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# DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

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## *AMERICAN RIVER PARKWAY NATURAL RESOURCES MANAGEMENT PLAN*



*Control Number: PLER2019-00073*  
*State Clearinghouse Number: 2021040230*  
*Date: September, 2022*

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COUNTY OF SACRAMENTO  
PLANNING AND ENVIRONMENTAL REVIEW  
827 7TH STREET, ROOM 225  
SACRAMENTO, CALIFORNIA 95814



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Planning and Environmental Review

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## *AMERICAN RIVER PARKWAY NATURAL RESOURCES MANAGEMENT PLAN*

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This Subsequent Environmental Impact Report has been prepared pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Division 13). A Subsequent Environmental Impact Report is an informational document which, when this Office requires its preparation shall be considered by every public agency prior to its approval or disapproval of a project. The purpose of a Subsequent Environmental Impact Report is to provide public agencies with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which any adverse effects of such a project might be minimized; and to suggest alternatives to such a project.

Prepared by the  
COUNTY OF SACRAMENTO  
PLANNING AND ENVIRONMENTAL REVIEW  
827 7<sup>TH</sup> STREET, ROOM 225  
SACRAMENTO, CALIFORNIA 95814  
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September 20, 2022

TO: All Interested Parties

SUBJECT: DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE AMERICAN RIVER PARKWAY NATURAL RESOURCES MANAGEMENT PLAN (CONTROL NUMBER: PLER2019-00073)

The subject Draft Subsequent Environmental Impact Report (DSEIR) is attached for your review and comment. The DSEIR can also be reviewed at:

<https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=PLER2019-00073>

Reviewers should focus on the sufficiency of the DSEIR in discussing possible impacts upon the environment, ways in which adverse effects might be minimized, and alternatives to the proposed project. Reviewers who wish to comment on the adequacy of this DSEIR are urged to submit written or emailed comments to the Sacramento County Department of Community Development, Planning and Environmental Review by close of business on 11/03/22 at the address below:

Joelle Inman, Environmental Coordinator  
Planning and Environmental Review  
827 7th Street, Room 225, Sacramento, CA 95814  
or via e-mail at: [CEQA@saccounty.net](mailto:CEQA@saccounty.net).

A public hearing on the American River Parkway Natural Resources Management Plan will be held by the Sacramento County Board of Supervisors at the Board of Supervisors Chambers, at 700 H Street in Sacramento. A notice of the date and time of the public hearing will be provided by the hearing body authorized to conduct the public hearing for the proposed project. Interested individuals may check the materials for upcoming hearings on the website of the Board of Supervisors at:

<https://sccob.saccounty.net/Pages/BOSPublicMeetings.aspx>

For questions about the project, please contact Meg de Courcy of this office at (916) 874-6332 or [decourcym@saccounty.net](mailto:decourcym@saccounty.net).

Sincerely,

Joelle Inman  
Environmental Coordinator

## **Table of Contents**

<b>Executive Summary.....</b>	<b>1</b>
SEIR Scope and Impacts Evaluated.....	1
Terminology Used in this SEIR.....	2
<b>1 Introduction.....</b>	<b>1-1</b>
Purpose for Preparing A Subsequent EIR.....	1-1
Project Background.....	1-2
Methodology .....	1-31
EIR Process.....	1-32
Terminology .....	1-35
<b>2 Project Description .....</b>	<b>2-1</b>
Introduction.....	2-1
Project Background.....	2-1
Project Location.....	2-2
Project Proponents.....	2-4
Environmental Setting.....	2-4
Project Proposal .....	2-5
Project Objectives .....	2-5
Intended Uses of the EIR .....	2-10
<b>3 Alternatives .....</b>	<b>3-1</b>
Introduction.....	3-1
Range of Alternatives.....	3-2
Description of Alternatives .....	3-3
Environmentally Superior Alternative.....	3-15

<b>4 Land Use And planning &amp; Population And Housing .....</b>	<b>4-1</b>
Introduction.....	4-1
Background.....	4-2
Environmental Setting.....	4-5
Regulatory Setting .....	4-6
Significance Criteria .....	4-11
Impacts And Analysis .....	4-12
<b>5 Water Quality and Hydrology .....</b>	<b>5-1</b>
Introduction.....	5-1
Water Quality .....	5-2
Impacts And Analysis .....	5-4
Hydrology.....	5-7
Impacts And Analysis .....	5-11
<b>6 Biological Resources .....</b>	<b>6-1</b>
Introduction.....	6-1
Environmental Setting.....	6-2
Regulatory Setting .....	6-16
Proposed Project – Natural Resources Management Plan .....	6-23
Significance Criteria .....	6-23
Methodology .....	6-24
Impacts And Analysis .....	6-25
<b>7 Cultural Resources .....</b>	<b>7-1</b>
Introduction.....	7-1
Environmental Setting.....	7-2
Regulatory Setting .....	7-2

Significance Criteria .....	7-9
Proposed NRMP Project Description: Cultural Resources Goals and Potential Resource Management Actions .....	7-11
Methodology .....	7-12
Impacts And Analysis .....	7-13
<b>8 Tribal Cultural Resources .....</b>	<b>8-1</b>
Introduction.....	8-1
Tribal Resources Environmental Setting.....	8-2
Regulatory Setting .....	8-4
Significance Criteria .....	8-7
Proposed NRMP Project Description: Tribal Cultural Resources Goals and Potential Resource Management Actions .....	8-7
Methodology .....	8-9
Impacts And Analysis .....	8-10
<b>9 Hazards, Hazardous Materials, and Wildfire .....</b>	<b>9-1</b>
Introduction.....	9-1
Regulatory Setting .....	9-2
Significance Criteria .....	9-6
Methodology .....	9-7
<b>10 Public Services/Utilities.....</b>	<b>10-1</b>
Introduction.....	10-1
Environmental Setting.....	10-2
Regulatory Setting .....	10-4
Proposed Project – Natural Resources Management Plan .....	10-5
Significance Criteria .....	10-6
Impacts And Analysis .....	10-7

**11 Cumulative Impacts and Other CEQA Considerations..... 11-1**

**Cumulative Impacts..... 11-1**

**12 Bibliography.....12-1**



**List of Plates**

**Plate PD-1: Location Map of 19 Plan Areas of the American River  
Parkway.....2-3**

**Plate HZ-1: Parkway CAL FIRE FHSZ Classification .....9-13**

**Plate HZ-2: Parkway CAL FIRE WUI .....9-15**

**Plate PS-1: Electrical (Power line) Easements .....10-3**

## **List of Tables**

<b>Table ES-1: Executive Summary of Impacts and Mitigation.....</b>	<b>4</b>
<b>Table ALT-2: Alternatives Summary Matrix .....</b>	<b>3-15</b>
<b>Table HY-1: Scenarios Modeled in NRMP Hydraulic Study .....</b>	<b>5-13</b>
<b>Table HY-2: NRMP Hydraulic Analysis Inputs. ....</b>	<b>5-14</b>
<b>Table BR-1: CNDDDB Results .....</b>	<b>6-4</b>
<b>Table BR-2: Recommended Survey Periods for Swainson’s Hawk (TAC 2000).....</b>	<b>6-29</b>
<b>Table CR–1: Policies of the American River Parkway Plan that Pertain to Cultural Resources .....</b>	<b>7-8</b>
<b>Table CR-2: NRMP Goal Area 3, Cultural Resources .....</b>	<b>7-11</b>
<b>Table TCR–1: Policies of the American River Parkway Plan that Pertain to Tribal Resources .....</b>	<b>8-6</b>
<b>Table TCR-2: NRMP Goal Area 3, Cultural Resources .....</b>	<b>8-8</b>

## EXECUTIVE SUMMARY

The subject of this Draft Subsequent Environmental Impact Report (DSEIR) is a project known as the American River Parkway Natural Resources Management Plan. The Sacramento County Board of Supervisors certified the original ARPPU FEIR on September 10, 2008 and approved the update to the American River Parkway Plan.

The Parkway is an open space greenbelt extending approximately 29 miles and covers approximately 7,000 acres. Regional Parks manages lands on the lower 23 miles of the Parkway from the Hazel Avenue Bridge to the American River confluence with the Sacramento River, approximately 5,000 acres. The width of the Parkway varies down its length – in certain areas, the Parkway is as narrow as 700 feet and at other locations as wide as 6,800 feet (1.3 miles). Several urban communities are located along the edges of the Parkway, including the City of Sacramento, the City of Rancho Cordova, and portions of unincorporated Sacramento County, including the communities of Arden-Arcade, Carmichael and Fair Oaks. The Parkway is located within the Sacramento West, Sacramento East, Carmichael, and Folsom U.S. Geological Service quadrangles: Townships 8, 9, and 10 N, Range 4, 5, 6, and 7 East.

### SEIR SCOPE AND IMPACTS EVALUATED

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As an initial step in the environmental review process, the Project was compared with the prior FEIR prepared for the American River Parkway Plan Update (ARPPU). Changes to the prior project along with new topical environmental analyses were considered to determine whether the Project would have the potential to result in significant impacts. During the Notice of Preparation (NOP) scoping process, two comments were received from the following agencies (Appendix IN-1, Appendix IN-2):

- Native American Heritage Commission
- Sacramento Regional County Sanitation District

**This report identifies potentially significant impacts** related to hydrology, cultural resources, and tribal cultural resources.

**This report identifies impacts that are less than significant with mitigation for impacts associated** with water quality, biological resources, hazards, hazardous materials and wildfires, and public services and utilities. These impacts are identified as significant or potentially significant, which could be reduced to a less than significant level through inclusion of recommended mitigation measures.

Impacts associated with land use and planning & population and housing **are considered less than significant.**

The following environmental impact and mitigation summary table (Table ES-1: Executive Summary of Impacts and Mitigation) briefly describes the project impacts evaluated in the Draft SEIR and the mitigation measures recommended to eliminate or reduce the impacts. The residual impact after mitigation is also identified. Detailed discussions of each of the identified impacts and mitigation measures, including pertinent supporting data, can be found in the specific topic sections in the remainder of this report.

## TERMINOLOGY USED IN THIS SEIR

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This Draft SEIR uses the following terminology to describe environmental effects of the project.

**Significance Criteria.** A set of criteria used by the lead agency to determine at what level, or “threshold,” an impact would be considered significant. Significance criteria used in this EIR include those that are set forth in the CEQA Guidelines, or can be discerned from the CEQA Guidelines; criteria based on factual or scientific information; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the Sacramento County General Plan.

**Less than Significant Impact.** A project impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment. No mitigation is required for less than significant impacts.

**Potentially Significant Impact.** A potentially significant impact is a substantial, or potentially substantial, adverse change in the environment. Physical conditions which exist within the area will be directly or indirectly affected by the proposed project. Impacts may also be short-term or long-term. A project impact is considered significant if it reaches the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to less than significant.

**Significant Unavoidable Impact.** A project impact is considered significant and unavoidable if it is significant and cannot be avoided or mitigated to a less-than-significant level once the project is implemented.

**Cumulative Significant Impact.** A cumulative impact can result when a change in the environment results from the incremental impact of a project when added to other related past, present or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects.

**Mitigation.** Mitigation measures are revisions to the project that would minimize, avoid, or reduce a significant effect on the environment. CEQA Guidelines §15370 identifies 5 types of mitigation:

- a) Avoiding the impact altogether by not taking a certain action or parts of an action.

- b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- e) Compensating for the impact by replacing or providing substitute resources or environments.

**Table ES-1: Executive Summary of Impacts and Mitigation**

<b>Impacts</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>LAND USE</b>			
<p><u>Impact: Physically Divide An Established Community</u></p> <p>The NRMP was developed to support and complement the land use policies of the ARPP. The NRMP addresses natural resources management within the context of the ARPP policies. Like the ARPP, the NRMP land use policies will not result in a physical division of communities.</p>	LS	None recommended.	LS
<p><u>Impact: Cause A Significant Environmental Impact Due To A Conflict With Any Land Use Plan, Policy, Or Regulation Adopted For The Purpose Of Avoiding Or Mitigating An Environmental Effect</u></p> <p>Because the land use policies of the NRMP complement those of the ARPP, the NRMP will not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.</p>	LS	None recommended.	LS
<b>HYDROLOGY AND WATER QUALITY</b>			

<p><u>Impact: Violate Any Water Quality Standards Or Waste Discharge Requirement Or Otherwise Substantially Degrade Surface Or Ground Water Quality</u></p> <p>The ARPPU FEIR analyzed physical impacts of potential land use activities associated with the land use designation changes proposed at that time; thus, the analysis and mitigation speak to impacts related to “construction projects.” Since not all of the NRMP Potential Resource Management Actions would result in what is traditionally known as “construction” for a development project, the mitigation has been slightly updated to clarify that it would apply to all construction and/or all applicable NRMP Potential Resource Management Actions. The applicability of these measures would be assessed when future NRMP Potential Resource Management Actions are being proposed and analyzed but would apply to all future NRMP Potential Resource Management Actions that have the potential to result in erosion, sediment transport or otherwise impact stormwater quality.</p>	PS	<p><b>HY-1.</b> All new construction projects and/or all applicable NRMP Potential Resource Management Actions within the Parkway shall incorporate the design components within the latest version of the <i>Sacramento County Guidance Manual for Development of Erosion and Sediment Control Plans</i>. No grading shall be permitted from October 1 – April 30, unless the grading is associated with an emergency project or it can be demonstrated to the Department of Environmental Review and Assessment that there is an environmental benefit to wet-season construction.</p> <p><b>HY-2.</b> All new construction or redevelopment of facilities and/or all applicable NRMP Potential Resource Management Actions within the Parkway shall incorporate the design components within the latest version of the <i>Stormwater Quality Design Manual for the Sacramento and South Placer Regions</i>, unless the Department of Environmental Review and Assessment determines that the project does not have the potential to release post-construction pollutants (e.g. signage). This shall include all new roads and trails, which shall be designed to minimize transport of sediment from the road or trail surface into nearby water bodies.</p>	PS <sup>1</sup> LS (c) <sup>2</sup>
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<sup>1</sup> Project absent on-going federal and state flood and habitat projects

<sup>2</sup> (c) Cumulative: Project + on-going federal and state flood and habitat projects

<p><u>Impact: Substantially Decrease Groundwater Supplies Or Interfere Substantially With Groundwater Recharge Such That The Project May Impede Sustainable Groundwater Management Of The Basin</u></p> <p>Although the plan may necessitate the use of water to establish vegetation within the Parkway, it does not include construction or development necessitating on-going uses or an expansion of use or reliance on groundwater.</p>	LS	None recommended.	LS
<p><u>Impact: In Flood Hazard, Tsunami, Or Seiche Zones, Risk Release Of Pollutants Due To Project Inundation</u></p> <p>The NRMP Potential Resource Management Actions are designed to improve habitat within the Parkway, which naturally has areas of inundation and seasonal flooding. Naturalization efforts will be done in concert with mitigation measures HY-1 and HY-2 to ensure that impacts are less than significant.</p>	PS	Mitigation Measures HY-1 and HY-2.	PS <sup>3</sup> LS (c) <sup>4</sup>

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<sup>3</sup> Project absent on-going federal and state flood and habitat projects

<sup>4</sup> (c) Cumulative: Project + on-going federal and state flood and habitat projects



<u>Impact: Conflict With Or Obstruct Implementation Of A Water Quality Control Plan Or Sustainable Groundwater Management Plan</u>  Implementation of the NRMP Potential Resource Management Actions will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LS	None recommended.	LS
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<p><u>Impact: Substantially Alter The Existing Drainage Pattern Of The Site Or Area, Including Through Alteration Of The Course Of A Stream Or River Or Through The Addition Of Impervious Surfaces, In A Manner Which Would:</u></p> <p><u>Result in Substantial Erosion or Siltation On- Or Off-site Or Substantially Increase The Rate Or Amount Of Surface Runoff In A Manner Which Would Result In Flooding On- Or Off-Site;</u></p> <p>Implementation of the NRMP Potential Resource Management Actions, may increase velocity and/or WSE within the Plan Areas. However, the model may be used to identify the appropriate location, scale, and caliber of NRMP management action within a Plan Area to bring velocity and/or WSE within that Plan Area and the Parkway within acceptable levels. Therefore, implementation of Mitigation Measure HY-3, application of the LAR2D, would reduce the above impacts to less-than-significant.</p>	PS	<p><b>HY-3.</b> Hydraulic analysis of NRMP Potential Resource Management Actions within the context of on-going state and federal projects (Scenario NRMP2 minus S1) using the LAR2D Model prior to implementation of Management Actions.</p> <p>The Hydrology Report titled <i>Natural Resource Management Plan Modeling Support Project: Cumulative Hydraulic Impact Assessment</i> (Hydrology Report) prepared by cbec eco engineering dated October 29, 2021, can be referenced to inform the implementation of NRMP Management Actions moving forward. Prior to implementation of Potential Resource Management Actions (see Table HY-2), the LAR2D will be used to evaluate for potential impacts to flood control systems using the NRMP2 minus S1 (NRMP with ARCF, and Water Forum projects) scenario. The modeling will reflect the specific Potential Resource Management Action, location within the Area Plan, within the context of near-term and on-going state and federal flood control and habitat projects. If the modeling indicates that implementation of the Management Action may increase the potential for localized erosion of a flood control levee or other critical infrastructure or features, the scope, location, and caliber of the Potential Resource Management Action will be redesigned to ensure that there are no significant velocity and/or WSE impacts.</p>	PS <sup>5</sup> LS (c) <sup>6</sup>
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<sup>5</sup> Project absent on-going federal and state flood and habitat projects

<sup>6</sup> (c) Cumulative: Project + on-going federal and state flood and habitat projects

<u>Create Or Contribute Runoff Water Which Would Exceed The Capacity Of Existing Or Planned Stormwater Drainage Systems Or Provide Substantial Additional Sources Of Polluted Runoff</u>  The NRMP Potential Resource Management Actions will not result in new construction and/or development of impervious surfaces; however, they may increase result in impacts. Application of mitigation measures HY-1, HY-2, and HY-3 will ensure that actions will not result in a creation or contribution of runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff.	PS	Mitigation Measures HY-1, HY-2, and HY-3.	PS <sup>7</sup> LS (c) <sup>8</sup>
<u>Impede Or Redirect Flood Flows</u>  Implementation of the NRMP Potential Resource Management Actions will not result in physical improvements or stormwater runoff discharge that would obstruct, impede, or otherwise redirect designated flood zones or naturally occurring floodplains; nor will these actions place buildings or new construction in high-risk flood areas.	LS	None Recommended.	LS
<b>BIOLOGICAL RESOURCES</b>			
<u>Impact: Have A Substantial Adverse Effect, Either Directly Or Through Habitat Modification, On Any Species Identified As A Special Status Species</u>			
<u>Vernal Pool Invertebrates</u>	PS	<b>BR-21. <i>Vernal Pool Crustaceans</i></b> (revised from ARPPU as follows) - Presence of listed vernal pool	LS

<sup>7</sup> Project absent on-going federal and state flood and habitat projects

<sup>8</sup> (c) Cumulative: Project + on-going federal and state flood and habitat projects

<p>Vernal pool invertebrate species are known to occur or have the potential to occur in the Parkway. With mitigation, impacts are less than significant.</p>		<p>crustaceans (<i>Branchinecta lynchi</i> &amp; <i>Lepidurus packardii</i>) shall be assumed unless determinate surveys that comply with the USFWS protocol "Survey Guidelines of the Listed Large Branchiopods" (published on May 31, 2015) conclude that the species is absent. In order to reduce impacts to listed vernal pool branchiopods and wetland habitat the applicant shall comply with one or a combination of the following:</p> <p>A. <i>Total Avoidance: Species is present or assumed to be present.</i> Unless a smaller buffer is approved through formal consultation with the USFWS, construction fencing shall be installed a minimum of 250 feet from the delineated wetland margin. All construction activities are prohibited within this buffer area. If total avoidance is achieved, no further action is required.</p> <p>B. <i>Compensate for habitat removed.</i> Mitigate for all vernal pools consistent with the Programmatic Formal Endangered Species Act Consultation published on February 28, 1996 for vernal pool branchiopods, if the project qualifies. Also, obtain all applicable permits from USFWS, USACE, CDFW, and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site wetlands and mitigate for habitat loss in accordance with the published regulatory guidelines.</p>	
<p><u>Invertebrates: VELB</u></p> <p>There are many locations throughout the Parkway where elderberry plants are present, and many of</p>	<p>PS</p>	<p><b>BR-22. VELB</b> (revised from the ARPPU as follows) - In order to reduce project impacts to the VELB habitat to a less than significant level the following mitigation measures, consistent with</p>	<p>LS</p>

