	None	None	G3G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	20	Threatened	None	G3T2	S2	null	null	Riparian scrub
Downingia pusilla	dwarf downingia	Dicots	PDCAM060C0	132	29	None	None	GU	S2	2B.2	null	Valley & foothill grassland, Vernal pool, Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	180	16	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1385	8	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-	Aquatic, Artificial flowing waters,

											Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Falco columbarius	merlin	Birds	ABNKD06030	37	1	None	None	G5	S3S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Estuary, Great Basin grassland, Valley & foothill grassland
Fritillaria agrestis	stinkbells	Monocots	PMLIL0V010	32	4	None	None	G3	S3	4.2	null	Chaparral, Cismontane woodland, Pinon & juniper woodlands, Ultramafic, Valley & foothill grassland
Gratiola heterosepala	Boggs Lake hedge-hyssop	Dicots	PDSCR0R060	99	5	None	Endangered	G2	S2	1B.2	BLM_S-Sensitive	Freshwater marsh, Marsh & swamp, Vernal pool, Wetland
Hydrochara rickseckeri	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	1	None	None	G2?	S2?	null	null	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Monocots	PMJUN011L1	13	1	None	None	G2T1	S1	1B.2	null	Valley & foothill grassland
Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	Monocots	PMJUN011L2	62	1	None	None	G2T2	S2	1B.1	BLM_S-Sensitive, USFS_S-Sensitive	Chaparral, Cismontane woodland, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	2	None	None	G5	S3S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Lower montane coniferous forest, Oldgrowth, Riparian forest
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	303	3	None	Threatened	G3G4T1	S1	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Legenere limosa	legenere	Dicots	PDCAM0C010	83	6	None	None	G2	S2	1B.1	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Vernal pool, Wetland
Lepidurus packardii	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	325	7	Endangered	None	G4	S3S4	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	438	57	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Melospiza melodia	song sparrow ("Modesto" population)	Birds	ABPBXA3010	92	2	None	None	G5	S3?	null	CDFW_SSC-Species of Special Concern	null
		Dicots	PDPLM0C0X1	14	2	None	None	G2T2	S2	1B.1	null	

Navarretia myersii ssp. myersii	pincushion navarretia											Vernal pool, Wetland
Northern Claypan Vernal Pool	Northern Claypan Vernal Pool	Herbaceous	CTT44120CA	21	1	None	None	G1	S1.1	null	null	Vernal pool, Wetland
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	9	None	None	G3	S3.1	null	null	Vernal pool, Wetland
Northern Volcanic Mud Flow Vernal Pool	Northern Volcanic Mud Flow Vernal Pool	Herbaceous	CTT44132CA	7	5	None	None	G1	S1.1	null	null	Vernal pool, Wetland
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	3	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
Orcuttia viscida	Sacramento Orcutt grass	Monocots	PMPOA4G070	12	3	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Vernal pool, Wetland
Pandion haliaetus	osprey	Birds	ABNKC01010	504	1	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest
Phalacrocorax auritus	double-crested cormorant	Birds	ABNFD01020	39	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Progne subis	purple martin	Birds	ABPAU01010	71	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Broadleaved upland forest, Lower montane coniferous forest
Riparia riparia	bank swallow	Birds	ABPAU08010	298	2	None	Threatened	G5	S2	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Sagittaria sanfordii	Sanford's arrowhead	Monocots	PMALI040Q0	126	5	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp, Wetland
Spea hammondi	western spadefoot	Amphibians	AAABF02020	1247	6	None	None	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Taxidea taxus	American badger	Mammals	AMAJF04010	592	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane

												dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Thamnophis gigas	giant gartersnake	Reptiles	ARADB36150	366	4	Threatened	Threatened	G2	S2	null	IUCN_VU- Vulnerable	Marsh & swamp, Riparian scrub, Wetland
Valley Needlegrass Grassland	Valley Needlegrass Grassland	Herbaceous	CTT42110CA	45	1	None	None	G3	S3.1	null	null	Valley & foothill grassland

\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

## Plant List

14 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in Quads 3812184, 3812183, 3812182, 3812174, 3812173, 3812172, 3812164 3812163 and 3812162;