<p>these plants show evidence that the species is present. There are also elderberry restoration/mitigation sites within the Parkway, such as the sites in the River Bend area. With mitigation, impacts are less than significant.</p>		<p>U.S. Fish and Wildlife Conservation Guidelines for the Valley Elderberry Longhorn Beetle, will be required:</p> <ul style="list-style-type: none"> <li>A. For construction prior to obtaining the applicable permits allowing removal of the elderberry plants, protective measures shall apply. Prior to initiating construction, the following measures shall be completed:</li> <li>B. Temporary construction fencing and flagging shall be installed at least 165 feet outside the edge of the driplines of the elderberry plants. In areas where encroachment on the 165-foot buffer has been approved by U.S. Fish and Wildlife, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant and provide documentation of U.S. Fish and Wildlife approval of the reduced setback.</li> <li>C. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.</li> <li>D. Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.</li> <li>E. Instruct work crews about the status of the</li> </ul>	
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		<p>beetle and the need to protect its elderberry host plant.</p> <p>F. Prior to construction within the 165-foot buffer area (or lesser buffer, as approved by U.S. Fish and Wildlife) established around the elderberry plants implement one of the following methods (or a combination of the following two methods) to reduce impacts to the Valley Elderberry Longhorn Beetle to a less than significant level:</p> <p>i) Either: Elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level shall be transplanted to a conservation area approved by U.S. Fish and Wildlife. The project applicant shall consult with the U.S. Fish and Wildlife on all transplantation activities and obtain all applicable permits.</p> <p>And/Or:</p> <p>ii) The project applicant shall compensate for the loss of elderberry plants on the site to the satisfaction of the U.S. Fish and Wildlife and shall obtain any/all applicable permit(s) from the Army Corps and the U.S. Fish and Wildlife.</p>	
<p><u>Amphibians and Reptiles: Western Pond Turtle</u></p> <p>The western pond turtle is known to occur within the American River Parkway, as it contains foraging and nesting habitat for the species. With mitigation, impacts are less than significant.</p>	PS	<p><b>BR-23. <i>Western Pond Turtle</i></b> (revised from ARPPU as follows) - To avoid impacts to western pond turtles the following measures shall apply:</p> <p>A. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) suitable habitat within the</p>	LS

		<p>project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.</p> <p>B. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat.</p> <p>C. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. CDFW and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.</p>	
<p><u>Amphibians and Reptiles: Western Spadefoot Toad</u></p> <p>Western spadefoot toad spend most of their lives in underground burrows, only coming to the surface to breed in wetlands. Mitigation has already been included in this document that will prevent net-loss of wetlands, so no net-loss of breeding habitat will result. The ARPPU FEIR identified ground-disturbing activities that could impact amphibian species. The NRMP management activities have the potential to result</p>	PS	<p><b>BR-28. <i>Western Spadefoot Toad</i></b> - Prior to surface disturbance in suitable habitat for Western Spadefoot Toad within the proposed project activity areas, a qualified biologist shall conduct surveys to determine the presence of the western spadefoot toad (<i>Spea hammondi</i>).</p> <p>A. Surveys shall be conducted at the appropriate time of the year (typically February-March when eggs, larvae, or tadpoles can be detected). If Western Spadefoot Toad is encountered during</p>	LS

<p>in ground disturbance that could result in impacts to western spadefoot. Mitigation has been included to ensure that preconstruction surveys are implemented. Impacts that are less than significant.</p>		<p>surveys, a site-specific avoidance, minimization, and/or relocation plan shall be prepared and ensure any measures in the approved plan are in place prior to project activities. If relocation (including out of harm's way), Western Spadefoot Toad shall only be relocated by a qualified biologist with the appropriate state and/or federal handling authorizations.</p> <p>B. Within suitable aquatic or upland western spadefoot habitat, all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within suitable habitat will be inspected for western spadefoot toad.</p> <p>C. If erosion control is implemented within suitable aquatic or upland western spadefoot habitat, non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls held together without synthetic netting containing burlap are examples of acceptable erosion control materials.</p>	
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<p><u>Birds: Nesting Raptors</u></p> <p>Numerous bird species are known to occur within the Parkway, including nesting raptors and migratory birds. The NRMP management activities have the potential to result in ground disturbance that could result in impacts to nesting raptor and migratory birds. The previously identified mitigation strategy in the ARPPU FEIR remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices. With implementation of this mitigation, impacts are less than significant.</p>	PS	<p><b>BR-18. <i>Nesting Raptors</i></b> - If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between March 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree and ground nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required. If any active nests are found, the Environmental Coordinator and California Fish and Wildlife shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest.</p>	LS
<p><u>Birds: Swainson's hawk</u></p> <p>Large trees in the Parkway are known to serve as nesting habitat for Swainson's hawk. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys and subsequent protocols in the event nesting Swainsons hawk are present. With mitigation impacts are less than significant.</p>	PS	<p><b>BR-29. <i>Swainson's Hawk Survey (TAC 2000)</i></b>. If construction, grading, or project-related improvements are to commence between February 1 and September 15, focused surveys for Swainson's hawk nests shall be conducted by a qualified biologist within a ½-mile radius of project activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). To meet the minimum level of protection for the species, surveys should be completed for the two survey periods immediately prior to</p>	LS

		commencement of construction activities in accordance with the 2000 TAC recommendations. If active nests are found, CDFW shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any activities. If no active nests are found during the focused survey, no further mitigation will be required.	
<p><u>Birds: Migratory birds</u></p> <p>Trees and vegetation in the Parkways are known to serve as nesting habitat for migratory birds. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys and subsequent protocols in the event nesting migratory birds are present. With mitigation, impacts are less than significant.</p>	PS	<p><b>BR-19. <i>Migratory Birds</i></b> (ARPPU mitigation measure BR-19) - For all migratory bird species not covered in the prior mitigation measures (including western yellow-billed cuckoo), the following guidelines shall be followed:</p> <ul style="list-style-type: none"> <li>A. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 day prior to construction by a qualified biologist.</li> <li>B. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.</li> <li>C. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer</li> </ul>	LS

		area until a qualified biologist determines that nestlings have fledged, or until September 1.	
<p><u>Birds: Bank swallow</u></p> <p>Bank swallow are known to nest in the Parkway. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys and subsequent protocols in the event bank swallows are present. With mitigation, impacts are less than significant.</p>	PS	<p><b>BR-17. <i>Bank Swallow</i></b> - Any construction activity within 200 feet of the bank of the American River shall comply with the following: A focused survey for bank swallow nests shall occur between April 1 and July 1 and be conducted by a qualified biologist no less than 14 days and no more than 30 days before construction commences. If active nests are found, the applicant shall consult with the CDFW for appropriate avoidance measures. If no active nests are found during the focused survey, submit a written report with date and the name of biologist to Planning and Environmental Review. Upon receiving the report, no further mitigation will be required.</p>	LS
<p><u>Birds: Western burrowing owl</u></p> <p>Burrowing owl are known to nest in the Parkway. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys and subsequent protocols in the event burrowing owls are present. With mitigation, impacts are less than significant.</p>	PS	<p><b>BR-30 <i>Burrowing Owl</i></b>. Prior to the commencement of construction activities (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:</p> <ul style="list-style-type: none"> <li>A. A survey for burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (~500 feet) of the project impact zone.</li> <li>B. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than</li> </ul>	LS

		<p>30 meters (~100 feet), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.</p> <p>C. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.</p> <p>D. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012).</p> <p>E. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and consult with California Fish and Wildlife prior to construction, and will be required to submit a</p>	
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		Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012) should be used in the development of the mitigation plan.	
<p><u>Birds: Purple Martin</u></p> <p>Purple Martin are known to nest in the Parkway. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys and subsequent protocols in the event Purple Martin are present. With mitigation, impacts are less than significant.</p>	PS	<p><b>BR-31. <i>Purple Martin Nest Protection.</i></b> Prior to the commencement of construction, a survey for nesting purple martins shall be conducted by a qualified biologist during the typical nesting period (May 1 to August 15). The survey shall cover potential nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no nests are found during the survey, no further mitigation will be required. If any nests are found, the developer shall consult with the CDFW to design and implement appropriate avoidance measures which shall ensure that the nesting area is not disturbed, and will remain a viable nesting location in the future.</p>	LS
<p><u>Birds: Tricolored Blackbird</u></p> <p>Tricolored blackbird are known to nest in the Parkway. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys</p>	PS	<p><b>BR-16. <i>Tricolor Blackbird</i></b> (revised from ARPPU as follows) - If construction activity (which includes clearing, grubbing, or grading) is to commence within 300 feet of suitable nesting habitat between March 1 and July 31, a survey for nesting tricolored blackbirds shall be conducted</p>	LS

<p>and subsequent protocols in the event tricolored blackbird are present. With mitigation, impacts are less than significant.</p>		<p>by a qualified biologist. The survey shall cover all potential nesting habitat on-site and off-site up to a distance of 300 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 300 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no tricolored blackbird were found during the pre-construction survey, no further mitigation would be required. If an active tricolored blackbird colony is found on-site or within 300 feet of the project site the project proponent shall do the following:</p> <ul style="list-style-type: none"> <li>A. Consult with the CDFW to determine if project activity will impact the tricolored blackbird colony(s). Provide the Environmental Coordinator with written evidence of the consultation or a contact name and number from CDFW. Implement all protective measures recommended by CDFW.</li> <li>B. With CDFW permission, the applicant may avoid impacts to tricolored blackbird by establishing a 300-foot temporary setback, with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat). The breeding season typically ends in July.</li> <li>C. If tricolored blackbird habitat is permanently destroyed follow the CDFW procedure to</li> </ul>	
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		mitigate for habitat loss, and submit documentation of the mitigation to the Environmental Coordinator.	
<p><u>Birds: Western Yellow-billed Cuckoo</u></p> <p>Western yellow-billed cuckoo are known to nest in the Parkway. NRMP implementation activities could disturb nesting birds. Mitigation has been included to incorporate pre-construction surveys and subsequent protocols in the event Western yellow-billed cuckoo are present. With mitigation, impacts are less than significant.</p>	PS	Implement measure BR-19.	LS
<p><u>Mammals: American Badger</u></p> <p>The plan will protect habitat for the American Badger within the Parkway, which means that impacts to habitat that support the American Badger are not anticipated. The ARPPU FEIR included mitigation to ensure that in the event that badgers are identified within the Parkway, that information be recorded and conveyed to CDFW. Mitigation from the ARPPU FEIR remains appropriate and has been included for the current project. Impacts to American Badger are not anticipated. The ARPPU FEIR included mitigation to ensure that in the event that badgers are identified within the Parkway, that information be recorded and conveyed to CDFW. Mitigation from the ARPPU FEIR remains appropriate and has been included for the current project. Impacts to American Badger are less than significant.</p>	LS	<p><b>BR-20. <i>American Badger.</i></b> To reduce potential impacts to American badger, the following shall be required:</p> <ul style="list-style-type: none"> <li>A. A qualified biologist shall conduct focused surveys for American badger dens within 2 weeks prior to ground-disturbing activities in suitable habitat (i.e., undeveloped grassland) within the Parkway. The survey shall cover the limits of ground disturbance and a 100-foot buffer. Any potentially active American badger dens located during the survey that show signs of recent activity shall be evaluated (typically with remote cameras) to determine activity status.</li> <li>B. If an active American badger den is detected during the breeding season (typically from March through May), then prior to construction, the qualified biologist shall establish a 100-foot no-disturbance buffer (e.g., mesh exclusion fencing, flagging, or similar) around the den. The buffer shall be maintained until the qualified biologist determines that the den is no longer active, and the young are no longer</li> </ul>	LS

		<p>dependent upon the den for survival. If a natal den site cannot be avoided throughout the life of the project (including operations and maintenance), destruction of the natal den burrow shall only proceed after the natal den is no longer active and no badger are present within the burrow.</p> <p>C. If construction occurs during the non-breeding period (i.e., typically from June through February) and an active non-natal den is found in or immediately adjacent to the construction footprint, a qualified biologist shall attempt to trap or flush the individual (e.g., passive exclusion with one-way doors) and relocate it to suitable habitat away from construction. After exclusion/relocation is completed, the vacated or unoccupied den can be excavated, and construction can proceed.</p>	
<p><u>Fish: Chinook salmon, Sacramento Splittail, Central Valley Steelhead</u></p> <p>Chinook Salmon, Central Valley Steelhead, and Sacramento Spittail, fish species are known to occur or have the potential to occur in the American River Parkway. Depending on the extent of improvements proposed for the NRMP resource management actions, the above fish species may be impacted during individual project implementation. Adherence to the applicable mitigation measures adopted with the ARPPU FEIR shall reduce impacts to less than significant.</p>	PS	<p><b>BR-25. Fish.</b> In order to avoid impacts to the steelhead, chinook salmon and Sacramento splittail, the following measures must be implemented for all work within the Ordinary High Water Mark of the American River:</p> <p>A. In-channel construction and riparian revegetation work on the main channel of the American River during the peak migration period for all three species (November through May, or specific periods that are specified in permits issued for the project by the National Marine Fisheries Service, U.S. Fish and Wildlife Service and/or the California Department of Fish and Game) shall be prohibited.</p> <p>B. Erosion control measures that prevent soil and sediment from entering the river shall be installed, monitored for effectiveness and</p>	LS



		<p>maintained throughout construction operations.</p> <p>C. Refueling of construction equipment and vehicles and storage of fuel shall not occur within the leveed floodway.</p> <p>D. Truck and concrete equipment wash-down shall not occur within the leveed floodway.</p> <p>E. Equipment and vehicles operated within the leveed floodway shall be checked and maintained daily to prevent leaks of fuels, lubricants or other fluids into the river.</p> <p>F. Litter and construction debris shall be removed from below the Ordinary High Water Mark daily, and disposed of at an appropriate site.</p> <p>G. Comply with water pollution protection provisions and conditions established by the Department of Fish and Game and all regulatory authorities with jurisdiction over the project.</p> <p>H. An erosion control and water quality protection plan shall be prepared and implemented that will be subject to the review and approval of the County Department of Water Resources.</p>	
<p><u>Special Status Plants</u></p> <p>All of the rare plants with the potential to be present in the Parkway are dependent on surface water habitats. The ARPPU FEIR identified ground-disturbing activities that could impact rare plants, and identified mitigation measures to reduce impacts to less than significant. The NRMP management activities have the potential to result in ground disturbance that could result in</p>	PS	<p><b>BR-25. Rare Plant Survey.</b> Rare plant surveys will be required in any wetland, marsh, or stream habitats prior to any grading, grubbing, or excavation within 250 feet of the wetland margin. The rare plant surveyor shall have:</p> <p>A. experience as a botanical field investigator;</p> <p>B. taxonomic experience and a knowledge of plant ecology (the surveyor should have some college coursework in plant taxonomy and</p>	LS

<p>impacts to individual rare plants. The previously identified mitigation strategy remains appropriate to mitigate impacts associated with the NRMP. Mitigation is included to require rare plant surveys for any wetland, marsh or stream habitats prior to construction within 250 of the habitat margin. If rare plants are found, authorization to impact the plants must be granted from Fish and Wildlife and/or Fish and Game. Any mitigation resulting from those permit actions must prioritize transplantation of the rare plants to an unaffected wetland. With implementation of this mitigation measure, impacts to rare plant species are less than significant.</p>		<p>ecology, and be a biological professional), and</p> <p>C. familiarity with the local flora and potential rare plants in the habitats to be surveyed.</p> <p>The surveys shall be conducted when the rare plants at the site will be easiest to identify (i.e. flowering stage), and when the plants reach that stage of maturity. A minimum of <u>three site visits</u> shall be required, during the plants' flowering period in order to determine absence. Each site visit must be no less than 7 days apart.</p> <p>Submit a written report to Planning and Environmental Review. The survey report should include a brief description of the vegetation, survey results, photographs, time spent surveying, date of surveys, a map showing the location of the survey route and any rare plant populations and copies of any rare plant occurrence forms. Notify Fish and Game and Fish and Wildlife if species are found, and apply for "take" authorization (state law section 2081 of the Fish and Game Code and federal Endangered Species Act) prior construction. Priority shall be given to transplanting individual plants to a different surface water in the Parkway, unless it can be demonstrated to the satisfaction of Planning and Environmental Review that transplantation is infeasible.</p>	
<p><u>Have a Substantial Adverse Effect on any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plan, Policies, Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service</u></p>	<p>LS</p>	<p>None recommended.</p>	<p>LS</p>

<p>Implementation of the NRMP would have a net benefit on all of the natural communities located within the Parkway. Individual projects may have temporary or permanent impacts on isolated features that comprise these communities. The proposed project is designed to preserve and naturalize riparian and woodland areas that have been impacted by man-made or natural activity along the Parkway. Therefore, overall impacts to sensitive natural communities are less than significant.</p>			
<p><u>Have a Substantial Effect on Protected State or Federally Protected Wetlands or Surface Waters</u></p> <p>NRMP Management Actions may impact protected wetlands and/or surface waters. Individual management actions will be evaluated for potential impacts to wetlands and/or surface waters during construction or implementation activities. In the event that an activity associated with the NRMP would impact waters, adherence to these mitigation measure shall reduce impacts to less than significant.</p>	PS	<p><b>BR-2. <i>Wetland Impacts</i></b> (revised from ARPPU as follows) - All projects that have identified wetlands within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following: To compensate for the permanent loss of wetlands, the applicant shall perform one or a combination of the following prior to issuance of building permits, and shall also obtain all applicable permits from the Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Central Valley Regional Water Quality Control Board, and the California Department of Fish and Wildlife:</p> <p>A. Where a Section 404 Permit has been issued by the Army Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of achieving a no net-loss of wetlands. The required Plan shall be submitted to the Sacramento County Environmental Coordinator, U.S. Army Corps</p>	LS

		<p>of Engineers, and U.S. Fish and Wildlife Service for approval prior to its implementation.</p> <p>B. If regulatory permitting processes result in less than a 1:1 compensation ratio for loss of wetlands, the Project applicant shall demonstrate that the wetlands which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.</p>	
<p><u>Interfere 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</u></p> <p>The project is located within the American River Parkway, an open space corridor and waterway for native resident, migratory fish or wildlife species, which contains native resident or migratory wildlife corridors for a variety of species. The ARPPU FEIR determined that improvements associated with the project could impact resident or migratory species within the Parkway. The prior conclusion and mitigation remains appropriate for the current project. Depending on the extent of improvements proposed for the NRMP resource management actions, the movement of any native resident, migratory fish, or wildlife species and native resident or migratory wildlife corridors may be impacted. With adherence to the applicable mitigation measures</p>	PS	See Mitigation Measures BR-16 through BR-31.	LS

identified for individual migratory species, impacts would be reduced to less than significant.			
<p><u>Conflict with Local Policies or Ordinances Protecting Biological Resources</u></p> <p>Sacramento County has identified the value of its native and landmark trees and has adopted measures for their preservation. The Tree Ordinance (Chapter 19.04 and 19.12 of the County Code) provides protections for landmark trees and heritage trees. There are native trees throughout the American River Parkway. A tree inventory has not been completed for the Parkway, but mitigation consistent with adopted policies and ordinances protecting native tree resources is included that would be required of projects implementing the NRMP. Impacts are less than significant.</p>	PS	<p><b>BR-11. <i>Transplanting Trees.</i></b> In lieu of either BR-10 or BR-13, the oak tree(s) proposed for removal may be transplanted to an area outside the construction footprint. A Planning and Environmental Review ISA-certified arborist must concur that relocation of the tree(s) in question is feasible, and any transplantation shall be planned and conducted under the supervision of an ISA-certified arborist. The transplanted tree(s) shall be monitored for a period of three years. If during this time the tree(s) die, mitigation shall be required in accordance with Mitigation Measures BR-10 and BR-13.</p> <p><b>BR-12. <i>Native Oak Protection.</i></b> With the exception of the trees removed and compensated for through Mitigation Measures above, all native trees of 6 inches dbh or larger whose trunks or driplines are within 100 feet of construction activities shall be preserved and protected as follows:</p> <p>A. A circle with a radius measurement from the trunk of the protected tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.</p> <p>B. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the protected trees prior to initiation</p>	LS