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Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Balsamorhiza macrolepis</a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Brodiaea rosea ssp. vallicola</a>	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	4.2	S3	G5T3
<a href="#">Chloropyron molle ssp. hispidum</a>	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.1	S1	G2T1
<a href="#">Clarkia biloba ssp. brandegeae</a>	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
<a href="#">Downingia pusilla</a>	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
<a href="#">Fritillaria agrestis</a>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	4.2	S3	G3
<a href="#">Gratiola heterosepala</a>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
<a href="#">Juncus leiospermus var. ahartii</a>	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	1B.2	S1	G2T1
<a href="#">Juncus leiospermus var. leiospermus</a>	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	1B.1	S2	G2T2
<a href="#">Legenere limosa</a>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
<a href="#">Navarretia myersii ssp. myersii</a>	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	1B.1	S2	G2T2
<a href="#">Navarretia nigelliformis ssp. nigelliformis</a>	adobe navarretia	Polemoniaceae	annual herb	Apr-Jun	4.2	S3	G4T3
<a href="#">Orcuttia viscida</a>	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	1B.1	S1	G1
<a href="#">Sagittaria sanfordii</a>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3

### Suggested Citation

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## **Questions and Comments**

[rareplants@cnps.org](mailto:rareplants@cnps.org)

# Attachment B

## **Plants Observed within the Project Site**

<b>Family</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>*</b>
<b>Asteraceae</b>	<i>Centaurea solstitialis</i>	Yellow star-thistle	Invasive
<b>Asteraceae</b>	<i>Dittrichia graveolens</i>	Stinkwort	Invasive
<b>Asteraceae</b>	<i>Sonchus oleraceus</i>	Common sow thistle	Invasive
<b>Asteraceae</b>	<i>Taraxacum officinale</i>	Common dandelion	Invasive
<b>Brassicaceae</b>	<i>Raphanus sativus</i>	Radish	Invasive
<b>Caryophyllaceae</b>	<i>Cerastium fontanum ssp. vulgare</i>	Common mouse-ear chickweed	Invasive
<b>Casuarinaceae</b>	<i>Casuarina</i> sp.	sheoak	--
<b>Cupressaceae</b>	<i>Cedrus deodara</i>	deodar cedar	--
<b>Fabaceae</b>	<i>Medicago polymorpha</i>	California burclover	Invasive
<b>Fabaceae</b>	<i>Vicia villosa</i>	Hairy vetch, winter vetch	Invasive
<b>Fagaceae</b>	<i>Quercus lobata</i>	Valley oak, roble	N
<b>Fagaceae</b>	<i>Quercus wislizeni</i> var. <i>wislizeni</i>	Interior live oak	N
<b>Geraniaceae</b>	<i>Erodium botrys</i>	Storksbill, filaree	Invasive
<b>Geraniaceae</b>	<i>Erodium cicutarium</i>	Redstem filaree	Invasive
<b>Geraniaceae</b>	<i>Geranium molle</i>	Cranesbill, geranium	Invasive
<b>Malvaceae</b>	<i>Malva parviflora</i>	Cheeseweed, little mallow	Invasive
<b>Orobanchaceae</b>	<i>Triphysaria eriantha</i>	Butter-and-eggs, johnny-tuck	Native
<b>Platanaceae</b>	<i>Platanus</i> sp.	Sycamore	--
<b>Poaceae</b>	<i>Aira caryophyllea</i>	Silver hair grass	Invasive
<b>Poaceae</b>	<i>Avena barbata</i>	Slender wild oat	Invasive
<b>Poaceae</b>	<i>Avena fatua</i>	Wild oat	Invasive
<b>Poaceae</b>	<i>Bromus diandrus</i>	Ripgut grass	Invasive
<b>Poaceae</b>	<i>Bromus hordeaceus</i>	Soft chess	Invasive
<b>Poaceae</b>	<i>Hordeum murinum</i>	Wall barley	Invasive