		<p>of project construction, in order to avoid damage to the trees and their root systems.</p> <p>C. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected tree.</p> <p>D. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the dripline of the protected tree.</p> <p>E. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the dripline of the protected trees, unless specific authorization has been granted by the Environmental Coordinator. Where this is necessary and approved by the Environmental Coordinator, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines. In no case shall the impact area be greater than 20% of the protected tree dripline.</p> <p>F. Before grading or excavation for footings, walls, or trenching within five feet outside the driplines of protected trees, root pruning shall be required at the limits of grading or excavation to cut roots cleanly to a depth of the excavation or 36 inches (whichever is less). Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades or other approved root-pruning equipment under the supervision of an ISA</p>	
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		<p>Certified Arborist.</p> <p>G. All underground utilities and drain or irrigation lines shall be routed outside the driplines of protected trees. If lines must encroach upon the dripline, they should be tunneled or bored under the trees.</p> <p>H. If temporary haul or access roads must pass within the driplines of protected trees, a roadbed of six inches of mulch or gravel shall be created to protect the soil. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.</p> <p>I. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be tree-safe and not easily transported by water.</p> <p>J. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of an oak tree.</p> <p>K. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the dripline of the protected tree.</p> <p>L. Tree pruning required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker.</p> <p>M. All portions of permanent fencing that will encroach into the dripline protection area of</p>	
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		<p>any protected tree shall be constructed using posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.</p> <p>N. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.</p> <p>O. Landscaping beneath protected oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the dripline of protected oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.</p> <p><b>BR-13. <i>Tree Replacement.</i></b> Replacement Planting Plans shall adhere to this measure. The removal of native oak trees shall be compensated by planting native oak trees equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by Planning and Environmental Review.</p> <p>Equivalent compensation based on the following ratio is required:</p>	
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		<ul style="list-style-type: none"> <li>• one preserved native oak tree &lt; 6 inches dbh on-site = 1 inch dbh</li> <li>• one D-pot seedling (40 cubic inches or larger) = 1 inch dbh</li> <li>• one 15-gallon tree = 1 inch dbh</li> <li>• one 24-inch box tree = 2 inches dbh</li> <li>• one 36-inch box tree = 3 inches dbh</li> </ul> <p>Replacement tree planting shall be completed prior to the start of construction or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.</p> <p>Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:</p> <ol style="list-style-type: none"> <li>1. Species, size and locations of all replacement plantings and &lt; 6-inch dbh trees to be preserved</li> <li>2. Method of irrigation</li> <li>3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to</li> </ol>	
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		<p>provide for adequate drainage</p> <ol style="list-style-type: none"> <li>4. Planting, irrigation, and maintenance schedules;</li> <li>5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.</li> <li>6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees &lt; 6-inches dbh to be preserved on-site.</li> </ol> <p>No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.</p> <p>Oak trees &lt;6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be</p>	
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		<p>determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject Planning and Environmental Review approval.</p> <p>If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.</p>	
<p><u>Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Approved Local, Regional, or State Habitat Conservation Plan</u></p> <p>The American River Parkway is not included within any adopted habitat conservation plan, natural community conservation plan, or approved local, regional, or state habitat conservation plan. Species mitigation in this SEIR is consistent with habitat conservation plans.</p>	LS	None Recommended.	LS
<b>CULTURAL RESOURCES</b>			
<p><u>Historical Resources</u></p> <p>The Parkway contains numerous historic resources. In particular, remnants of historic mining activities are extremely prevalent and obvious within the Parkway. The ARPPU FEIR acknowledges that cultural resources are present within the Parkway and that ground disturbing activities may have a potentially significant impact</p>	PS	<p><b>CR-1.</b> Retain all important cultural features in the design of all future Parkway projects, unless doing so is proven to be infeasible to the satisfaction of Planning and Environmental Review (PER).</p> <p><b>CR-2.</b> Prior to approval of grading plans or issuance of building permits, all proposed facilities projects and/or all applicable NRMP Potential Resource</p>	PS

<p>to historical resources. The NRMP has a clear commitment to preservation and education to ensure historical resources are not impacted by both natural forces and physical developments. However, some of the Management Actions contemplated with the NRMP have the potential for ground disturbance, and therefore could result in the same impacts to historical resources that was contemplated in the ARPPU FEIR. Similar to the ARPPU FEIR, the overall impact to historical resources due to implementation of the NRMP is considered potentially significant, even after application of all feasible mitigation.</p>		<p>Management Actions within the Parkway must provide documentation that there are no cultural resources present within the construction area (including staging areas and similar). A qualified cultural resources professional shall perform a preliminary analysis of the construction area, to determine the relative sensitivity of the construction area. This need not include a formal cultural resources survey if the cultural resources investigator determines a finding of negative presence can be made from previous surveys or otherwise. If cultural resources are considered not to be present, Mitigation Measure CR-4 will still apply. If additional work is required, Mitigation Measure CR-3 and CR-4 shall apply.</p> <p><b>CR-3.</b> All projects including all applicable NRMP Potential Resource Management Actions that have been determined sensitive for known and/or unknown cultural resources within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following, to the satisfaction of PER:</p> <p>A. Conduct an archaeological/historical survey and assessment, by a qualified professional archaeologist, of the area of direct impact. If the project area includes known resources, then the survey will assess the condition of the resource.</p> <p>B. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine the significance of the resource.</p> <p>C. Following the field investigations, a technical</p>	
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		<p>report describing the evaluation shall be prepared to the satisfaction of PER.</p> <p>D. If based on the results of the field investigations the resource is not considered significant or important, no additional work would be required for that resource, and all construction related impacts would be considered less than significant.</p> <p>E. If based on the results of the field investigations resources were identified as being significant the following mitigation would apply:</p> <p>a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels.</p> <p><u>OR</u>, if a redesign is determined infeasible by PER, then,</p> <p>b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of PER. Impacts to the resource would remain significant.</p> <p><b>CR-4.</b> Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities and/or all applicable NRMP Potential Resource Management Actions, work shall be suspended PER shall be immediately notified at</p>	
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		<p>(916) 874-6141.</p> <p>At that time, PER will coordinate any necessary investigation of the find with appropriate specialists as needed. The project applicant shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.</p> <p><b>CR-5.</b> Design interpretive uses so that locational data of sensitive cultural resources is not disclosed to the general public. If locational data of cultural resources is crucial to an interpretive use than the following shall apply:</p> <p>A. Limit accessibility to envisioned cultural interpretive uses by requiring docent led tours or restricting access through fencing or elevated wooden walkways.</p> <p>B. Consult with qualified cultural resources staff, local Native Americans, and historical societies during the design phases in order to create interpretive uses that are appropriate for specific cultural resources sites.</p> <p><b>CR-6.</b> The area utilized for Soil Born Farms and potential interpretive area, and all associated construction and/or all applicable NRMP</p>	
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		Potential Resource Management Actions shall be located outside the limits of all known cultural resources sites.	
<p><u>Archeological or Prehistoric Resources</u></p> <p>The Parkway contains numerous documented archaeological and prehistoric resources, included but not limited to multi-component village sites, individual special-use sites, and prehistoric isolates. The ARPPU FEIR acknowledges that cultural resources are present within the Parkway and that ground disturbing activities may have an impact on those resources. The NRMP has a clear commitment to preservation, education and consultation with tribal governments to ensure cultural resources are not impacted by both natural forces and physical developments. However, some of the Potential Resource Management Actions contemplated with the NRMP have the potential for ground disturbance, and therefore could result in the same impacts to archaeological and prehistoric resources that were contemplated in the ARPPU FEIR. Thus, similar to the ARPPU FEIR, the overall impact to archaeological and prehistoric resources due to implementation of the NRMP is considered potentially significant, even after application of all feasible mitigation.</p>	PS	See Mitigation Measures CR-1 thru CR-6.	PS
<p><u>Human Remains</u></p> <p>The project will involve ground disturbance and there is always the potential to encounter unknown burials, especially within the Parkway. If human remains are encountered, recommended mitigation measure CR-4 will reduce impacts to</p>	PS	See Mitigation Measure CR-4.	LS

less than significant.			
<b>TRIBAL CULTURAL RESOURCES</b>			
<p><u>Impact: Cause A Substantial Adverse Change In The Significance Of A Tribal Cultural Resource On-Site</u></p> <p>The NRMP includes goals, objectives, and management criteria that is designed to protect and preserve tribal cultural resources (TCRs) within the Parkway. Some of the NRMP's recommended Potential Resource Management Actions would involve ground-disturbing activities and have the potential to impact TCRs. A new mitigation measure, specific to TCRs, has been incorporated for applicable NRMP projects involving ground-disturbing activities.</p>	PS	<p>See Mitigation Measure CR-1 through CR-6.</p> <p><b>TCR – 1</b> Tribal entities that have requested notification under AB-52 shall be notified of discretionary projects implementing the NRMP that will result in ground disturbance during the planning process. Tribal entities shall be afforded the opportunity to consult and recommend project-specific feedback and mitigation measures.</p>	PS
<b>HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE</b>			
<p><u>Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials or through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment</u></p> <p>Some activities associated with implementation of the NRMP have the potential to introduce hazardous materials into the Parkway. Additionally, some soils also have the potential to contain elevated levels of contaminants such as pesticides, mercury, or other materials that could be disturbed during activities that require interaction with the soil substrate. Specific NRMP projects would be implemented based on an</p>	PS	<p><b>HZ-1</b> Conduct Soil Investigations as Needed for In-Water Work Projects</p> <p>Specific sites identified for soil-disturbing activities under the NRMP related to in-water work projects shall be evaluated for their potential to contain contaminated soil from factors such as their location, previous disturbance, and previous uses. If the site has potential for soil contamination by substances such as arsenic, mercury, pesticides, and herbicides, lead, or hydrocarbons (e.g., if it is designated as intentionally altered or unintentionally altered in the NRMP in the case of mining or mining upstream, respectively), then soil testing for contaminants shall be</p>	LS



evaluation by Regional Parks according to considerations such as need, effects, durability, demonstrated cost versus benefits, and alternative sites. Impacts of specific projects, particularly those necessitating in-water work, may be subject to further evaluation under CEQA when they are identified. Mitigation Measure HZ-1 would require investigation of soils for in-water projects. This mitigation measure would also require appropriate investigation and, if needed, treatment of contaminated soils prior to the start of work in these areas. With this mitigation, impacts are less than significant.		completed prior to soil-disturbing activities if not previously conducted. Contaminated material, if found, shall be treated or otherwise disposed of in accordance with federal, state, and local laws and regulations.	
<u>Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School</u>  While there are numerous schools within 0.25 mile of the Parkway, the NRMP would not result in hazardous emissions or handling of hazardous materials close enough to schools to result in impacts at schools. Some transportation routes may pass by schools, but all hazardous materials would be handled in accordance with applicable federal, state, and local regulations.	LS	None recommended.	LS
<u>Impair Implementation of or Physical Interference with an Adopted Emergency Response Plan or Emergency Evacuation Plan</u>  The NRMP would be implemented entirely within the Parkway and would not adversely affect roadways potentially used for emergency response or evacuation outside of the Parkway. The NRMP is also prioritizing maintaining access for safety along transmission corridors.	LS	None recommended.	LS

Therefore, there would be no adverse impact to emergency access, and emergency access may be improved under the NRMP.			
<p><u>Expose People or Structures to a Significant Risk of Loss, Injury or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to or Intermixed with Urbanized Areas</u></p> <p>Although wildfire management activities of the NRMP would have an overall beneficial reduction in wildfire risk, there are certain recommended resource management actions that have the potential for a temporary risk of wildfire during construction. Mitigation Measure HZ-2 states that all construction equipment use will be conducted in accordance with applicable regulations, standards, and labels, which include requirements related to training and other factors that are protective for wildfire safety. With this mitigation, impacts are less than significant.</p>	PS	<p><b>HZ-2.</b> Operation and Maintenance of Construction Equipment</p> <p>All construction equipment use will be conducted in accordance with applicable regulations, standards, and labels, which include requirements related to training and other factors that are protective for wildfire safety. Use and transport of this equipment will comply with applicable federal, state, and local laws and regulations. Compliance with laws and regulations will substantially reduce the potential risk for a wildland fire during construction.</p>	LS
<b>PUBLIC SERVICES/UTILITIES</b>			
<p><u>Result in Substantial Adverse Physical Impact Associated with the Provision of Public Utilities</u></p> <p>The NRMP Potential Resource Management Actions include revegetation and restoration efforts throughout the American River Parkway that may overlap with utility easements and facilities. Regional San and SASD have concerns regarding adequate access to, and maintenance of, underground pipes and above ground facilities (pumping stations and treatment plants). The project could impede the ability for public utility providers to adequately maintain existing infrastructure within the Parkway, which is considered a potentially significant impact. This</p>	PS	<p><b>PS-1.</b> Prior to construction of new recreational amenities or installation of vegetation associated with revegetation and restoration efforts, Sacramento County Regional Parks shall submit plans to the public utility providers (PG&amp;E, SMUD, Western Area Power Authority, Regional San, SASD, etc.) which hold easements or have existing facilities within the American River Parkway for review and approval.</p>	LS

impact can be reduced to less than significant with implementation of mitigation requiring coordination of construction and landscaping plans with utility providers that maintain easements and facilities in the Parkway.			
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# 1 INTRODUCTION

## PURPOSE FOR PREPARING A SUBSEQUENT EIR

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The proposed project is the American River Parkway Natural Resources Management Plan (NRMP). The NRMP is intended to provide relevant and defensible information to the Parkway Manager for making informed decisions for managing, maintaining, and enhancing Parkway resources. In general, the NRMP is intended to provide a clear understanding of existing Parkway resources, the effects of disturbances such as flood, fire, invasive species and human impacts, as well as opportunities for protections and enhancements. It will advise resource management for promoting healthy ecosystems and resource protections, while balancing concurrent American River Parkway Plan goals of flood control, recreational opportunities and public safety. The NRMP is a programmatic level policy document, with project related analysis only associated with hydraulic modeling for specific locations within the Plan area. No other project specific analysis was prepared in support of the plan document.

Under the California Environmental Quality Act (CEQA), a subsequent EIR (SEIR) is required when one or more of the following occurs:

- substantial changes are proposed in a project, which will require revisions to the previous EIR;
- substantial changes in circumstances under which the project is undertaken, which will require revisions to the previous EIR;
- the discovery of new information of substantial importance occurs after an EIR has been certified; which includes
  - A. One or more significant effects not discussed in the previous EIR;
  - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - C. Mitigation measures or alternatives previously found not to be feasible would be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Because the proposed NRMP contains modified elements that were not considered in the previous analysis, the County determined that an SEIR should be prepared to revise the analysis of environmental impacts presented in the previous EIR.

The NRMP SEIR will supplement the analysis in the American River Parkway Plan 2006 Update (ARPPU) Final Environmental Impact Report (FEIR) (County Control Number: 2003-GPB-0332) and disclose to the public and decision makers potential environmental impacts pursuant to CEQA associated with the proposed NRMP.

## **PROJECT BACKGROUND**

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### **PREVIOUS ENVIRONMENTAL REVIEW PROCESSES**

The American River Parkway Plan (ARPP) is the guiding policy document that directs preservation, use, development, and administration within the Parkway. The ARPP also acts as the management plan for the federal and state Wild and Scenic Rivers Acts. The County of Sacramento has the principal responsibility for administration and management of the Parkway as guided by the ARPP. The purpose of the ARPP is to provide direction for land use decisions affecting the Parkway and it specifically addresses the preservation, use, development, and administration of the Parkway. The ARPP contains policies that apply to the entire extent of the Parkway, as well as area-specific policies regarding authorized use of the Parkway and its resources. These include limits on development and protection of natural resources.

The 1985 American River Parkway Plan was updated in 2006 to reflect current interests and technical information and is an Element of the Sacramento County General Plan. The ARPPU consisted of policy-level decisions related to allowable uses and designations within the Parkway. The associated FEIR was a high level programmatic analysis that did not cover project-level/construction-level projects; therefore any subsequent projects proposed would be required to undergo a separate review for CEQA compliance.

A revised Notice of Preparation (“NOP”) for the ARPPU Draft EIR (DEIR) was circulated in April 2007 and the Notice of Availability and DEIR were made available to the public in March 2008. A copy of the NOP can be found in Appendix IN-1. The DEIR was circulated for a 45-day public review period, which ended in April 2008. A public hearing was held before the Policy Planning Commission on April 22, 2008 and before the Sacramento County Parks Commission on April 24, 2008. The Policy Planning Commission instructed the Department of Environmental Review and Assessment (DERA) to respond to comments received and to prepare a Final EIR (FEIR) for presentation to the Sacramento County Board of Supervisors. On September 10, 2008 the Board of Supervisors certified the ARPPU FEIR (County Control #2003-0332; State Clearinghouse #2007032125) and adopted a Findings of Fact and Statement of Overriding Considerations, which acknowledged that although adverse impacts may result, specific project benefits outweighed the project’s unavoidable, adverse environmental impacts on Cultural Resources and Visual and Aesthetic Quality. Impacts identified that required mitigation are listed in Table 1.1, ARPPU FEIR – Summary of Impacts with Mitigation. A Mitigation Monitoring and Reporting Program (MMRP) was also adopted with the Findings of Fact and Statement of Overriding Considerations. Language in Table 1.1 in strikethrough was included in the ARPPU FEIR and removed during Board hearings on the project.

**Table 1.1: ARPPU FEIR – Summary of Impacts with Mitigation**

Description of Impact(s)	Recommended Mitigation(s)	IAM
Land Use		
<p>The ARPPU FEIR identified several significant land-use-related physical impacts, as well as some internal inconsistencies. These were:</p> <ul style="list-style-type: none"> <li>There are two types of boat launches in the Parkway Plan, but these are not defined. The result has been that they are treated as operationally identical. To eliminate this inconsistency, mitigation requires that either there shall be just one boat launch type, or definitions for the two shall be introduced to the Parkway Plan. The latter choice will avoid biological resources impacts from two proposed boat launches. (LU-1)</li> <li>There are no access paths shown extending to many existing or proposed boat launches, even though the Parkway Plan specifies that trails recreation is only allowed on designated trails. Though this does not cause significant physical impacts, this is a land use inconsistency that should be resolved. (LU-5)</li> <li>The proposed bridge on the eastern side of Discovery Park would physically disrupt and divide the Riverdale Mobile Home Park. This significant impact can be offset by mitigation. (LU-2)</li> <li>The westernmost proposed Limited Recreation area in the Cal Expo Area Plan conflicts with the Bushy Lake Preservation Act. This significant impact can be offset by mitigation. (LU-3)</li> <li>Policy 5.17 specifies that mountain bikes can be permitted on unpaved maintenance roads provided that there is stable funding to “support and monitor” the activity, to be certain it causes no harm. However, no definition for “support and monitor” is included. Mitigation requires the inclusion of more specific language to offset potential user conflict impacts. (LU-4)</li> <li>The Cal Expo Area Plan includes an Interpretive Area that is not near an access road, which is inconsistent with Parkway policy. Though this does not cause significant physical impacts, mitigation is recommended to eliminate this inconsistency.(LU-6)</li> </ul>	<p><b>LU-1.</b> One of the following shall be implemented to clarify the definitions and functions of the two types of boat launch facilities:</p> <ol style="list-style-type: none"> <li><del>The car-top boat launch and the boat ramp/trailer boat designation shall be eliminated and shall be replaced by a single boat launch designation. If this measure is chosen, mitigation for habitat loss must also be implemented in order to reduce impacts to less than-significant levels (refer to the Biological Resources measures).</del></li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>The Parkway Plan shall be amended to include a definition for car-top boat launch facility and the boat ramp/trailer boat facility. At a minimum, the definition of the car-top boat launch shall include the following elements: no motorized boats may be launched from this point, boats must be hand-carried to the water, and no impervious surfacing shall be used to create the boat launch site or access pathway.</li> </ol> <p><del><b>LU-2.</b> The proposed bridge shown on the far eastern side of the Discovery Park Area Plan (adjacent to the existing 16<sup>th</sup> Street bridge) shall be removed from the Area Plan.</del></p> <p><b>LU-3.</b> One of the following revisions shall be made to the proposed Cal Expo Area Plan:</p> <ol style="list-style-type: none"> <li><del>The existing Nature Study Area designation shall be retained in the northwestern portion of the site.</del></li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>The proposed Limited Recreation Area in the northwestern portion of the site shall be restricted to the area of the levee, the levee slope, and the toe of the levee where the habitat is primarily grassy. The Limited Recreation Area shall not overlay the existing marsh</li> </ol>	LS

Description of Impact(s)	Recommended Mitigation(s)	IAM
	<p>habitat, or encumber areas of dense riparian canopy or understory.</p> <p><b>LU-4.</b> Policy 5.17 shall be modified to specify that an implementation plan shall be in place prior to allowing the use of unpaved maintenance roads by users on mountain bicycles. The implementation plan shall include a design component and an educational component. The design component shall include surveys of the roads to identify blind curves, intersections and other areas of potential safety concern. The educational component shall include signage and outreach efforts designed to decrease user group conflicts.</p> <p><b>LU-5.</b> One of the following changes shall be made to the Parkway Plan in order to resolve an internal inconsistency related to access to car-top boat launches:</p> <p><del>1. A pedestrian trail designation shall be shown on the Area Plans connecting existing and proposed car-top boat launches to the nearest reasonable access point.</del></p> <p><b>OR</b></p> <p>2. A new trail designation shall be defined in the Parkway Plan and shown on the Area Plans connecting existing and proposed car-top boat launches to the nearest reasonable access point. The new trail designation shall be described as a footpath primarily maintained through use, not requiring any surface treatment (or similar language). Signage must still be provided, consistent with the requirements for other trail types.</p> <p><b>LU-6.</b> One of the following changes shall be made to the Cal Expo Area Plan in order to resolve an internal inconsistency:</p> <p><del>1. A pedestrian access trail shall be designated leading to the Interpretive Area in the center of Bushy Lake. The trail designation shall overlie the existing utility road.</del></p> <p><b>OR</b></p> <p>2. The Interpretive Area shown in the center of Bushy Lake shall either be removed or shall be relocated to an area adjacent to a proposed or existing public access path.</p>	



Description of Impact(s)	Recommended Mitigation(s)	IAM
Biological Resources		
<p>The analysis identified many areas of potential impact to biological resources. Some are specific to a particular improvement or land use area, and some are Parkway-wide.</p> <ul style="list-style-type: none"> <li>Wetlands may be present near proposed facilities in Discovery Park and Cal Expo, based on site reconnaissance. No construction should proceed until a qualified biologist has screened the construction area. (BR-1)</li> <li>Any wetlands near construction activities should either be avoided/protected or compensation must be provided for loss. (BR-2)</li> <li>The proposed Limited Recreation area along the river in Cal Expo is seasonally flooded, so no permanent structures should be allowed, the area should be cleaned of trash, and the area should be closed to recreation during the winter. (BR-3)</li> <li>One proposed maintenance road in Cal Expo goes straight through part of Bushy Lake. This road should be removed. (BR-4)</li> <li>In case LU-3 is not adopted, development in the marsh in the northwestern corner of Cal Expo should be limited for the protection of the habitat. (BR-5)</li> <li>Implementation of the Woodlake Gateway could remove substantial riparian woodland habitat. This habitat should be protected, particularly the large trees. (BR-6)</li> <li>Development of the proposed Limited Recreation area in the northwestern portion of the Cal Expo Area Plan could remove substantial riparian woodland habitat. This habitat should be protected, particularly the large trees. (BR-7)</li> <li>The proposed Developed Recreation area in SARA Park overlies a sensitive habitat area with a waterway and steep slopes. This designation should be removed. (BR-8)</li> <li>Various Project elements may remove riparian woodland, oak woodland, or individual trees within these woodlands.</li> </ul>	<p><b>BR-1.</b> Prior to approval of grading plans or issuance of building permits, all development projects within the Discovery Park and Cal Expo Area Plans must provide documentation that there are no wetlands present within the construction area (including staging areas and similar). A person qualified to perform wetland delineations (in accordance with the most recent United States Army Corps of Engineers delineation manual) shall inspect the construction area, determine if wetlands are present, and provide written documentation of the findings. This need not include a formal wetland delineation if the site investigator determines a finding of negative presence can be made without the delineation. If wetlands are not present, no further action is required. If wetlands are present, Mitigation Measure BR-2 shall apply.</p> <p><b>BR-2.</b> All projects that have identified wetlands within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following, to the satisfaction of the Department of Environmental Review and Assessment (unless the wetland is habitat for vernal pool branchiopods, in which case Mitigation Measure BR-21 shall apply):</p> <p>A. <i>Total avoidance: The project is designed to achieve total wetland avoidance, which requires that the construction footprint shall be no closer no closer than 50 feet to any wetland.</i> Orange temporary construction fencing shall be installed to delineate this buffer area. If total avoidance is achieved, no further action is required.</p> <p>B. <i>Partial avoidance: The project is designed to avoid encroaching within the delineated wetland boundaries, but is within 50 feet of the wetland boundaries.</i> In such a case, orange temporary construction fencing shall be</p>	LS

Description of Impact(s)	Recommended Mitigation(s)	IAM
<p>Compensation should be provided for any removal of this habitat. (BR-9, BR-10, BR-11, BR-12, and BR-13)</p> <ul style="list-style-type: none"> <li>• The Project will result in loss of grassland habitat. As a means of indirectly offsetting some of this impact, the chain link fence in Rossmoor Bar should be removed, because it acts as a migration barrier for larger species that use grassland habitat. (BR-14) Further, a program should be established to convert unofficially-created trails in grassland environments back to grassland habitat. (BR-15)</li> <li>• Some Project construction activities have the potential to impact tricolored blackbird nests, bank swallow nests, raptor nests, or the nests of other migratory bird species. Standard avoidance practices apply. (BR-16, BR-17, BR-18, and BR-19)</li> <li>• Some Project activities will reduce the available habitat for the American Badger. The current recommendation for this species is continued monitoring. As the Parkway is unique habitat, an effort should be made to aid in the effort to track the presence of the badger. (BR-20)</li> <li>• Some elements of the Project may impact vernal pools, which are habitat for listed invertebrate species. Standard avoidance and mitigation applies. (BR-21)</li> <li>• Some elements of the Project may impact elderberry plants, which is host to the Endangered Valley Longhorn Elderberry Beetle. Standard avoidance and mitigation applies. (BR-22)</li> <li>• Some elements of the Project may impact waterbodies that support Northwestern pond turtles. Standard avoidance applies. (BR-23)</li> <li>• Any bridges or trailered boat launches constructed in the Parkway have the potential to impact the habitat of special status fish species, such as the Chinook salmon. Various measures to protect water quality and to avoid disturbance of the river channel should be implemented. (BR-24)</li> <li>• Some elements of the Project may impact waterbodies that are host to rare plant species. Surveys for these species should occur before construction, and appropriate mitigation provided. (BR-25)</li> </ul>	<p>installed at the limits of construction. Regardless of the construction season, this shall be supplemented by straw wattles (or similar) and silt fencing. If the edge of the facility is closer than 50 feet to the wetland margin, informational signage shall be installed next to the facility to inform Parkway users that a sensitive wetland habitat is located nearby and that off-trail activities could result in serious harm to this resource. Any new parking lot in the buffer area shall be designed so that runoff from the surface of the lot shall be directed <u>away</u> from the wetland. Fencing shall also be placed around the boundary of the facility on all sides where a wetland is within 50 feet. The fencing shall be of open style, to allow the passage of wildlife (e.g. vertical pipe fencing).</p> <p>C. <i>Compensation</i>: Compensation may be either through restoration or creation of wetlands, with priority being placed on the restoration option, and shall take place within the Parkway.</p> <p>a. <i>Restoration</i>: Restoration may include either enhancing an existing degraded wetland area (rehabilitation) or returning function to an historic wetland area that is no longer functioning (re-establishment). As the former type of restoration does not result in net-gain of wetland habitat, this type of restoration shall only be permissible when mitigating for loss of a wetland that is also degraded or otherwise low-quality (according to a qualified biologist). High-quality wetlands must be mitigated through either the re-establishment restoration method or through creation (see item b, below). Mitigation may take place at multiple locations if multiple wetlands are impacted, but the total size of each restoration area shall be at least the same size as the wetland impacted. Any vegetation planted as part of the restoration activities shall be locally native plants chosen from the Army Corps list of</p>	

Description of Impact(s)	Recommended Mitigation(s)	IAM
<ul style="list-style-type: none"> <li>• Parkway Policy 5.8 allows overnight camping, but does not specify that this camping shall not result in any degradation of the natural environment or the nearby restoration area. This language should be added. (BR-26)</li> <li>• Mountain biking on unpaved maintenance roads may cause damage if the roads are wet, and the soils are thus easily disturbed. These activities could cause siltation of nearby biological resources. Mountain biking should not be permitted during the rainy season. (BR-27)</li> </ul>	<p>wetland plants that is current at the time of project approval. In the case of re-establishment, mitigation is required at a minimum 1:1 ratio. In the case of rehabilitation, mitigation is required at a minimum 2:1 ratio.</p> <p>b. <i>Creation:</i> An equivalent amount of in-kind wetland habitat removed shall be created within the Parkway. Creation shall be in accordance with the Army Corps guidelines that are current at the time of project approval.</p> <p><b>BR-3.</b> This measure applies to the Limited Recreation area along the American River in the Cal Expo Area Plan and shall be added to the Parkway Plan policies applicable to the Cal Expo Area Plan. No permanent facilities are permitted in this location. Temporary facilities may not be placed within the area prior to June 1 or the recession of high water from the area (whichever is <i>later</i>), and must be removed by October 15. All trash and debris must also be cleaned from this area by October 15. Signs shall be posted at the head of the main access trails to this area from October 15 to June 1 (or later – see above) stating that the area is closed to recreation until the summer.</p> <p><b>BR-4.</b> The proposed maintenance roadway shown on the northwestern margin of Bushy Lake and extending to the levee shall be removed from the Cal Expo Area Plan.</p> <p><b>BR-5.</b> This measure applies to the Limited Recreation area in the northwestern portion of the Cal Expo Area Plan. Up to two piers may be placed within the marsh margins, but all other development or fill within the marsh margins is prohibited. The piers shall extend no more than 10 feet into the marsh, and shall be no wider than the minimum required for ADA access. If Mitigation Measure LU-3 is adopted, this Measure no longer applies.</p>	

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	<p><b>BR-6.</b> This Measure applies to the expanded Developed Recreation area in the Woodlake Area Plan (the "Woodlake Gateway"). No more than 10% of the native trees of 19" dbh or greater in this location may be removed, and no more than 5 acres of riparian habitat area may be removed. Mitigation Measure BR-9 applies to any removal of riparian habitat, and Mitigation Measure BR-12 shall apply to all native trees that will not be removed.</p> <p><b>BR-7.</b> This measure applies to the Limited Recreation area in the northwestern portion of the Cal Expo Area Plan. The removal of any native tree of 19" dbh or greater in this location is prohibited, and no more than 0.10 acres of riparian habitat area may be removed. Mitigation Measure BR-9 applies to any removal of riparian habitat, and Mitigation Measure BR-12 shall apply to all native trees that will not be removed. If Mitigation Measure LU-3 is adopted, this Measure no longer applies.</p> <p><b>BR-8.</b> This measure applies to the SARA Park Area Plan. The proposed Developed Recreation designation on the eastern side of the Area Plan shall be dropped from the Project and the existing designations in this location shall be retained.</p> <p><b>BR-9.</b> To mitigate riparian woodland and scrub habitat removal, an equivalent amount of habitat removed shall be restored elsewhere in the American River Parkway. Mitigation may also be achieved by invasive plant removal activities in a riparian area, but in this case the invasive plant removal area must be twice the size of the area impacted by the project. Preference shall be given to complying with this mitigation by passive restoration activities consisting of blocking off and restoring unauthorized/undesignated roads or trails within the Parkway (if the roads are within riparian habitat). Signs shall be placed at all access points to these roads and trails indicating that restoration is in progress and entry is prohibited (or similar message). This</p>	

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	<p>passive restoration area will take longer to replace the lost habitat, and therefore must be twice the size of the area impacted.</p> <p>For active restoration mitigation, revegetation shall consist of locally native riparian plant and tree species. To ensure species diversity, a single species shall not comprise more than 50% of the total number of trees planted. Restoration activities shall commence prior to or concurrent with removal of riparian habitat and shall be monitored for three years from the date of planting. The success criteria for plant survival shall be 80 percent throughout the monitoring period. If the survival rate falls below the success criteria during the monitoring period, in-kind replacement plantings are required. Any new plantings shall be monitored for a further three years. Prior to commencement of restoration activities, a planting plan shall be submitted to and approved by the Department of Environmental Review and Assessment. The planting plan shall include plant species, planting locations, spacing, maintenance provisions, monitoring requirements, success criteria and plant replacement provisions should a plant die within the monitoring period.</p> <p><b>BR-10.</b> Pursuant to General Plan Policy CO-133, mitigation shall be required for oak woodland canopy removed. The mitigation site shall be within the Parkway, shall be contiguous to an existing oak woodland area, and shall be equal in size to the canopy area removed. Oak trees shall be planted in this area. Tree plantings shall be varied from a 10-foot minimum to a 40-foot maximum, averaging 25 feet apart, in a mosaic pattern that mimics existing oak woodlands. A Replacement Oak Tree Planting Plan commensurate with the description in Mitigation Measure BR-13 shall be required, except that the monitoring period shall be seven years. Where removed oak trees are part of a riparian canopy area, instead of an oak woodland canopy area, mitigation for the oak trees shall be pursued</p>	

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	<p>through Mitigation Measure BR-9. Any individual oak tree that is standing alone, not part of any other canopy area, shall be treated as a fragment of riparian woodland if it is within a riparian scrub environment, and shall be treated as a fragment of oak woodland if within a grassland environment.</p> <p><b>BR-11.</b> In lieu of either BR-10 or BR-13, the oak tree(s) proposed for removal may be transplanted to an area outside the construction footprint. A Department of Environmental Review and Assessment ISA-certified arborist must concur that relocation of the tree(s) in question is feasible, and any transplantation shall be planned and conducted under the supervision of an ISA-certified arborist. The transplanted tree(s) shall be monitored for a period of three years. If during this time the tree(s) die, mitigation shall be required in accordance with Mitigation Measures BR-10 or BR-13.</p> <p><b>BR-12.</b> With the exception of the trees removed and compensated for through Mitigation Measures above, all native trees of 6 inches dbh or larger whose trunks or driplines are within 100 feet of construction activities shall be preserved and protected as follows:</p> <p>A. A circle with a radius measurement from the trunk of the protected tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.</p> <p>B. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the protected trees prior to initiation of project construction, in order to avoid damage to the trees and their root systems.</p>	

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	<p>C. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected tree.</p> <p>D. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the dripline of the protected tree.</p> <p>E. Any soil disturbance (scrapping, grading, trenching, and excavation) is to be avoided within the dripline of the protected trees, unless specific authorization has been granted by the Environmental Coordinator. Where this is necessary and approved by the Environmental Coordinator, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines. In no case shall the impact area be greater than 20% of the protected tree dripline.</p> <p>F. Before grading or excavation for footings, walls, or trenching within five feet outside the driplines of protected trees, root pruning shall be required at the limits of grading or excavation to cut roots cleanly to a depth of the excavation or 36 inches (whichever is less). Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades or other approved root-pruning equipment under the supervision of an ISA Certified Arborist.</p> <p>G. All underground utilities and drain or irrigation lines shall be routed outside the driplines of protected trees. If lines must encroach upon the dripline, they should be tunneled or bored under the trees.</p>	

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	<ul style="list-style-type: none"> <li>H. If temporary haul or access roads must pass within the driplines of protected trees, a roadbed of six inches of mulch or gravel shall be created to protect the soil. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.</li> <li>I. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be tree-safe and not easily transported by water.</li> <li>J. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of an oak tree.</li> <li>K. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the dripline of the protected tree.</li> <li>L. Tree pruning required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker.</li> <li>M. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.</li> <li>N. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.</li> </ul>	



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	<p>O. Landscaping beneath protected oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the dripline of protected oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.</p> <p><b>BR-13.</b> Replacement Planting Plans shall adhere to this measure. The removal of native oak trees shall be compensated by planting native oak trees equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Department of Environmental Review and Assessment.</p> <p>Equivalent compensation based on the following ratio is required:</p> <ul style="list-style-type: none"> <li>• one preserved native oak tree &lt; 6 inches dbh on-site = 1 inch dbh</li> <li>• one D-pot seedling (40 cubic inches or larger) = 1 inch dbh</li> <li>• one 15-gallon tree = 1 inch dbh</li> <li>• one 24-inch box tree = 2 inches dbh</li> <li>• one 36-inch box tree = 3 inches dbh</li> </ul> <p>Replacement tree planting shall be completed prior to the start of construction or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The</p>	

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	<p>bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.</p> <p>Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:</p> <ol style="list-style-type: none"> <li>1. Species, size and locations of all replacement plantings and &lt; 6-inch dbh trees to be preserved</li> <li>2. Method of irrigation</li> <li>3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage</li> <li>4. Planting, irrigation, and maintenance schedules;</li> <li>5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.</li> <li>6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees &lt; 6-inches dbh to be preserved on-site.</li> </ol> <p>No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally</p>	

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	<p>unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.</p> <p>Oak trees &lt;6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Department of Environmental Review and Assessment approval.</p> <p>If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.</p> <p><b>BR-14.</b> Prior to any development within the Limited Recreation area to the east of the Live Steamers facility, the chain link fence that begins at the eastern edge of the Live Steamers facility and extends along the riverfront trail in the Rossmoor Bar Area Plan shall be removed. An ISA-certified arborist shall be present where the removal of the fence will require excavation within the driplines of any native trees, or where portions of the fence have been absorbed into the trunks of native trees.</p> <p><b>BR-15.</b> Within one year after approval of the first Parkway project involving at least ¼-acre of grassland loss, a trails maintenance program shall be established whose principle</p>	

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	<p>purpose is to minimize off-trail behavior and convert unofficially-created trails and roads back to grassland habitat. As part of the program, all trailheads shall include informational signs discussing the damage caused by off-trail use, and a statement that any trailhead or new trail intersection that is unmarked should be treated as an unauthorized trail and reported to the Parkway authorities. When discovered, unauthorized trails and roads should be marked as a habitat restoration area, with a caution that users should not enter. The program shall include target goals for trail restoration each year (in either acres or feet of trail).</p> <p><b>BR-16.</b> The following shall be required for any construction activities within 300 feet of marsh or other wetland habitat that includes dense stands of bulrush, cattail, or blackberry bushes: In order to mitigate potential impacts to tricolored blackbird, two pre-construction surveys of the project impact area and areas of appropriate habitat within 300 feet of the site shall be performed by a qualified biologist. The surveys shall be done during the months of March and April (one each month) the year of project construction. If tricolored blackbirds are found nesting within the survey area, project construction shall be postponed until fledging of all nestlings (about July 15). If no active nests are found during the survey, submit a written report with date and the name of biologist to the Department of Environmental Review and Assessment. Upon receiving the report, no further mitigation will be required. If construction is proposed outside the nesting season (the nesting season is March 1 – July 15), no pre-construction surveys would be required.</p> <p><b>BR-17.</b> Any construction activity within 200 feet of the bank of the American River shall comply with the following: A focused survey for bank swallow nests shall occur between April 1 and July 1 and be conducted by a qualified biologist no less than 14 days and no more than 30 days before</p>	

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	<p>construction commences. If active nests are found, the applicant shall consult with the California Department of Fish and Game for appropriate avoidance measures. If no active nests are found during the focused survey, submit a written report with date and the name of biologist to the Department of Environmental Review and Assessment. Upon receiving the report, no further mitigation will be required.</p> <p><b>BR-18.</b> If construction occurs between March 1 and September 15, pre-construction nesting surveys for raptor nesting sites shall be conducted by a qualified raptor biologist. If any active nests are located both within the Parkway and within a quarter-mile of proposed heavy equipment operations or construction activities, the project proponent shall then consult with the California Department of Fish and Game to determine the appropriate course of action to reduce potential impacts upon nesting raptors and to determine under what circumstances equipment operation and construction activities can occur.</p> <p><b>BR-19.</b> For all migratory bird species not covered in the prior mitigation measures (including purple martin and western yellow-billed cuckoo), the following guidelines shall be followed:</p> <p>A. Trees slated for removal shall either be removed during the non-nesting season (September – January), or if removed during the nesting season (February – August) the trees that are to be removed shall be surveyed by a qualified biologist and will only be removed if no nesting birds are found.</p> <p>B. Pre-construction surveys of all potentially active nesting trees within 200 feet of the construction area shall be conducted by a qualified biologist no less than 14 days and no more than 30 days before construction commences. If active nests are found in the vicinity of</p>	

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	<p>the project site, non-disturbance buffers must be established and maintained based on species-specific protocols approved by the California Department of Fish and Game.</p> <p><b>BR-20.</b> The date, time, and location of any sighting of the American badger shall be reported to the California Department of Fish and Game. This mitigation shall be satisfied by either:</p> <ul style="list-style-type: none"> <li>A. An administrative policy (not a Parkway Policy) shall be adopted that requires all Parkway employees and volunteers to be notified about the above requirement, and to be given basic information about how to identify the species. A copy of the policy shall be provided to the Department of Environmental Review and Assessment within 6 months of the adoption of the Parkway Plan.</li> <li>B. Some other measure suggested by the Parkway Manager to comply with the above that meets with the satisfaction of the Department of Environmental Review and Assessment. This other measure must be implemented within 6 months of the adoption of the Parkway Plan.</li> </ul> <p><b>BR-21.</b> In all vernal pools, presence of listed vernal pool branchiopods shall be assumed unless determinate surveys that comply with Fish and Wildlife protocol conclude that the species is absent. In order to reduce impacts to listed vernal pool branchiopods the applicant shall comply with one of the following:</p> <ul style="list-style-type: none"> <li>A. <i>Avoid impacts to listed vernal pool branchiopods.</i> Establish buffers with fencing around the perimeter of branchiopod habitat to be preserved. Fencing shall be installed as far from the shrimp habitat as possible (to be determined by the Department of Environmental</li> </ul>	

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	<p>Review and Assessment using US Fish and Wildlife Service guidelines). No project activity shall occur within fenced area(s) without prior approval by Department of Environmental Review and Assessment staff.</p> <p>B. <i>Compensate for habitat removed (on-site).</i> An equivalent amount of vernal pool habitat removed shall be created within the Parkway. Creation shall be in accordance with Fish and Wildlife guidelines.</p> <p>C. <i>Compensate for habitat removed (off-site).</i> If compensation within the Parkway is demonstrated to the satisfaction of the Department of Environmental Review and Assessment to be infeasible, off-site mitigation in accordance with Fish and Wildlife guidelines shall be permitted. An equivalent amount of vernal pool habitat removed shall be created, and <u>in addition</u> an equivalent amount shall be preserved.</p> <p><b>BR-22.</b> Any construction project within 100 feet of an elderberry plant with at least one stem of a one inch diameter shall adhere to the following measures, consistent with United States Fish and Wildlife Service guidelines:</p> <p>A. Unless a permit for removal is obtained from the Fish and Wildlife Service, temporary construction fencing and flagging shall be installed at least 100 feet outside the edge of the driplines of the elderberry plants. In areas where encroachment on the 100-foot buffer has been approved by Fish and Wildlife, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant and provide documentation of Fish and Wildlife approval of the reduced setback. Contractors and work crews shall be briefed on the need to avoid damaging the elderberry plants, the status of the beetle, and the possible penalties for non-compliance with these requirements. Signs shall be erected every 50</p>	