# Attachment C

## **Photographs of the Project Site**



**Photograph 1**  
Pleasant Grove



**Photograph 2**  
Campus Oaks



**Photograph 3**  
Misty Woods



**Photograph 4**  
Galilee



**Photograph 5**  
Vencil Brown



**Photograph 6**  
Central Park



**Photograph 7**  
Marlin



**Photograph 8**  
Maidu

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# Attachment D

## **Regionally Occurring Special-Status Species Considered in the Project Site**

**TABLE D-1**  
**REGIONALLY OCCURRING SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT SITE**

Common Name Scientific Name	Status (Federal/State/ CRPR)	Habitat Requirements	Identification/ Survey Period	Potential to Occur
<b>Plants</b>				
Ahart's dwarf rush <i>Juncus leiostermus</i> var. <i>ahartii</i>	--/--/1B	Annual herb found in mesic areas in valley and foothill grassland from 30 to 229 meters.	Blooming period: April – August.	<b>Low</b> ; the annual grassland within the project site provides marginal habitat for this species. There are no CNDDDB records within 5 miles of the project site.
Big-scale balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	--/--/1B	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland on serpentinite soils, from 90 to 1,555 meters.	Blooming period: March – June.	<b>Low</b> ; the annual grassland within the project site provides marginal habitat for this species. There are no CNDDDB records within 5 miles of the project site.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--/CE/1B	Annual herb found on clay soils around the lake margins of marshes and swamps and in vernal pools from 10 to 2,375 meters.	Blooming period: April – August.	<b>None</b> ; while there are CNDDDB records within 5 miles, the project site does not provide habitat for this species.
Dwarf downingia <i>Downingia pusilla</i>	--/--/2	Annual herb found in mesic areas within valley and foothill grassland and vernal pools from 1 to 445 meters.	Blooming period: March – May.	<b>Low</b> ; the annual grassland within the project site provides marginal habitat for this species. There are CNDDDB records within 5 miles of the project site.
Hisbid bird's beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	--/--/1B	Annual hemiparasitic herb found on alkaline substrate in meadows and seeps, playas, and valley and foothill grassland from 1 to 155 meters.	Blooming period: June - September	<b>Low</b> ; the annual grassland within the project site provides marginal habitat for this species. There are CNDDDB records within 5 miles of the project site.
Legenere <i>Legenere limosa</i>	--/CT/1B	Annual herb found in vernal pools from 1 to 880 meters.	Blooming period: April – June.	<b>None</b> ; while there are CNDDDB records within 5 miles, the project site does not provide habitat for this species.
Pincushion navarretia <i>Navarretia myersii</i>	--/--/1B	Annual herb found in vernal pools, which are often acidic, from 20 to 330 meters.	Blooming period: April – May.	<b>None</b> ; the project site does not provide habitat and there are no CNDDDB records for this species within 5 miles of the project site.
Red Bluff dwarf rush <i>Juncus leiostermus</i> var. <i>leiostermus</i>	--/--/1B	Annual herb found in vernal mesic chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools from 35 to 1,250 meters.	Blooming period: March - June	<b>Low</b> ; the annual grassland within the project site provides marginal habitat for this species. There are CNDDDB records within 5 miles of the project site.
Sacramento orcutt grass <i>Orcuttia viscida</i>	FE/CE/1B	Annual herb found in vernal pools from 30 to 100 meters.	Blooming period: April – September.	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDDB records within 5 miles of the project site.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--/--/1B	Perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 650 meters.	Blooming period: May – October.	<b>None</b> ; the project site does not provide habitat for this species. There are CNDDDB records within 5 miles of the project site.

**TABLE D-1**  
**REGIONALLY OCCURRING SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT SITE**

Common Name Scientific Name	Status (Federal/State/ CRPR)	Habitat Requirements	Identification/ Survey Period	Potential to Occur
<b>Wildlife</b>				
<b>Invertebrates</b>				
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE/--/--	Inhabits very large vernal pools.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDB records within 5 miles of the project site.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT/--/--	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus nigra</i> ssp. <i>caerulea</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Adults emerge in spring until June. Exit holes visible year – round.	<b>None</b> ; the project site does not contain elderberry shrubs. There are CNDDB records within 5 miles of the project site.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/--/--	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None</b> ; the project site does not provide habitat for this species. There are CNDDB records within 5 miles of the project site.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE/--/--	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None</b> ; the project site does not provide habitat for this species. There are CNDDB records within 5 miles of the project site.
<b>Fish</b>				
Central Valley steelhead DPS <i>Oncorhynchus mykiss</i>	FT/--/--	Inhabits rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	Spawn in winter and spring.	<b>None</b> ; the project site does not provide habitat for this species. There are CNDDB records within 5 miles of the project site.
Delta smelt <i>Hypomesus transpacificus</i>	FT/SE/--	Open surface waters in the Sacramento/San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators. May be affected by downstream sedimentation.	Consult agency	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDB records within 5 miles of the project site.