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	<p>feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.</p> <p>B. Prior to construction within the 100-foot buffer area (or lesser buffer, as approved by Fish and Wildlife) established around the elderberry plants implement one of the following methods (or a combination of the following two methods) to reduce impacts to the Valley Elderberry Longhorn Beetle to a less than significant level:</p> <p>a. Elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level shall be transplanted to a conservation area approved by Fish and Wildlife. The project applicant shall consult with Fish and Wildlife on all transplanted activities and obtain all applicable permits.</p> <p>b. The project applicant shall compensate for the loss of elderberry plants on the site to the satisfaction of Fish and Wildlife and shall obtain any/all applicable permit(s) from the U.S. Army Corps of Engineers and Fish and Wildlife.</p> <p><b>BR-23.</b> To avoid potential taking of northwestern pond turtle, for all construction projects involving work in or within 300 feet of a linear waterway (creek, slough, etc.) a qualified biologist shall inform all construction personnel that turtles may occur in the area. A description of their natural history and identifying characteristics shall also be provided. The foreperson(s) shall be further instructed of the proper</p>	



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	<p>techniques for handling and relocating turtles if relocation is required. The biologist shall distribute reporting forms to all foreperson(s) to document observances or the relocation of any turtles.</p> <p>If a turtle of any species enters an active construction area, or is in imminent danger, the foreperson shall carefully remove the turtle to a point at least 300 feet upstream of the project limits within the leveed floodway. Upon relocation the foreperson shall immediately notify the Sacramento County Department of Environmental Review and Assessment of the action taken and provide a completed reporting form to the Department within 48 hours of the relocation. Turtles found outside the active or proposed construction areas shall be left unharrassed, uninjured and alive. All observances of turtles within the construction limits shall be immediately reported via telephone to the Department of Environmental Review and Assessment (874-7914) and subsequently documented on a reporting form</p> <p><b>BR-24.</b> In order to avoid impacts to the steelhead, chinook salmon and Sacramento splittail, the following measures must be implemented for all work within the Ordinary High Water Mark of the American River:</p> <p>A. In-channel construction and riparian revegetation work on the main channel of the American River during the peak migration period for all three species (November through May, or specific periods that are specified in permits issued for the project by the National Marine Fisheries Service, U.S. Fish and Wildlife Service and/or the California Department of Fish and Game) shall be prohibited.</p> <p>B. Erosion control measures that prevent soil and sediment from entering the river shall be installed, monitored for</p>	

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	<p>effectiveness and maintained throughout construction operations.</p> <p>C. Refueling of construction equipment and vehicles and storage of fuel shall not occur within the leveed floodway.</p> <p>D. Truck and concrete equipment wash-down shall not occur within the leveed floodway.</p> <p>E. Equipment and vehicles operated within the leveed floodway shall be checked and maintained daily to prevent leaks of fuels, lubricants or other fluids into the river.</p> <p>F. Litter and construction debris shall be removed from below the Ordinary High Water Mark daily, and disposed of at an appropriate site.</p> <p>G. Comply with water pollution protection provisions and conditions established by the Department of Fish and Game and all regulatory authorities with jurisdiction over the project.</p> <p>H. An erosion control and water quality protection plan shall be prepared and implemented that will be subject to the review and approval of the County Department of Water Resources.</p> <p><b>BR-25.</b> Rare plant surveys will be required in any wetland, marsh, or stream habitats prior to any grading, grubbing, or excavation within 250 feet of the wetland margin. The rare plant surveyor shall have:</p> <p>A. experience as a botanical field investigator;</p> <p>B. taxonomic experience and a knowledge of plant ecology (the surveyor should have some college coursework in</p>	

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	<p>plant taxonomy and ecology, and be a biological professional), and</p> <p>C. familiarity with the local flora and potential rare plants in the habitats to be surveyed.</p> <p>The surveys shall be conducted when the rare plants at the site will be easiest to identify (i.e. flowering stage), and when the plants reach that stage of maturity. A minimum of <u>three site visits</u> shall be required, during the plants' flowering period in order to determine absence. Each site visit must be no less than 7 days apart.</p> <p>Submit a written report to the Department of Environmental Review and Assessment. The survey report should include a brief description of the vegetation, survey results, photographs, time spent surveying, date of surveys, a map showing the location of the survey route and any rare plant populations and copies of any rare plant occurrence forms. Notify Fish and Game and Fish and Wildlife if species are found, and apply for "take" authorization (state law section 2081 of the Fish and Game Code and federal Endangered Species Act) prior construction. Priority shall be given to transplanting individual plants to a different surface water in the Parkway, unless it can be demonstrated to the satisfaction of the Department of Environmental Review and Assessment that transplantation is infeasible.</p> <p><b>BR-26.</b> Parkway Plan Policy 5.8 shall be revised to read as follows: Overnight camping may be permitted in association with the programs at an interpretive center with permission from the Parkway Manager, so long as camping is not within a restoration area and natural resources are not degraded.</p>	

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	<p><b>BR-27.</b> Use of bicycles on the unpaved maintenance roads shall be prohibited when the roads are saturated with water. Implementation of this measure requires either:</p> <p>A. Signs posted at all access points to the maintenance roads stating that bicycles are not permitted on the roads when the roads are wet from recent rain.</p> <p>B. Maintenance roads are closed to bicycles at the onset of the rainy season and remain closed until the trails dry out in the spring, as determined by the Parkway Manager. During this period, signs are posted at all access points to the maintenance roads informing bicyclists of the closure.</p> <p>Whichever option is chosen, the appropriate language shall be incorporated into Parkway Policy 5.17.</p>	
Hydrology and Water Quality		
<p>Various Project elements have the potential to impact hydrology. Some of these are more major facilities, such as bridges, boat launches, and an interpretive center, but most are minor facilities (e.g. kiosks) or facilities that do not have impacts (e.g. trails). All facilities with the potential to impact hydrology would be required to minimize their effects by existing ordinances, regulations, and standards. No mitigation is necessary – the existing regulatory framework ensures that impacts are less-than-significant.</p> <p>Some projects may be too small to be captured by the ordinances, and the Parkway is a particularly sensitive area. Compliance with the requirements of existing ordinances or the mitigation herein is essential to ensuring that construction water quality impacts are less-than-significant.</p>	<p><b>HY-1.</b> All new construction projects within the Parkway shall incorporate the design components within the latest version of the <i>Sacramento County Guidance Manual for Development of Erosion and Sediment Control Plans</i>, even if a grading permit is not required for the project. No grading shall be permitted from October 1 – April 30, unless the grading is associated with an emergency project or it can be demonstrated to the Department of Environmental Review and Assessment that there is an environmental benefit to wet-season construction.</p> <p><b>HY-2.</b> All new construction or redevelopment of facilities within the Parkway shall incorporate the design components within the latest version of the <i>Stormwater Quality Design Manual for the Sacramento and South Placer Regions</i>, unless the Department of Environmental Review and Assessment determines that the project does not have the potential to release post-construction pollutants (e.g.</p>	LS

Description of Impact(s)	Recommended Mitigation(s)	IAM
	signage). This shall include all new roads and trails, which shall be designed to minimize transport of sediment from the road or trail surface into nearby water bodies.	
Cultural Resources		
<p>Project impacts related to the redesignation of land uses to more intensive designations, policy changes, and construction of new facilities/improvements within the updated area plans could result in potentially significant impacts to sensitive cultural resources.</p>	<p><b>CR-1.</b> Retain all important cultural features in the design of all future Parkway projects, unless doing so is proven to be infeasible to the satisfaction of the Department of Environmental Review and Assessment.</p> <p><b>CR-2.</b> Prior to the start of construction, all proposed facilities projects within the Parkway must provide documentation that there are no cultural resources present within the construction area (including staging areas and similar). A qualified cultural resources professional shall perform a preliminary analysis of the construction area, to determine the relative sensitivity of the construction area. This need not include a formal cultural resources survey if the cultural resources investigator determines a finding of negative presence can be made from previous surveys or otherwise. If cultural resources are considered not to be present, Mitigation Measure CR-4 will still apply. If additional work is required, Mitigation Measure CR-3 and CR-4 shall apply.</p> <p><b>CR-3.</b> All projects that have been determined sensitive for known and/or unknown cultural resources within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following, to the satisfaction of the Department of Environmental Review and Assessment:</p> <p>A. Conduct an archaeological/historical survey and assessment, by a qualified professional archaeologist, of the area of direct impact. If the project area includes known resources, then the survey will assess the condition of the resource.</p>	LS

Description of Impact(s)	Recommended Mitigation(s)	IAM
	<p>B. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine the significance of the resource.</p> <p>C. Following the field investigations, a technical report describing the evaluation shall be prepared to the satisfaction of the Department of Environmental Review and Assessment.</p> <p>D. If based on the results of the field investigations the resource is not considered significant or important, no additional work would be required for that resource, and all construction related impacts would be considered less than significant.</p> <p>E. If based on the results of the field investigations resources were identified as being significant the following mitigation would apply:</p> <ul style="list-style-type: none"> <li>a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels.</li> <li>b. Or, if a redesign is determined infeasible by the Department of Environmental Review and Assessment, then,</li> <li>c. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of the Department of Environmental Review and Assessment. Impacts to the resource would remain significant.</li> </ul> <p><b>CR-4.</b> Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any</p>	

Description of Impact(s)	Recommended Mitigation(s)	IAM
	<p>development activities, work shall be suspended and the Department of Environmental Review and Assessment (DERA) shall be immediately notified at (916) 874-7914.</p> <p>At that time, the DERA will coordinate any necessary investigation of the find with appropriate specialists as needed. The project applicant shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.</p> <p><b>CR-5.</b> Design interpretive uses so that locational data of sensitive cultural resources is not disclosed to the general public. If locational data of cultural resources is crucial to an interpretive use than the following shall apply:</p> <p>A. Limit accessibility to envisioned cultural interpretive uses by requiring docent led tours or restricting access through fencing or elevated wooden walkways.</p> <p>B. Consult with qualified cultural resources staff, local Native Americans, and historical societies during the design phases in order to create interpretive uses that are appropriate for specific cultural resources sites.</p> <p><b>CR-6.</b> The area utilized for Soil Born Farms and potential interpretive area, and all associated construction shall be located outside the limits of all known cultural resources sites.</p>	
Visual and Aesthetic Quality		

Description of Impact(s)	Recommended Mitigation(s)	IAM
<p>The Project includes significant visual impacts associated with the bridges in Discovery Park, the Developed Recreation Area in the Woodlake Area Plan, and some of the roadways and Limited Recreation areas in Cal Expo. Some of these impacts can be avoided or offset by mitigation already recommended in other chapters of this EIR, but the bridges in Discovery Park and the Developed Recreation area in the Woodlake Area Plan remain significant. At a project-level stage, specific mitigation related to facility design and location could be recommended. However, at this plan-level stage, only general recommendations can be made to offset impacts. These are already encapsulated in the proposed Parkway Plan, which includes the plan-level policies that are necessary to protect visual resources in the Parkway.</p>	<p>See Measures LU-2, LU-3, BR-3, BR-4, BR-5, BR-6, BR-7 and BR-8; otherwise, none available.</p> <p>No mitigation beyond this can be recommended at this time. Aesthetic impacts related to some elements of the Project are significant.</p>	S
Air Quality		
<p>Project impacts related to construction emissions may exceed the established thresholds for ozone precursors in some cases, and may also exceed the screening thresholds for particulate matter. Mitigation is included that will reduce construction air quality impacts to less-than-significant levels. Although the Project may result in increased use of the Parkway, which could increase operational vehicle emissions, the entire purpose of the Parkway is to provide non-vehicular recreation opportunities for the region. Therefore, operational impacts are less-than-significant and no mitigation is required.</p>	<p><b>AQ-1.</b> All projects shall comply with the following mitigation if active project grading in any one day falls within the acreage ranges below. This mitigation shall also apply if multiple projects occur in the Parkway within 0.25 miles of each other, and the aggregate total active grading for those projects fall within the acreage ranges below. This mitigation may be modified if current guidance from the Sacramento Metropolitan Air Quality Management District varies from the below.</p> <p>A. <u>5.1 – 8 acres</u>: Water exposed soil twice daily and maintain two feet of freeboard space on haul trucks.</p> <p>B. <u>8.1 – 12 acres</u>: Water exposed soil and soil piles three times daily and maintain two feet of freeboard space on haul trucks.</p> <p>C. <u>12.1 – 15 acres</u>: Keep soil moist at all times, maintain two feet of freeboard space on haul trucks, and use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment.</p>	LS



Description of Impact(s)	Recommended Mitigation(s)	IAM
	<p><b>AQ-2.</b> All future construction projects shall include an ozone precursor analysis. If the analysis results indicate that the project will generate ozone precursors that exceed the current Sacramento Metropolitan Air Quality Management District thresholds, this mitigation shall apply. This mitigation shall also apply if multiple projects occur in the Parkway within 0.25 miles of each other, and the aggregate total emissions for those projects exceed thresholds. This mitigation may be modified if current guidance from the Sacramento Metropolitan Air Quality Management District varies from the below.</p> <p><i>A. Category 1: Reducing NOx emissions from off-road diesel powered equipment</i></p> <p>The project shall provide a plan, for approval by the lead agency and AQMD, demonstrating that the heavy-duty (&gt; 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction (acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.) compared to the most recent CARB fleet average at time of construction; and,</p> <p>The project representative shall submit to the lead agency and AQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly</p>	

Description of Impact(s)	Recommended Mitigation(s)	IAM
	<p>throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide AQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.</p> <p>B. <i>and Category 2: Controlling visible emissions from off-road diesel powered equipment</i></p> <p>The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the lead agency and AQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The AQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other AQMD or state rules or regulations.</p>	

## **SUPPLEMENT TO THE EIR**

This NRMP DSEIR supplements the ARPPU FEIR to the extent necessary to address proposed changes associated with the NRMP. Preparing this DSEIR allows the County to respond to changed circumstances or new information prior to considering approval of the NRMP. For a full description of the ARPPU and NRMP, please see Chapter 2, Project Description.

## **METHODOLOGY**

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### **GENERAL**

The NRMP DSEIR has been prepared in accordance with CEQA and its implementing guidelines, using an interdisciplinary approach. The NRMP DSEIR is an informational document that is intended to inform the decision makers and their constituents, as well as responsible and trustee agencies, of the environmental impacts of the proposed project and to identify feasible mitigation measures that would avoid or reduce the severity of the impacts. The lead agency is required to consider the information contained in this DSEIR, together with the information in the ARPPU FEIR, prior to taking any discretionary action to approve the proposed project. The NRMP DSEIR has been prepared using available information as outlined in the NRMP.

An EIR is an objective public disclosure document that takes no position on the merits of the proposed project. Therefore, the findings of the NRMP DSEIR do not advocate a position "for" or "against" the proposed project. Instead, the NRMP DSEIR provides information on which decisions about the proposed project can be based. The NRMP DSEIR has been prepared according to professional standards and in conformance with legal requirements.

### **EMPHASIS**

In accordance with CEQA Guidelines Section 15143, the NRMP DSEIR focuses on the significant effects on the environment. The significant effects are discussed with emphasis in proportion to their severity and probability of occurrence.

### **FORECASTING**

As acknowledged in CEQA Guidelines Section 15144, preparing the NRMP DSEIR necessarily involved some degree of forecasting. While foreseeing the unforeseeable is not possible, the report preparers and technical experts used their best efforts to discover and disclose all environmental factors that was reasonably possible at the time.

### **DEGREE OF SPECIFICITY**

In accordance with CEQA Guidelines Section 15146, the degree of specificity in this DSEIR corresponds to the degree of specificity involved in the proposed project. An EIR on a construction project will necessarily be more detailed in the specific effects of the project compared to an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater

accuracy. An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

In the case of the NRMP DSEIR, the plan focuses on the management and treatment of biological resources and natural systems within the Parkway. Project related analysis is only associated with hydraulic modeling for specific locations within the Plan area, as discussed in the Water Quality and Hydrology Chapter. Accordingly, the NRMP DSEIR is a programmatic-level document. Each NRMP objective/implementation measure and potential Resource Management Action that will cause a *physical* impact on the environment will subsequently require project level CEQA analysis. However, several NRMP objectives/implementation measures such as mapping and plan development can proceed immediately upon adoption of the DSEIR.

## **TECHNICAL DETAIL**

In accordance with CEQA Guidelines Section 15147, the information contained in this DSEIR includes summarized technical data, maps, plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data is included as appendices to the main body of the DSEIR. The DSEIR will be available for review on the County's website and by visiting Planning and Environmental Review (PER) to review a hard copy in-person.

## **CITATION**

In accordance with CEQA Guidelines Section 15148, preparation of this DSEIR was dependent upon information from many sources, including hydraulic modeling relating to environmental features. If the document was prepared specifically for the proposed project, the document is included in the technical appendices discussed above. Documents that were not prepared specifically for the proposed project, but contain information relevant to the environmental analysis of the proposed project, are cited but not included in this DSEIR. This DSEIR cites all documents used in its preparation including, where appropriate, the page and section number of any technical reports that were used as the basis for any statements in the DSEIR.

## **EIR PROCESS**

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There are several steps required in an EIR process. The major steps are briefly discussed below.

### **NOTICE OF PREPARATION (NOP)**

In accordance with CEQA Guidelines Section 15375, the County prepared an NOP to notify the Responsible Agencies, Trustee Agencies, the Office of Planning and Research, and involved federal agencies that as Lead Agency it plans to prepare an SEIR for the project. The NOP was prepared and circulated beginning April 8, 2021. Written responses to the NOP were received from the Native American Heritage Commission

(NAHC) dated April 12, 2021 and the Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD) dated May 21, 2021. A copy of the letters received can be found in Appendix IN-2.

## **TRIBAL CONSULTATION**

Pursuant to AB-52, on April 18, 2021, County staff mailed notification letters to the tribes that have formally requested notification. Further, all tribes were sent a copy of the Notice of Preparation for this document with the AB-52 notification. Written responses were received during the AB-52 30-day review period from the United Auburn Indian Community (UAIC). Initial comments received by UAIC dated April 22, 2021 requested consultation on the project and noted concerns for an area adjacent to the Parkway in the City of Rancho Cordova's jurisdiction. Staff responded to UAIC's correspondence but no further response has been received related to consultation on the NRMP. Initial communication on consultation with Native American tribes will continue as project level CEQA documents related to the NRMP are prepared.

## **DRAFT SEIR**

### **CONTENTS**

Pursuant to CEQA Guidelines Section 15162, the NRMP DSEIR updates the following topics:

- ☐ Introduction;
- ☐ Project Description;
- ☐ Revised Environmental Impact Analysis; the NRMP DSEIR proposes the following additions to the ARPPU FEIR: Land Use and Planning & Population and Housing, Water Quality and Hydrology, Biological Resources, Cultural Resources, Tribal Cultural Resources, Hazards, Hazardous Materials, and Wildfires, and Public Services; and,
- ☐ New or Additional References and Report Preparers.

Table 1.2 provides a comparison between the topics analyzed in the Certified ARPPU FEIR and NRMP DSEIR. Aesthetics were discussed in the ARPPU FEIR; however this discussion was not revisited in the NRMP DSEIR because no land use changes are proposed as part of the NRMP. The purpose of the NRMP Potential Resource Management Actions is to naturalize the American River Parkway and meet best management practices for the protection of biological and natural resources. Although the evaluation of aesthetics is somewhat subjective, the overall goal of the NRMP is to preserve and protect the overall natural aesthetic of the Parkway.

**Table 1.2: Comparison between Certified ARPPU FEIR and NRMP DSEIR**

Topics Analyzed in the ARPPU FEIR	Topics Re-evaluated in this DSEIR
Land Use and Planning & Population and Housing	Yes
Public Services	Yes
Biological Resources	Yes
Water Quality and Hydrology	Yes
Geology and Soils	Remains Unchanged
Air Quality	Remains Unchanged
Cultural Resources	Yes
Visual and Aesthetic Quality	Remains Unchanged
ADD: Tribal Cultural Resources Section	Yes
ADD: Hazards, Hazardous Materials, and Wildfires	Yes

### **PUBLIC REVIEW**

In accordance with CEQA Guidelines Section 151623 (d), a subsequent EIR is given the same kind of notice and public review as is given to a DEIR under Section 15087. Therefore, the DSEIR will be circulated for a 45 day public review period, as noted on the accompanying Notice of Availability.

### **FINAL SEIR**

In accordance with CEQA Guidelines Section 15132, a FSEIR must provide the following:

- ☐ List of persons, organizations, and public agencies commenting on the draft SEIR;
- ☐ Comments received on the draft SEIR;
- ☐ Responses to significant environmental points raised in comments; and
- ☐ Revisions that may be necessary to the draft SEIR based upon the comments and responses.

According to CEQA Guidelines Section 15204(a), when responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full

disclosure is made in the FEIR. The FSEIR and the DSEIR will constitute the entire NRMP SEIR.

### ***CERTIFICATION***

In accordance with CEQA Guidelines Section 15088, the lead agency is required to provide a written proposed response to a person, organization or public agency on comments made by that person or entity at least 10 days prior to certifying an EIR. Once the FSEIR is certified by the County Board of Supervisors, the County may approve the proposed project.

## **TERMINOLOGY**

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### **CHARACTERIZATION OF IMPACTS**

This DSEIR uses the following terminology to describe environmental effects of the project.

- **Significance Criteria.** A set of criteria used by the lead agency to determine at what level, or “threshold,” an impact would be considered significant. Significance criteria used in this EIR include those that are set forth in the CEQA Guidelines, or can be discerned from the CEQA Guidelines; criteria based on factual or scientific information; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the Sacramento County General Plan.
- **Less-than-Significant Impact.** A project impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- **Potentially Significant Impact.** A potentially significant impact is a substantial, or potentially substantial, adverse change in the environment. Physical conditions which exist within the area will be directly or indirectly affected by the proposed project. Impacts may also be short-term or long-term. A project impact is considered significant if it reaches the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to less than significant.
- **Significant Unavoidable Impact.** A project impact is considered significant and unavoidable if it is significant and cannot be avoided or mitigated to a less-than-significant level once the project is implemented.
- **Cumulative Significant Impact.** A cumulative impact can result when a change in the environment results from the incremental impact of a project when added to other related past, present or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects.

- **Mitigation.** Mitigation measures are revisions to the project that would minimize, avoid, or reduce a significant effect on the environment. CEQA Guidelines §15370 identifies 5 types of mitigation:
  - a) Avoiding the impact altogether by not taking a certain action.
  - b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
  - c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
  - d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
  - e) Compensating for the impact by replacing or providing substitute resources or environments.



## **2 PROJECT DESCRIPTION**

### **INTRODUCTION**

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The proposed project is the American River Parkway Natural Resources Management Plan (NRMP). The purpose of the NRMP is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. Sacramento County Department of Regional Parks (Regional Parks) will use this plan to help identify the effects of disturbances such as flood, fire, invasive species and human impacts, as well as opportunities for protections and enhancements. It will advise resource management strategies for promoting healthy ecosystems and resource protections, while balancing concurrent American River Parkway goals of flood control, recreational opportunities, and public safety. This draft SEIR will supplement the American River Parkway Plan Update (ARPPU) FEIR and disclose to the public and decision makers potential environmental impacts associated with the proposed NRMP.

The NRMP is included as Appendix PD-1 and is available online at: <https://regionalparks.saccounty.gov/Parks/Pages/NaturalResourcesManagement.aspx>

### **PROJECT BACKGROUND**

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The purpose of the American River Parkway Plan (ARPP) is to provide direction for land use decisions affecting the Parkway. The ARPP specifically addresses the preservation, use, development, and administration of the American River Parkway. The ARPP contains policies that apply to the entire extent of the Parkway, as well as area-specific policies regarding authorized use of the Parkway and its resources. These include limits on development and protection of natural resources. Concept Policy 1.1 of the ARPP provides a concise description of the need for balanced management:

The American River Parkway is a unique regional asset that shall be managed to balance the goals of controlling flooding; preserving and enhancing native vegetation, native fish species, the naturalistic open space and environmental quality within the urban environment; maintaining and improving water flow and quality; providing adequate habitat connectivity and travel corridors to support migratory and resident wildlife; providing recreational opportunities; and ensuring public safety.

Terrestrial Resource Policy 3.4 of the ARPP states, “A resource impact monitoring plan shall be developed that clearly defines criteria and standards to monitor, evaluate and protect the Parkway’s resources from overuse, and provides steps to be taken to restore areas that have been overused.”

In 2008, Regional Parks began a process to develop a NRMP for the Parkway. The original NRMP Stakeholder Committee (Committee) worked with Regional Parks from 2008 to 2010. The Committee was charged with gathering and evaluating natural resource data to provide recommendations for both protecting and improving the health of the Parkway's ecosystems and natural values. The Committee accomplished many important goals including baseline ecosystem mapping of the Parkway. The baseline mapping delineated the Parkway by ecosystem types, with an evaluation of current health, trends, and threats in each area.

The Committee also identified high value resources as well as degraded areas that could be improved. The Committee made preliminary recommendations for Parkway management, including identifying opportunities for protecting high value resources and opportunities for creating desired habitat in degraded areas.

In 2014, Regional Parks reinitiated the NRMP effort with the goal of creating a document that would be aligned with the goals and policies of the 2008 American River Parkway Plan Update (ARPPU). A new Stakeholder Committee convened in Spring/Summer of 2015 to develop a set of recommended NRMP specifications to provide the guidelines and parameters for a scope of work for the preparation of the NRMP. The Stakeholder Committee and Regional Parks' staff developed specifications to develop the scope of work for preparation of the NRMP. The NRMP was prepared with guidance and input from a task force, with representatives from various federal, state, and local agencies and organizations, which convened from June 2020 to mid-year 2022. Additionally, the NRMP (see Appendix PD-1) is also based on input and guidance from the community during various outreach activities that occurred between July 2020 and February 2021. The NRMP advances resource management strategies and measures contained in the ARPP.

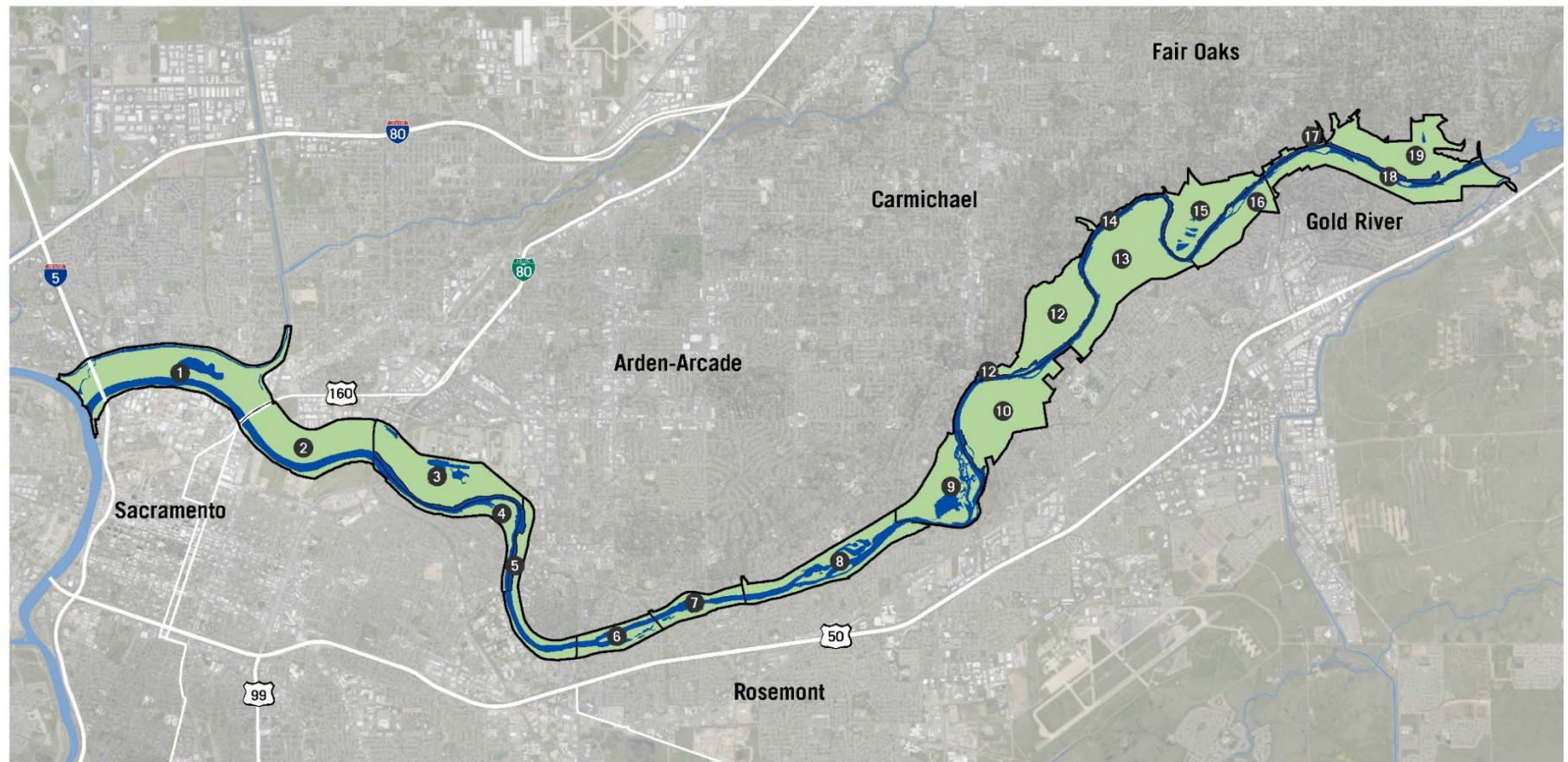
## **PROJECT LOCATION**

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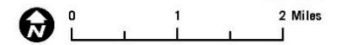
The Parkway is an open space greenbelt extending approximately 29 miles and covers approximately 7,000 acres. Regional Parks manages lands on the lower 23 miles of the Parkway from the Hazel Avenue Bridge to the American River confluence with the Sacramento River, approximately 5,000 acres. Plate PD-1 depicts the 19 plan areas within the American River Parkway. The width of the Parkway varies down its length – in certain areas, the Parkway is as narrow as 700 feet and at other locations as wide as 6,800 feet (1.3 miles). Several urban communities are located along the edges of the Parkway, including the City of Sacramento, the City of Rancho Cordova, and portions of unincorporated Sacramento County, including the communities of Arden-Arcade, Carmichael and Fair Oaks. The Parkway is located within the Sacramento West, Sacramento East, Carmichael, and Folsom U.S. Geological Service quadrangles: Townships 8, 9, and 10 N, Range 4, 5, 6, and 7 East.

**Project APNs:** Various

Plate PD-1: Location Map of 19 Plan Areas of the American River Parkway



AREAS		5	Campus Commons	10	River Bend Park	15	Sacramento Bar
1	Discovery Park	6	Howe Avenue	11	Sarah Court Access	16	Lower Sunrise
2	Woodlake	7	Watt Avenue	12	Ancil Hoffman County Park	17	Sunrise Bluffs
3	Cal Expo	8	SARA Park	13	Rossmore Bar	18	Upper Sunrise
4	Paradise Beach	9	Arden Bar	14	San Juan Bluffs	19	Sailor Bar



**Figure 3-1**  
**American River Parkway**

## PROJECT PROPONENTS

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### Owners: Various

**Applicant:** Sacramento County Department of Regional Parks  
10361 Rockingham Drive  
Sacramento, CA 95827  
Attention: Liz Bellas, Director

## ENVIRONMENTAL SETTING

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The Parkway is an open space greenbelt spanning approximately 29 miles, from the Folsom Dam to the confluence of the American and Sacramento rivers. Major vegetation types in the Parkway include grassland, oak woodland, willow riparian, cottonwood forests, ponds, marshes/seeps, introduced vegetation, and agricultural. The Parkway also includes wetlands and seasonal floodplain areas. Undeveloped “bars” (elevated landforms near a river) containing larger areas of natural vegetation are occasional on both the north and south side of the river in the upper half of the Parkway. These bars include (from east to west) Sailor Bar, Sacramento Bar, Rossmoor Bar, Ancil Hoffman County Park, River Bend Park, and Arden Bar. Due to past mining activities along and in the river, there are also significant areas of barren land and mine tailings/rock piles.

The river and the associated habitat support a variety of wildlife species, including many species listed by the state or the federal government as “special status” (e.g. Endangered). These special status species include the Valley Elderberry Longhorn Beetle, the Chinook and steelhead salmon, Swainson’s hawk, bank swallow and the northwestern pond turtle. The habitat also hosts a variety of other non-special-status wildlife species that include amphibians, birds, fish, insects, mammals, and reptiles.

The lower American River is classified as a “Recreation” river within the State and Federal Wild and Scenic River Systems. The Parkway is designated either as Natural Preserve or as Recreation on the Sacramento County General Plan. The Sacramento County Zoning Code designates the area as “O (PC)”, for Recreation and Parkway Corridor Combining Zone, with some areas also denoted “F”, for Flood Combining Zone. The ARPP provides more specific land use designations for areas within the Parkway: Open Space Preserve, Nature Study Area, Protected Area, Limited Recreation, Developed Recreation, and Recreation Reserve.

The existing Parkway includes maintained trails, some roads and staging areas and public facilities (an interpretive center, boat launches, bathrooms, etc.). There are also some existing commercial, public and agricultural uses in the Parkway, pumping stations, and small active farms. The Parkway is surrounded on both sides by urban development, primarily of a residential character. To connect these urban areas, the American River is crossed by two freeways, nine local thoroughfares, two train bridges, five

pedestrian/bicycle bridges and the Nimbus Dam. The American River is flanked on both sides by a levee system, where needed, to protect urban development.

## **PROJECT PROPOSAL**

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The NRMP is a guide for implementation of a multifaceted natural resource management program for the Parkway. It integrates ecological resource management and conservation with cultural resources protection, recreational use and impacts, and other human uses in the Parkway. The NRMP informs the management, conservation, and rehabilitation of Parkway land and natural resources, and helps to ensure compliance with environmental laws and regulations. Utilizing an adaptive management approach, the effectiveness of natural resource management efforts in the Parkway will be reevaluated and the NRMP will be updated periodically. The NRMP includes goals and objectives designed to maintain natural communities located within the Parkway and identifies future projects for implementation to accomplish goals and objectives. The NRMP takes an integrative approach to planning for ecological resources, cultural resources, and human use. However, it is important to note that the emphasis of the NRMP is to manage human uses in a manner that minimizes impacts to natural and cultural resources while maintaining recreational access.

The purpose of the NRMP is to establish resource management guidelines to minimize the impact of human uses on the Parkway and on the environment. Additionally, its purpose is also to provide relevant and defensible information to the Parkway Manager for making informed decisions for managing, maintaining, and enhancing Parkway resources. The NRMP includes five goal areas with relevant goals which are linked to specific objectives and performance measures designed to maintain natural communities located within the Parkway. Each specific goal also identifies the lead/support roles by agency, funding sources, and planned completion dates. Further, specific Potential Resource Management Actions to accomplish each goal and objective are identified for the 19 area plans of the Parkway. The goal areas of the NRMP include: Biological Resources, Physical Resources, Cultural Resources, Human Impact Reduction, and Agency and Community Coordination.

## **PROJECT OBJECTIVES**

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The objective of the NRMP is to provide relevant and defensible information to the Parkway Manager for making informed decisions for managing, maintaining, and enhancing Parkway resources.

The NRMP's goal areas, goals, objectives, and performance measures (PM) are outlined in Appendix PD-2. Appendix PD-2 is a table that corresponds with 6 the NRMP goals, objectives, and performance measures with the relevant policies of the ARPP. There are objectives tied to each goal and performance measures (PM) tied to the objectives. The

objectives follow the SMART (**S**pecific, **M**easurable, **A**ttainable, **R**elevant, **T**ime-Oriented) framework, the components of which are defined as follows:

- Specific: Objectives are linked to a goal or strategic plan and answer the questions, “Who?” and, “What?”
- Measurable: The success toward meeting the objective can be measured.
- Attainable: Objectives are realistic and can be achieved in a specific amount of time.
- Relevant: Objectives are aligned with current interests of the implementing entity.
- Time Oriented: Objectives have a clearly defined time-frame for completion.

SMART objectives clarify expectations and provide the means to determine if the objective is successfully completed. Specifically, where feasible, success criteria will be established for individual projects to enable monitoring of each project’s success over a 5-year period. After 5 years, the success of the projects will be evaluated to determine if modification of the NRMP’s goals and objectives, and projects is needed to improve resource protection, enhancement, and restoration within the Parkway.

As such, completion dates for the objectives are placed into three categories: (1) 1-2 years after NRMP completion; and (2) 3-5 years after completion, and (3) 6-10 years after completion. After five years, the NRMP will undergo a comprehensive review.

## **PROJECT FEATURES**

### **NRMP POTENTIAL RESOURCE MANAGEMENT ACTIONS**

The NRMP provides Potential Resource Management Actions developed for each of the 19 area plans. These actions were developed in consideration of key indicators and natural resource management categories. Four key indicators were mapped and used to help develop the natural resource management categories and guide Potential Resource Management Actions for the Parkway. These included level of alteration, inundation, vegetation communities, and land use.

- **Level of alteration** – The level of alteration is an important factor given that the history of an area informs its current condition and what may influence its future condition. Understanding an area’s level of alteration can help explain a site’s current topography, inundation regime, vegetation patterns, etc. It can also help to better understand on-going trends and what might be expected in the future. Three categories were used to evaluate the level of alteration for the American River Parkway areas:
  - Intentionally altered – Footprints of physical changes resulting from human actions
  - Unintentionally altered – Areas affected by off-site human actions due to intentional alterations elsewhere
  - Unaltered areas – Areas without any definitive evidence of alteration from direct or indirect actions.
- **Inundation** – The evaluation of inundation through mapping served as a planning tool that highlights the relationship between a given land area and its probable surface and subsurface moisture conditions as they relate to river flows and periodic inundation. The recurrence interval of inundation provides useful information about the suitability of the site conditions for different vegetation communities.
- **Vegetation Communities** – The evaluation of vegetation communities through mapping is important to understand existing conditions and how these vegetation communities are contributing to habitat values that meet the identified goals and objectives of the NRMP, or where changes should occur in order to meet the goals and objectives. The vegetation community data also allows an assessment of conditions within each plan area, as well as within the Parkway as a whole. It is important to be able to access habitat conditions at both spatial scales.
- **Land Use** – There are several land use and infrastructure parameters that potentially influence natural resource management within the parkway. These include formal land use designations of the ARPP and those associated with specific infrastructure. The knowledge and mapping of these designations was fundamental to planning for the management of natural resources, as the ARPP is the guide for land use decisions affecting the Parkway. It is important to



understand what uses are permissible within a given land use designation to understand their compatibility with specific natural resources and to plan accordingly for those existing or potential uses as consideration is given to meeting the goals and objectives of the NRMP.

The development of the NRMP Potential Resource Management Actions was further classified by management categories that help guide decisions throughout the Parkway. The management categories are shown in detail on the area plan maps. The management categories are as follows:

- **Conservation (Low Level of Management Intensity)** – Conserving the values of areas that currently meet most applicable natural resource goals. This includes existing mitigation sites that require preservation in perpetuity, as well as non-mitigation sites that provide quality habitat. Considering the dynamic nature of all natural habitats, additional actions may be deemed suitable in Conservation areas in order to maximize suitable habitat values. Implementing restoration/enhancement actions within existing formal mitigation sites should be consistent with existing regulatory agreements/commitments.
- **Restoration (Moderate Level of Management Intensity)** – Existing conditions are considered to generally meet desired conditions, but have been degraded to varying degrees and should be improved to meet the goals of the NRMP. The need for ongoing rehabilitation of degraded areas is expected.
- **Naturalization (High Level of Management Intensity)** – Modifying areas that were substantially altered in the past to improve existing natural resource conditions or otherwise modify to meet the management objectives of the ARRP, NRMP, and Wild and Scenic Rivers (W&SR) policies. This applies to areas previously altered and outcomes are generally native habitat types that would typically be expected to occur in the Parkway. Naturalization also includes converting areas that have unaltered by past actions to heighten, intensify, or improve highly valued resource functions that may have been lost or degraded overtime. This can entail the conversion of a land cover type.
- **Rehabilitation**– Applies to any of the aforementioned categories that are degraded or damaged in the future and require action to improve their condition. Rehabilitation is suitable in any of the other categories and can happen anywhere in the Parkway, just as all areas in the Parkway are subject to degradation or damage.

An area plan map for each of the 19 locations is in Appendix PD-3. Each map set illustrates the NRMP Potential Resource Management Actions for each area plan. Appendix PD-4 is a table outlining each of the 19 ARPPU area plans with their land use designations and NRMP Potential Resource Management Actions. All of the area plans have Potential Resource Management Actions, with some area plans having numerous proposed actions due to the extent of site specific issues, while others only have a few proposed actions. In some cases, again based on site specific issues, the Potential Resource Management Actions overlap and are found for many different area plans. The



intent of the NRMP and its management actions are to supplement the ARPPU land use designations and policies through best management practices specific to each area plan.