**TABLE D-1**  
**REGIONALLY OCCURRING SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT SITE**

Common Name Scientific Name	Status (Federal/State/ CRPR)	Habitat Requirements	Identification/ Survey Period	Potential to Occur
<b>Amphibians/Reptiles</b>				
California red-legged frog <i>Rana draytonii</i>	FT/CSC/--	Requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or marsh communities with emergent vegetation. Believed extirpated from the Central Valley floor since 1960s.	Aquatic surveys of breeding sites between January and September. Optimally after April 15.	<b>None</b> ; the project site does not provide habitat and occurs outside of the known extant geographic and elevation ranges for this species. There are no CNDDDB records within 5 miles of the project site.
California tiger salamander <i>Ambystoma californiense</i>	FT/ST/--	Found in vernal pools, ephemeral wetlands, and seasonal ponds, including constructed stockponds, in grassland and oak savannah plant communities from 3 to 1,054 meters.	Aquatic surveys between March and May.	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDDB records within 5 miles of the project site.
Giant garter snake <i>Thamnophis gigas</i>	FT/CT/--	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid March). This species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Active outside of dormancy period November-mid March	<b>None</b> ; the project site occurs outside of the known geographic range for this species. There are no CNDDDB records within 5 miles of the project site.
Western pond turtle <i>Emys marmorata</i>	--/CSC/--	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Active outside of dormancy period November – February	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDDB records within 5 miles of the project site.
Western spadefoot <i>Spea hammondi</i>	--/CSC/--	Found in open grasslands and woodlands. Requires vernal pools or seasonal wetlands for breeding.	Year – round	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDDB records within 5 miles of the project site.
<b>Birds</b>				
Bank swallow <i>Riparia riparia</i>	--/CT/--	Nests in riverbanks and forages over riparian areas and adjacent uplands.	April – July	<b>None</b> ; the project site does not provide nesting habitat for this species.
Burrowing owl <i>Athene cunicularia</i>	--/CSC/-- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year – round/Breeding season surveys between March and August.	<b>Moderate</b> ; the ruderal/disturbed and annual grassland provide habitat for this species, although few burrows that could be occupied by this species were observed in these habitat types. There are CNDDDB records within 5 miles of the project site.