Overall, the Potential Resource Management Actions promote preservation, expansion, and improvement of habitats and native vegetation along the Parkway, while minimizing human, invasive vegetation, and wildfire impacts to these biological resources. Several Potential Resource Management Actions also include limiting bluff erosion and identifying locations where the floodplain is evaluated for further improvements related to enhancing the Parkway's habitats and native vegetation. Some Potential Resource Management Actions are also unique to a certain area plan to address site specific issues. For example, the purchase of the Urrutia property, is only specific to the Discovery Park area plan to naturalize this property if brought into public ownership.

The NRMP is based on an adaptive management approach that facilitates informed management decisions based on lessons learned from previous management actions. Monitoring is a key component of adaptive management and the NRMP outlines potential attributes or implementation activities to monitor as well as some data collection methods that could be utilized for each of the 5 NRMP goal areas as follows: biological resources; physical resources; cultural resources; human use impact reduction; and agency and community coordination. A draft Monitoring Plan to support the adaptive management aspect of the NRMP (see Appendix PD-1) will be finalized pending the approval by the American River Parkway Advisory Committee (ARPAC) and Recreation and Park Commission (RPC) in early 2023. Updates to the Monitoring Plan will be reviewed and updated regularly and this process will inform the 5-year review and future updates of the NRMP.

## **INTENDED USES OF THE EIR**

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The Sacramento County Board of Supervisors will use the information contained in the SEIR in evaluating the proposed project and rendering a decision to approve or deny the NRMP. The SEIR will serve as an informational document for the general public as well. Responsible agencies may also use the SEIR as needed for subsequent discretionary actions. Based on the potential effects known at this time, responsible agencies may include (but may not be limited to) the Cities of Sacramento and Rancho Cordova, Sacramento Area Flood Control Agency (SAFCA), National Oceanic and Atmospheric Administration Fisheries, United States Fish and Wildlife Service, United States Army Corps of Engineers, California Department of Fish and Wildlife, the Central Valley Regional Water Quality Control Board, Sacramento Municipal Utility District and/or Pacific Gas and Electric.

## **3 ALTERNATIVES**

### **INTRODUCTION**

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This chapter describes alternative versions of the proposed project that may lessen environmental impacts, or that provide meaningful information to foster informed decisions. Impact discussion are presented in a qualitative rather than quantitative manner and are briefer than those found in the project chapters, consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15126.6(d). This chapter does not repeat background discussions or other subject matter that has already been described in the topical chapters of this DSEIR, but focuses on those Alternative impacts, which are substantively different from the impacts described for the project. Where impacts are similar, the reader is referred to the appropriate topical chapter for further detail and discussion. The discussion of each alternative describes the fundamental differences between the alternative and the proposed project and the effect of the alternative in avoiding or lessening any of the significant environmental impacts associated with the proposed project. Reviewers are encouraged to read the topical chapters describing project impacts prior to reading the Alternatives chapter.

The purpose of this section is to identify alternative project designs that would mitigate, lessen, or avoid the significant effects of the Project. To foster meaningful public discussion and informed decision-making, a range of reasonable alternatives to the Project is provided. This range includes the “no project” alternative, the purpose of which is to allow the hearing body to compare the impacts of approving the Project to the impacts of not approving the Project. The “no project” alternative describes what would happen if the NRMP was not implemented.

The CEQA Guidelines require that a “No Project” alternative be evaluated. (Guidelines § 15126.6(e)(1)). The “no project” alternative analysis is not the baseline for determining whether the proposed project’s environmental impacts may be significant unless it is identical to the existing environmental setting analysis, which does establish the baseline. The EIR must also identify the environmentally superior alternative. If the “no project” alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from among the other alternatives (Guidelines § 15126.6(e)(2)). An EIR need not evaluate an alternative that is considered speculative, theoretical, or unreasonable (Guidelines § 15126.6(f)(3)). Not every potentially feasible alternative need be considered; rather, the relevant test is whether a “reasonable range” of feasible alternatives is considered for that particular project (Guidelines § 15126.6(a)).

A range of alternatives that could possibly reduce or eliminate some of the project’s significant impacts were considered. Some of the alternatives considered were infeasible and rejected without detailed analysis, for the reasons explained below. Other feasible alternatives are discussed with further detail below. Alternatives were considered to address the Project’s potentially significant impacts, as well as impacts that could be reduced to less than significant with mitigation (Land Use & Population and Housing,

Water Quality, Hydrology (cumulative), Biological Resources, Hazards, Hazardous Materials, and Wildfire, and Public Services.)

### **POTENTIALLY SIGNIFICANT IMPACTS**

The proposed project would result in potentially significant impacts related to Hydrology (project-only), Cultural Resources, and Tribal Cultural Resources.

## **RANGE OF ALTERNATIVES**

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According to Section 15126.6 of CEQA Guidelines:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553 and *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376).

The purpose of this section is to identify alternative project designs that would mitigate, lessen, or avoid the significant effects of the project. The purpose of the NRMP, a subsequent document to the American River Parkway Plan, is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources; therefore, there are very few significant effects identified. The NRMP identifies Potential Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified Potential Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

The alternatives proposed below are designed to reduce potential impacts – even if the impacts are not significant. To foster meaningful public discussion and informed decision-making, a range of reasonable alternatives to the project is provided. This range

includes Alternative A, the “No Project” alternative, the purpose of which is to allow the hearing body to compare the impacts of approving the project to the impacts of not approving the project. The “No Project” alternative describes what would happen if the proposed NRMP was not adopted. In addition to Alternative A, Alternative B, and Alternative C, a “considered but rejected” alternative is discussed below.

## **DESCRIPTION OF ALTERNATIVES**

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### **ALTERNATIVE A: NO PROJECT**

The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (State CEQA Guidelines Section 15126.6(e)(1)). In this case, the No Project alternative is identical to the existing environmental setting, as described in the topical chapters that follow.

The no project alternative would assume that the existing management of the Parkway would continue, and a comprehensive strategy for natural resource management (which includes conservation, restoration, and naturalization actions) would not be implemented as currently proposed. This alternative would not contribute to preventing further degradation of resources, nor would it help promote enhancement of resources.

### **ALTERNATIVE B: SCALED-DOWN VERSION OF THE NRMP**

The purpose of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified Potential Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. The NRMP identifies Potential Management Actions specific to each Area Plan within the Parkway to further this goal. Several of these Management Actions support conservation, restoration, and naturalization goals within more than one Area Plan.

Alternative B explores impacts associated with a scaled down version of the NRMP Potential Management Actions where implementation of only the conservation and restoration efforts would occur. Naturalization actions would be limited to activities that were previously associated with the American River Parkway Plan. This Alternative could be implemented more quickly, but would reduce the areas preserved and protected from human impact within the Parkway.

### **ALTERNATIVE C: SCALED-UP VERSION OF THE NRMP**

Alternative C explores impacts associated with a scaled up version of the NRMP Potential Management Actions where implementation includes restoration and naturalization activities within developed recreational areas. This Alternative could be implemented, but

would change land uses and have new and/or additional impacts due to conflicting goals of the Parkway.

## **ALTERNATIVES CONSIDERED BUT REJECTED**

Alternatives to the proposed project were considered but ultimately rejected from further analysis and consideration. CEQA Guidelines Section 15126.6 states that:

The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility or (iii) inability to avoid significant environmental impacts.

An agency need not find that an alternative is literally impossible before it can reject an alternative as infeasible. The finding may be made based on policy considerations or project objectives (ex: *California Native Plant Society, et al. v. City of Santa Cruz, et al.*) or based on specific economic, legal, social, technological, or other considerations (CEQA Guidelines Section 15091). There is no ironclad definition of infeasibility, only guidance, and so it is left to the discretion of the lead agency to determine and explain what reasons are sufficient to exclude an alternative from analysis.

## **ALTERNATIVE LOCATION**

An alternative location for the implementation of NRMP Potential Management Actions is not a realistic alternative because they were designed specifically to address the unique ecosystem of the Parkway. While conservation, preservation, and naturalization efforts within other parks within the County may be desirable, the NRMP addresses these measures within the larger hydraulic context of the Lower American River.

## **ALTERNATIVES ANALYSIS**

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The Project is fully discussed, with regulatory and environmental setting discussions, in the topical chapters of the main document. The discussions below focus on impacts analyses and do not repeat the regulatory and environmental settings contextual background. A summary matrix is included at the end of this document clearly identifying the range of Alternatives and their respective impacts to select environmental topics in relation to the proposed project. Below, Table ALT-1 summarizes the NRMP project goals/objectives by environmental topic.

**Table ALT-1: NRMP Project Objectives by Environmental Topic**

<b>Chapter 4: Land Use</b>
<ul style="list-style-type: none"> <li>4.1 Minimize human use impacts on all Parkway resources. <ul style="list-style-type: none"> <li>4.1a Location of future recreational use areas and facilities 100 feet from a waterway as long as allowable recreational activities can be maintained.</li> <li>4.1b Documentation and mapping of social trails in the Parkway.</li> </ul> </li> <li>4.2 Reduce impacts associated with homeless encampments in the Parkway. <ul style="list-style-type: none"> <li>4.2a Elimination or mitigation of the detrimental consequences associated with homeless encampments such as (1) accumulated debris, (2) environmental degradation, and (3) health and public safety issues including degradation of public infrastructure such as levees (as directed by the Martin v. Boise court decision).</li> </ul> </li> <li>4.3 Monitor impacts related to large group gatherings and special events.</li> </ul>
<b>Chapter 5: Water Quality and Hydrology</b>
<ul style="list-style-type: none"> <li>2.1 Protect levees throughout the Parkway. <ul style="list-style-type: none"> <li>Stabilize bank conditions throughout the Parkway to minimize erosion and retain natural riverine processes.</li> </ul> </li> <li>2.2 Improve water quality.</li> </ul>
<b>Chapter 6: Biology</b>
<ul style="list-style-type: none"> <li>1.1 Assess biological resources within the Parkway.</li> <li>1.2 Conserve high-quality native habitats.</li> <li>1.3 Restore high-quality native habitats that require improvement.</li> <li>1.4 Naturalize habitats that have been altered by human activity.</li> <li>1.5 Rehabilitate habitats damaged or degraded by fire or homeless populations.</li> <li>1.6 Expand corridors that connect disparate native vegetation communities and wildlife habitat.</li> <li>1.7 Reduce the prevalence of invasive, non-native species.</li> </ul>
<b>Chapter 7: Cultural Resources</b>
<ul style="list-style-type: none"> <li>3.1 Protect archaeological and historical resources.</li> <li>3.2 Form a partnership with tribal governments to protect and manage cultural resources in the parkway.</li> <li>4.6 Interpret environmental, archaeological, and historical resources and educate the public on the significance of the Parkway in the greater Sacramento Region.</li> </ul>
<b>Chapter 8: Tribal Cultural Resources</b>
<ul style="list-style-type: none"> <li>3.1 Protect archaeological and historical resources.</li> <li>3.2 Form a partnership with tribal governments to protect and manage cultural resources in the parkway.</li> </ul>
<b>Chapter 9: Hazards, Hazardous Materials, and Wildfire</b>
<ul style="list-style-type: none"> <li>5.1 Oversee implementation of NRMP.</li> <li>5.2 Coordinate with fire agencies to reduce wildfire fuel and hazards in the Parkway. <ul style="list-style-type: none"> <li>5.2a Update and implement the wildfire prevention plan. Develop response, and recovery plans.</li> <li>5.2b Develop and maintain a tracking system for wildfires in the Parkway.</li> </ul> </li> <li>5.3 Support scientific research programs to increase the quantity and quality of data describing the condition of Parkway resources.</li> <li>5.4 Implement a robust Natural Resource Management Plan Monitoring Program.</li> <li>5.5 Encourage public outreach and educational activities to increase the public's understanding and appreciation of Parkway resources.</li> </ul>
<b>Chapter 10 Public Services</b>
<ul style="list-style-type: none"> <li>4.4 Maximize environmentally beneficial opportunities within transmission line corridors.</li> </ul>

## **ALTERNATIVE A: NO PROJECT ALTERNATIVE**

### ***LAND USE & POPULATION AND HOUSING***

The ARPP land use policies will continue to govern land use policies in the Parkway for all Alternatives. The ARPP utilizes the following land use designations within the 19 Parkway Area Plans:

- Open Space Preserve
- Nature Study Area
- Protected Area
- Limited Recreation
- Developed Recreation
- Recreation Preserve

The ARPP identified the purchase of the Urrutia property and former Riverdale Mobile Home Park so that these formerly developed/disturbed areas may be naturalized within the Parkway. Additionally, the ARPP identified ecosystem restoration/naturalization efforts in the Woodlake and Cal Expo areas of the Parkway. The Urrutia property is no longer an active mine and the former mobile home park no longer operates and since these properties are located within the floodplain designation potential development of these properties is limited. Alternative A, the no project alternative, supports the naturalization of these properties to improve habitat and wildlife corridors in the Parkway.

Alternative A would not physically divide a community, nor would it conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, impacts to land use under Alternative A would be ***less than significant***.

### ***WATER QUALITY AND HYDROLOGY***

The ARPP acknowledged that historic activities both in and outside of the American River raised the floodplain within the Parkway. It concluded that, “the aggradation of the floodplain continues to this day to affect Parkway vegetation’s regeneration and sustainability.” The ARPP also identified the role of vegetation in the hydrology of the Parkway:

Vegetation represents a degree of hydraulic roughness, potentially impeding the flow of water and raising water surface elevations. Vegetation in the lower American River has been affected by many factors, including deposition of hydraulic mining debris, removal for infrastructure and recreational development, wildland fire, invasion by non-native species, thinning and clearing for maintenance of engineered structures, and re-vegetation/habitat restoration projects.



Vegetation management needs are identified based on historical data, field observations, professional judgment, and hydraulic modeling. (Pg 86)

The ARPP explained that vegetation impacts the hydrology of the Parkway and indicated hydraulic modeling and planning activities would be implemented to identify acceptable restoration and naturalization activities, which would integrate water conveyance, recreation, and land use objectives. Alternative A does not provide specific guidance regarding restoration of the floodplain to historic, natural levels. Aggradation of the floodplain has led to a variety of impacts within the Parkway including stress to flood control structures through increased velocity and water surface elevation and a depletion of unique habitat areas within the Parkway, such as areas subject to more frequent inundation and associated shaded riverine areas.

Although mitigation measures may be implemented to manage impacts to water quality and hydrology resulting from Alternative A there would not be a strategic approach for preventing further degradation and/or enhancement of floodplain resources, including hydrology and water quality. Under Alternative A, the no project alternative could result in ***potentially significant impacts*** related to hydrology and water quality.

### ***BIOLOGICAL RESOURCES***

The purpose of the ARPP is to provide a guide to land use decisions affecting the Parkway, specifically its preservation, use, development and administration. The ARPP was written to promote preservation of the naturalistic environment while providing limited developments to facilitate human enjoyment of the Parkway. The Parkway Plan also acts as the management plan for the federal and state Wild and Scenic Rivers Acts. The ARPP included mitigation measures to ensure that best management practices for the protection and preservation of biological resources occurred during the implementation of any projects within the Parkway. Therefore, environmental impacts under Alternative A are ***less than significant***.

### ***CULTURAL RESOURCES***

The Parkway contains sensitive cultural resources. Ground disturbing projects have the potential to impact cultural resources, particularly archaeological resources. The ARPP FEIR concluded that projects could result in potentially significant impacts to cultural resources because the full extent – location, type, significance – of cultural resources within the Parkway is unknown. Under Alternative A, environmental impacts to cultural resources remain ***potentially significant***.

### ***TRIBAL CULTURAL RESOURCES***

The Parkway contains sensitive tribal cultural resources. Tribal cultural resources were defined by Assembly Bill 52, which became effective July 1, 2015, and was codified in PRC, §21080.3.1 (as discussed in the Tribal Cultural Resources chapter). Like cultural resources, tribal cultural resources may be archeological; therefore, ground disturbing projects have the potential to impact previously unidentified tribal cultural resources. However, with consultation and mitigation, impacts to tribal cultural resources may be avoided or lessened but not to a less than significant level. Therefore, Alternative A, the

no project alternative, would result in ***potentially significant*** impacts to tribal cultural resources.

### ***HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE***

The ARPP did not specifically address Hazards, Hazardous Materials, and Wildfire in the Parkway. The ARPP relies on a number of plans to manage wildfire within the Parkway including:

- *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2014);
- *Review of Sheep Grazing on Sacramento County Parks Department Lands* (Rice 2015a); and a
- *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2015b).

Under Alternative A, management activities would proceed in accordance with state and federal law managing the use of herbicides and requiring the maintenance and proper operation of heavy equipment. In-water work would likely trigger compliance with additional requirements in the event that mercury or other remnants from historic mining activities are present during projects. Impacts under Alternative A would be ***less than significant***.

### ***PUBLIC SERVICES AND UTILITIES***

Under Alternative A, the natural resources would continue to be managed under current practices. The ARPP strives to protect and enhance natural resources within the Parkway but these goals may conflict with and/or inhibit the ability of utility providers to maintain utility infrastructure. Mitigation was not explicitly included in the ARPP requiring coordination with utility providers, therefore, under Alternative A the impacts related to public services and utilities would be ***potentially significant***.

## **ALTERNATIVE B: SCALED-DOWN VERSION OF THE NRMP**

### ***LAND USE & POPULATION AND HOUSING***

The ARPP land use policies will continue to govern land use policies in the Parkway for all alternatives. The ARPP utilizes the following land use designations within the 19 Parkway Area Plans:

- Open Space Preserve
- Nature Study Area
- Protected Area
- Limited Recreation

- Developed Recreation
- Recreation Preserve

Alternative B would only implement the NRMP Potential Management Actions identified for conservation or restoration within the Parkway. The only naturalization projects that would occur would be within Discovery, Woodlake, and Cal Expo areas of the Parkway, as previously identified in the ARPP.

The restoration and conservation activities that would take place under Alternative B are consistent with the ARPP land use designations and policies and would not divide an established community nor conflict with any land use plan, policy or regulation previously adopted to avoid or mitigate an environmental effect. Mitigation associated with other projects identified in the ARPP, such as the construction of the Sacramento Regional Transit (RT) Downtown-Natomas-Airport Bridge crossing that would run through a portion of the Discovery Park Area Plan could still be mitigated within areas designated for restoration within the Parkway under Alternative B. Furthermore, as consistent with the ARPP the actions of conservation and restoration would not directly or indirectly impact population and/or housing. Therefore, impacts to land use and population and housing under Alternative B would be ***less than significant***.

### ***WATER QUALITY AND HYDROLOGY***

Under Alternative B, implementation of only the conservation and restoration NRMP Potential Management Actions would occur. Actions that would require a larger effort, such as lowering floodplain elevations to elevations that existed prior to mining activities would not occur. Alternative B actions only, without on-going federal and state flood and habitat projects, would increase roughness from vegetation that could negatively impact water surface elevations or flow velocities. Therefore, project only hydrology impacts would be ***potentially significant***.

However, in conjunction with the American River Common Features flood risk reduction project currently underway, there would likely not be an impact to the hydrology in the Parkway. Additionally, utilizing a hydraulic model to refine designs would help ensure impacts were avoided. Cumulatively, hydrology impacts would be ***less than significant***.

The ARPP FEIR identified mitigation measures that would reduce water quality impacts to less than significant and those would be carried through under Alternative B. Therefore, Alternative B would result in ***less than significant impacts*** for both water quality.

### ***BIOLOGICAL RESOURCES***

Alternative B supports the goals of the NRMP for the conservation and restoration but not naturalization actions beyond those identified in the ARPP. Under Alternative B, partial implementation of the NRMP Proposed Management Actions could expand and enhance habitats that support state and federally protected species, which include the following:

- Riparian Habitat

- Valley and Foothill Grassland
- Oak Woodland and Forest
- Foothill Pine
- Gravel Bar Chaparral
- Elderberry Savanna
- Freshwater Emergent Wetland
- Open Water

Alternative B is similar to the Project, in that Potential Management Actions would be applied across the Parkway; however, Alternative B would not realize full implementation of those actions through use of naturalization projects.

Partial implementation of Potential Management Actions would not result in greater impacts to biological resources. Under the NRMP, Alternative B would apply the updated mitigation measures for the protection and conservation of listed plant and animal species. Alternative B would help prevent further degradation and would enhance biological resources within the Parkway compared to Alternative A; however, to a lesser degree compared to implementation of the NRMP. Under Alternative B environmental impacts would be ***less than significant***.

### ***CULTURAL RESOURCES***

The Parkway contains sensitive cultural resources. Under Alternative B, the scaled down version of the NRMP, there would be ground disturbing activities that have the potential to impact cultural resources, particularly archaeological resources. The ARPPU FEIR concluded that projects could result in potentially significant impacts to cultural resources because the full extent – location, type, significance – of cultural resources within the Parkway is unknown. This remains true under Alternative B; with implementation of the identified mitigation measures the impacts would result in ***potentially significant*** impacts to cultural resources.