**TABLE D-1**  
**REGIONALLY OCCURRING SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT SITE**

Common Name Scientific Name	Status (Federal/State/ CRPR)	Habitat Requirements	Identification/ Survey Period	Potential to Occur
California black rail <i>Laterallus jamaicensis coturniculus</i>	--/CT/--	Saltwater, brackish, and freshwater marshes. This species is known from Alameda, Butte, Contra Costa, Imperial, Los Angeles, Marin, Napa, Nevada, Orange, Placer, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Sutter, and Yuba counties, in California.	Year – round	<b>None</b> ; the project site does not provide habitat for this species. There are no CNDDB records within 5 miles of the project site.
Grasshopper sparrow <i>Ammodramus savannarum</i>	--/CSC/--	Frequents dense, dry, or well drained grassland, especially native grassland. Nests at base of overhanging clump of grass.	April – July	<b>Low</b> ; while the annual grassland within the project site provides habitat, there are no CNDDB records within 5 miles of the project site.
Purple martin <i>Progne subis</i>	--/CSC/--	Often nests in tall, old trees near bodies of water in woodland and conifer habitats. Feed in open areas near water and nest in tree cavities.	Year – round	<b>None</b> ; although the oak trees within the oak woodland are young and less than 30 feet tall. In addition, the oak woodland does not occur around water. There are no CNDDB records within 5 miles of the project site.
Song sparrow <i>Melospiza melodia</i>	--/CSC	Nests on the ground and in marshes. Inhabits grassland, chaparral, orchard, woodland, wetland, riparian, and scrub-shrub. In California this species is known from Alameda, Contra Costa, Marin, Napa, Sacramento, San Mateo, Santa Clara, Solano, Sonoma, and Stanislaus counties.	February - September	<b>None</b> ; although the annual grassland and oak woodland provide habitat, the project site occurs outside of the known geographic range for this species.
Swainson's hawk <i>Buteo swainsoni</i>	--/CT/--	Nest peripherally to valley riparian systems lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. This species is known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Inyo, Kern, Kings, Lassen, Los Angeles, Madera, Merced, Modoc, Mono, Napa, Placer, Plumas, Sacramento, San Bernardino, San Joaquin, San Luis Obispo, Siskiyou, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.	March – October	<b>Moderate</b> ; the mature trees within and in the vicinity of the project site provide nesting habitat and the annual grassland provides foraging habitat for this species. There are CNDDB records within 5 miles of the project site.
Tricolored blackbird <i>Agelaius tricolor</i>	--/CT, CSC/-- (nesting colony)	Nests in dense blackberry, cattail, tules, bulrushes, sedges, willow, or wild rose within freshwater marshes. Nests in large colonies of at least 50 pairs (up to thousands of individuals).	Year – round	<b>None</b> ; although the valley foothill riparian provides habitat, the extent of the habitat is not large enough to support colonial nesting colonies.

**TABLE D-1**  
**REGIONALLY OCCURRING SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT SITE**

Common Name Scientific Name	Status (Federal/State/ CRPR)	Habitat Requirements	Identification/ Survey Period	Potential to Occur
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT/SE/--	Nests in riparian forests along the broad, lower flood- bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, w/lower story of blackberry, nettles, or wild grape.	Year - round	<b>None</b> ; the project site does not provide suitable nesting habitat for this species.
White-tailed kite <i>Elanus leucurus</i>	--/CFP/-- (nesting)	Nests in isolated trees or woodland areas with suitable open foraging habitat.	February 15 – August 31	<b>Moderate</b> ; the mature trees within and in the vicinity of the project site provide nesting habitat and the annual grassland provides foraging habitat for this species. There are CNDDDB records within 5 miles of the project site.
<b>Mammals</b>				
American badger <i>Taxidea taxus</i>	--/CSC/--	Found in a variety of grasslands, shrublands, and open woodlands throughout California.	Year – round	<b>Low</b> ; the annual grassland within the project site provides habitat, however, very few burrows that could be utilized by this species are present within the project site. There are no CNDDDB records within 5 miles of the project site.
Pallid bat <i>Antrozous pallidus</i>	--/CSC/--	Most abundant in oak woodland with tree cavities, savannah, and riparian habitats. Roosts in crevices and hollows in trees, rocks, cliffs, bridges, and buildings.	Year – round	<b>Low</b> ; the small oak trees within the oak woodland provide marginal habitat given their small size. There are CNDDDB records within 5 miles of the project site.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--/CCT and CSC/--	Found in all habitats except for subalpine and alpine habitats. Roosts in caves, mines, tunnels with minimal disturbance, abandoned open buildings and other human-made structures.	Year-round	<b>None</b> ; the project site does not provide roosting habitat for this species. There are no CNDDDB records within 5 miles of the project site.

**Status Codes**

**Federally-Listed Species:**

FE = federal endangered  
 FT = federal threatened  
 FC = candidate  
 PT = proposed threatened  
 FPD = proposed for delisting  
 FD = delisted

**California State Ranked Species:**

CE = California state endangered  
 CT = California state threatened  
 CR = California state rare  
 CSC = California species of special Concern  
 CCT = California state threatened candidate  
 CFP = California fully protected

**CNPS\* Rank Categories:**

1A = plants presumed extinct in California  
 1B = plants rare, threatened, or endangered in California and elsewhere  
 2 = plants rare, threatened, or endangered in California, but common elsewhere  
 3 = plants about which we need more information  
 4 = plants of limited distribution

SOURCES: CDFW, 2020; CNPS, 2020; USFWS, 2020