### ***TRIBAL CULTURAL RESOURCES***

The Parkway contains sensitive tribal cultural resources. Alternative B includes ground disturbing activities, similar to the other alternatives, though to a lesser degree when compared to Alternative C. Since tribal cultural resources may be archeological, ground disturbing projects have the potential to impact previously unidentified tribal cultural resources. However, with consultation and mitigation, impacts to tribal cultural resources may be avoided or lessened. Additionally, It is important to note that most ground disturbing activities proposed are discretionary and would require project-level CEQA and compliance with AB52. With early engagement under AB52 there is a greater potential to proactively identify projects with the potential to impact tribal cultural resources early in the design process that could lead to less potential impacts. Due to the uncertainty in location and extent of potential subsurface resources, impacts to tribal cultural resources remain ***potentially significant*** under Alternative B.

### ***HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE***

Under Alternative B there would be the potential to introduce or to expose potentially hazardous materials within the Parkway. For example, herbicides may be applied to management vegetation. Additionally, naturalization activities may include the use of heavy equipment for earthwork. Ground disturbances, particularly in waterways, may also disturb soils historically contaminated by hydraulic mining activities. Additionally, the ARPP and the NRMP rely on a number of plans to manage wildfire within the Parkway including:

- *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2014);
- *Review of Sheep Grazing on Sacramento County Parks Department Lands* (Rice 2015a); and a
- *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2015b).

Building upon this foundation, the NRMP prioritizes a number of actions. The NRMP proposes the development of a tracking system for wildfires in the Parkway, and development and implementation of a plan for wildfire prevention, response, and recovery with fire departments and agencies and adjacent landowners. Additionally, the NRMP calls for mapping and evaluating all areas damaged or degraded by wildfire annually, and survey of invasive species to produce an Invasive Species Management Plan Update. These actions together would aid in wildfire prevention, response, and recovery efforts in the Parkway. With implementation of identified mitigation measures, impacts associated with hazards and hazardous materials would be ***less than significant***.

### ***PUBLIC SERVICES AND UTILITIES***

Under Alternative B, conservation and restoration actions identified in the NRMP would be implemented. The goals of the ARPP and of the NRMP both strive to protect and enhance natural resources within the Parkway, but these goals may conflict with and/or inhibit the ability of utility providers to maintain utility infrastructure. These conflicts could be reduced by developing agreements to seek opportunities to coordinate management activities and enhance the environment where possible. This mitigation is included in the Project and would also apply to Alternative B. Therefore, impacts related to Alternative B would be similar to the Project and are ***less than significant*** with implementation of mitigation.

## **ALTERNATIVE C: SCALED-UP VERSION OF THE NRMP**

### ***LAND USE & POPULATION AND HOUSING***

Alternative C promotes restoration and naturalization within all Parkway land use categories, including the areas designated for active/developed recreation, which is above and beyond what is proposed in the NRMP. Although the ARPP would not prevent restoration and naturalization within designated developed recreation areas it could result

in significant changes to the use of these areas and may prompt a change in the land use. The NRMP does not propose changes to land uses, nor does it include goals specific to land use designations. The one NRMP land use designation goal that relates to active uses within the Parkway is Policy 4.3: Monitor impacts related to large group gatherings and special events. The goals and the Potential Management Action of the NRMP were developed within the framework of the ARPP. Therefore, the NRMP remains consistent with overarching goals of the ARPP, including management that balances flood management, natural resources, and recreational uses within the Parkway. Alternative C would expand restoration and naturalization actions into designated developed recreation areas. This would not physically divide a community and would not directly or indirectly impact population and/or housing. However, the Alternative C actions could result in changes in the land uses in the Parkway and conflict with other goals and objectives of the ARPP related to recreation and land use. Thus, impacts to land use for Alternative C would be ***potentially significant***.

### ***WATER QUALITY AND HYDROLOGY***

Under Alternative C, restoration and naturalization actions would be implemented in developed designated recreation areas identified in the ARPP, along with the full NRMP Potential Management Actions. Mitigation measures identified in the ARPP FEIR would be implemented to reduce water quality impacts to ***less than significant***. Hydraulic modeling would be used to refine restoration and naturalization designs to ensure the impacts to water surface elevations and velocities are less than significant. However, since the hydraulic analysis for the Potential Management Actions identified in the NRMP was determined to be just under the limits of potentially significant impacts it is likely that the addition of actions under Alternative C would cause ***potentially significant impacts*** to the hydrology in the Parkway.

### ***BIOLOGICAL RESOURCES***

Alternative C supports the goals of the NRMP for the conservation, restoration, and naturalization of natural resources within the Parkway but to a larger degree. Restoration and naturalization actions would be expanded into areas designated as developed recreation. Alternative C would implement updated mitigation measures for the protection and conservation of listed plant and animal species and would support more active enhancement of biological resources within the Parkway, and reduce human impacts to the Parkway ecosystem compared to other alternatives. Under Alternative C environmental impacts would be ***less than significant***.

### ***CULTURAL RESOURCES***

The Parkway contains sensitive cultural resources. Under Alternative C, there would be ground disturbing activities that have the potential to impact cultural resources. As with the other alternatives, implementation of the identified mitigation measures lessen potential impacts, but impacts to cultural resources would remain ***potentially significant***.

### **TRIBAL CULTURAL RESOURCES**

The Parkway contains sensitive tribal cultural resources. Alternative C includes more ground disturbing activities than the Project. Since, tribal cultural resources may be archeological in nature, ground disturbing projects have the potential to impact previously unidentified tribal cultural resources. Additionally, It is important to note that most ground disturbing activities, proposed such as lowering the floodplain, are discretionary and would require project-level CEQA and compliance with AB52. With early engagement under AB52 there is a greater potential to proactively identify projects with the potential to impact tribal cultural resources early in the design process that could lead to avoiding and/or lessening potential impacts. However, due to the potential sub-surface nature of tribal cultural resources, impacts remain **potentially significant**.

### **HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE**

Under Alternative C, there would be the potential to introduce or to expose potentially hazardous materials within the Parkway, similar to the proposed NRMP and Alternative B. With an increase in geographic area, the potential for the exposure to hazardous materials is greater, especially in locations that were not previously designated for naturalization. This alternative poses a risk to wildfire and fuel management by naturalizing areas that were not previously designated for this type of use. The ARPP and the NRMP rely on a number of plans to manage wildfire within the Parkway including:

- *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2014);
- *Review of Sheep Grazing on Sacramento County Parks Department Lands* (Rice 2015a); and a
- *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2015b).

Building upon this foundation, the NRMP prioritizes a number of actions. The NRMP proposes the development of a tracking system for wildfires in the Parkway, and development and implementation of a plan for wildfire prevention, response, and recovery with fire departments and agencies and adjacent landowners. Additionally, the NRMP calls for mapping and evaluating all areas damaged or degraded by wildfire annually, and survey of invasive species to produce an Invasive Species Management Plan Update. These actions together would aid in wildfire prevention, response, and recovery efforts in the Parkway. Because Alternative C would implement mitigation measures related to hazards and hazardous materials, and rely on a series of existing wildfire management plans, environmental impacts are **less than significant**.

### **PUBLIC SERVICES AND UTILITIES**

Under Alternative C, conservation, restoration, and naturalization actions identified in the NRMP would be implemented, but to a larger degree. The goals of the ARPP and of the NRMP both strive to protect and enhance natural resources within the Parkway but these goals may conflict with and/or inhibit the ability of utility providers to maintain utility

infrastructure. These conflicts could be reduced by developing agreements to seek opportunities to coordinate management activities. This mitigation is included in the Project and would also apply to Alternative C. Therefore, impacts related to Alternative C would be similar to the Project and are ***less than significant***.

## **SUMMARY OF COMPARISON OF ALTERNATIVES**

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The ARPP that is the current framework for the management activities in the Parkway. The goal of this document was to ensure protection of natural resources balanced with requirements for flood risk reduction and recreation enjoyment of the Parkway. The ARPP did identify several actions that would enhance natural resources within the Parkway. These actions make up Alternative A and are considered the no project alternative. As described in this chapter this alternative may result in potentially significant effects associated with impacts to water quality and hydrology, as well as public services and utilities.

The NRMP was developed under the framework of the ARPP and is consistent with the goals of the ARPP, but it identifies goals and objectives that aim to prevent further degradation of the Parkway resources and would enhance natural resources through the strategic approach outlined in the NRMP. Some of the actions could potentially have a significant impact on the environment but with new and updated mitigation measures implementation of the NRMP would result in less than significant impacts to the environment.

The scaled down version of the NRMP outlined as Alternative B would potentially reduce the environmental impacts but would also miss opportunities to further enhance the environment. The scaled-up version of the NRMP would maximize natural resource enhancement within the Parkway but would ultimately result in significant impacts to Parkway land uses and hydrology.

This alternatives analysis demonstrates that no action under Alternative A and maximize resource enhancement in Alternative C would result in potentially significant impacts to the environment. Further, it shows that while Alternative B would slightly reduce the effects when compared to implementation of the NRMP it would not maximize the potential to enhance natural resources within the Parkway as outlined in the NRMP.

For comparison purposes, Table ALT-2 provides the impacts of the proposed project, the No Project Alternative and Alternatives A-C.

- LS Indicates the project's impact is Less than Significant
- PS Indicates the project's impact is Potentially Significant
- S Indicates the project's impact is Significant
- Greater: Indicates the impact is greater than the proposed project.



**Table ALT-2: Alternatives Summary Matrix**

Environmental Impact	Project	Alternative A: No Project	Alternative B: Scaled down NRMP	Alternative C: Scaled up NRMP
Alternatives and Planning & Population and Housing	LS	LS	LS	PS
Water Quality & Hydrology (project-only)	PS	PS	PS	PS
Water Quality & Hydrology (cumulative)	LS	PS	LS	PS
Biological Resources	LS	LS	LS	LS
Cultural Resources	PS	PS	PS	PS
Tribal Cultural Resources	PS	PS	PS	PS
Hazards, Hazardous Material, and Wildfire	LS	LS	LS	LS
Public Services and Utilities	LS	PS	LS	LS

## ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) provides that an environmentally superior alternative will be identified among the alternatives evaluated in an EIR. In addition, if the environmentally superior alternative is the No Project Alternative, the EIR will identify an environmentally superior alternative among the other alternatives. The above analysis includes Alternative A (the No Project Alternative), Alternative B (scaled down version of the NRMP), and Alternative C (scaled up version of the NRMP). Analysis of Alternative A concludes that without the Project, impacts may occur to hydrology and public services. Alternative B illustrates environmental impacts that may occur as the Project is fully implemented. This alternatives analysis demonstrates that while pursuit of only a portion of the NRMP is comparable, implementation of the full Project will result in the fewest environmental impacts due to the magnitude of the actions, and by not naturalizing some

areas, there are missed opportunities to further reduce hydraulic impacts. Alternative C illustrates that environmental impacts to land use and hydrology may result if greater portions of the Parkway are converted from active recreational uses to naturalized areas. Considering the range of alternatives, the environmentally superior alternative is the proposed project.

## **4 LAND USE AND PLANNING & POPULATION AND HOUSING**

### **INTRODUCTION**

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The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan (ARPP), is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified Potential Resource Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

While the NRMP is not a land use plan, some of the NRMP Goals include physical changes that could potentially result in land use, planning, population and housing (land use/population) impacts. NRMP goals applicable to land use/population are:

- 4.1 Minimize human use impacts on all Parkway resources.
  - 4.1a Location of future recreational use areas and facilities 100 feet from a waterway as long as allowable recreational activities can be maintained.
  - 4.1b Documentation and mapping of social trails in the Parkway.
- 4.2 Reduce impacts associated with homeless encampments in the Parkway.
  - 4.2a Elimination or mitigation of the detrimental consequences associated with homeless encampments such as (1) accumulated debris, (2) environmental degradation, and (3) health and public safety issues including degradation of public infrastructure such as levees (as directed by the Martin v. Boise court decision).
- 4.3 Reduce impacts related to large group gatherings and special events.
  - 4.3a Containment of large special event activities within developed recreational areas. Staff shall review each special event permit request on an individual basis to assess potential adverse impacts on the Parkway such as litter and other nuisances.

The following Potential Resource Management Actions include plans for the transfer of property within the Parkway. These proposed transfers of land ownership are slated to occur within the Discovery Park Area Plan. The transfer of property could result in physical changes that could potentially result in land use/population impacts. They are:

- Purchase and naturalize Urrutia property;
- Address and minimize impacts associated with proposed bridge crossing; and,
- Purchase and naturalize Riverdale mobile home park.

As discussed further in the following Background section, these Potential Resource Management Actions were introduced as land use actions in the ARPP Update (ARPPU) and analyzed in the ARPPU FEIR. The Potential Resource Management Actions are discussed at a conceptual/programmatic level in the NRMP; as specific projects are proposed to implement the Potential Resource Management Actions, those projects will be subject to project-level review, including CEQA.

The ARPPU FEIR identified physical impacts that could result from updates to land use designations in the Parkway; however, with mitigation, the ARPPU concluded that these impacts would be less than significant. The land use designations were certified with adoption of the ARPP. Furthermore, the NRMP does not propose changes in land use designations. Therefore, the ARPPU FEIR mitigation measures do not apply to the NRMP SEIR.

## **BACKGROUND**

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As noted in the Project Description Chapter and the Introduction above, the Land Use/Population Goals of the NRMP, specifically Policy 4.3 and the proposed property transfers identified as Potential Resource Management Actions in the Discovery Park Area Plan, carry through goals and policies from the ARPPU.

### **NRMP POLICY 4.3: LARGE GROUP GATHERINGS AND SPECIAL EVENTS**

NRMP Policy 4.3, to reduce impacts related to large group gatherings and special events, states that large special event activities shall be contained within developed recreational areas. Large events require a special event permit, which staff will review on an individual basis to assess for potential adverse impacts on the Parkway such as litter and other nuisances. This policy carries over the following policies from the ARPPU, which require permitting for events:

- 5.33: Large special events may be permitted at Discovery Park on a periodic basis so long as natural resources are not degraded.
- 5.34: Small special events may be permitted in the Ancil Hoffman, River Bend Park, William B. Pond and Effie Yeaw Nature Center areas where events can be

accommodated by existing facilities, so long as natural resources are not degraded.

- 6.1.5: Staff shall review each special event permit request on an individual basis to assess potential adverse impacts on the Parkway such as litter and other nuisances.

The ARPP summarizes the permitting process for events to minimize physical impacts to the Parkway:

The permit process for a special event includes measures to minimize impacts on other users and Parkway resources. These measures typically include steps to avoid closure of the bicycle trail and boat ramps, defining the size of the event area and amount of parking allowed, temporarily fencing the event area to regulate access, leaving portions of the park and parking areas available for other use during the event, regulating and enforcing amplified sound regulations, enforcement of alcoholic beverage regulations specified in the permit for the event, and advance notification regarding the date, time, and location of the event through signage and the media. This ARPP also recommends that the permit process require: recycling, shuttle services and promoting bicycle use in order to reduce traffic congestion, and valet parking for bicycles.

### **POTENTIAL RESOURCE MANAGEMENT ACTIONS: TRANSFER OF PROPERTY**

The NRMP Potential Resource Management Actions also carry through Goals and Policies identified in the ARPP for the transfer of privately owned properties within the Discovery Park Area Plan. As described in the ARPP, most of the proposed property transfers would occur within the eastern portion of the Discovery Park Area Plan:

The Discovery Park East area is bounded by Discovery Park proper on the west and Highway 160 on the north. The privately owned properties within this area include the Riverdale Mobile Home Park, a Boy Scouts of America camp facility, Camp Pollock and the Gardenland Sand and Gravel Mine (Urrutia) site. The remaining land is owned by the County. Trails crossing the private land are on established easements (ARPPU, Area Plans 10, pg. 153).

Since the adoption of the ARPP, Camp Pollock has been transferred to public ownership under the State Lands Commission. The property is leased to Sacramento County Regional Parks, and subleased to the Sacramento Valley Conservancy.

These proposed property transfers are described in greater detail below.

### ***PURCHASE AND NATURALIZE URRUTIA PROPERTY***

The NRMP includes a Potential Resource Management Action to develop a conceptual naturalization plan for the Urrutia Property if it is brought into public ownership. This concept of bringing the former gravel mine into public ownership was discussed in the ARPP through the following policies:

- 10.5: Acquire the Gardenland Sand and Gravel Mine (Urrutia) site.
- 10.6: Following acquisition, reclaim and restore the Gardenland Sand and Gravel Mine (Urrutia) site to enhance its fish and wildlife habitat value, accommodate historical and cultural interpretive activities, with related minor interpretive facilities in Limited and Developed Recreation areas, including demonstrations of California Native American culture, and support picnicking, hiking and wildlife viewing.

***ADDRESS AND MINIMIZE IMPACTS ASSOCIATED WITH PROPOSED BRIDGE CROSSING***

The ARPP acknowledges on-going planning efforts to construct a new bridge over the American River as part of Regional Transit's (RT) Green Line to the Airport project (formerly the Downtown-Natomas-Airport (DNA)) project. The purpose of the project is to connect downtown Sacramento via light rail to the Sacramento International Airport (SMF). This proposed bridge crossing would be located downstream of the Urrutia Property. The NRMP anticipates construction of the bridge structure within portions of the Discovery Park Area Plan and identifies the need to mitigate for potential impacts to habitat, specifically to address wildlife connectivity issues. The NRMP carries through the following policy and discussion from the ARPP:

- 8.18.1: The Downtown-Natomas-Airport (DNA-RT) light rail project alignment, as approved by the Regional Transit Board of Directors in December 2003, is recognized by this plan.

A thorough study should be performed prior to constructing any new crossing to evaluate the impact upon the natural habitat so that the design results in the least impact to the Parkway environment, aesthetic values and natural resources. Evaluation of site conditions, project goals, environmental considerations and alternatives in preparation of detailed site plans will determine the exact alignment.

The preferred Downtown-Natomas-Airport (DNA-RT) light rail project alignment includes a crossing of the American River through the Discovery Park area. The approved alignment, adopted by the Regional Transit Board of Directors in December 2003, crosses the Parkway along the Truxel Road alignment. This area includes a most vibrant riparian habitat area, often referred to as the most pristine riparian area in the Parkway. The protection and avoidance of harm to the Parkway's sensitive habitat shall be of primary concern in the design and construction of the span crossing the Parkway. The alignment shall cross the entire Parkway and provide bicycle/pedestrian access into the Parkway at both levee sides. A bicycle/ pedestrian bridge should be attached to the rail line structure. A station shall not be included within the Parkway boundaries, but should be placed in close proximity to the Parkway and within reasonable walking distance to the Parkway. A proximate station would provide alternate modes of access to the Parkway.

If new bridge crossings are constructed, they shall be designed and located in such a manner as to minimize negative impact to the parkway environment, aesthetic values, and natural resources. Any additional bridge crossings should be located within Developed Recreation or Limited Recreation areas.

### ***PURCHASE AND NATURALIZE FORMER RIVERDALE MOBILE HOME PARK***

The NRMP also includes a Potential Resource Management Action in the Discovery Park Area Plan to identify an appropriate use for the former Riverdale Mobile Home Park if it is brought into public ownership. The mobile home park, which is located in the floodplain, is currently vacant.

This NRMP Potential Resource Management Action carries through the following policies from the ARPP:

- 10.7: Acquire the Riverdale Mobile Home park site.
- 10.8: Following acquisition of the Riverdale Mobile Home park site, establish an interpretive/educational center for visitor enjoyment and interpretation of the parkway. If the Riverdale Mobile Home park site is determined to be infeasible, establish an interpretive/educational center at an alternative site within the Woodlake or Discovery park areas.
- 10.14: Create a Woodlake Gateway near the intersection of Highway 160 and Northgate Boulevard to serve as a major entry point to the parkway, with access to and parking for an interpretive/ educational center at the Riverdale Mobile Home site west of Highway 160. Provide a surfaced parking area and trailhead east of Highway 160, a car-top boat access and ramp into the American River, restrooms, and signage.

## **ENVIRONMENTAL SETTING**

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The Parkway is an open space greenbelt extending approximately 29 miles and covers approximately 7,000 acres. Regional Parks manages lands on the lower 23 miles of the Parkway from the Hazel Avenue Bridge to the American River confluence with the Sacramento River, approximately 5,000 acres. The entire Parkway lies within the boundaries of Sacramento County, but also passes through the City of Sacramento, the City of Rancho Cordova and the City of Folsom. Activities within the American River are subject to the jurisdiction of many state and federal agencies, such as the United States Army Corps of Engineers, the California Regional Water Quality Control Board, and the California Department of Water Resources.

The Parkway's landscape is relatively undeveloped, though manmade structures including recreational facilities, interpretive centers, kiosks, utilities buildings and infrastructure are located throughout. Major vegetation types occurring within the Parkway include valley and foothill grassland, oak woodland, and riparian vegetation, including cottonwood forests, mixed riparian forest, and riparian scrub.

The Parkway is surrounded by urban development, particularly the lower six miles, and suburban development along its upper reaches. Lands and developments associated with the cities of Sacramento and Rancho Cordova, and unincorporated Sacramento

County communities (including Carmichael, Fair Oaks, and Gold River) border the Parkway. Adjacent residential, commercial, and industrial land uses form an extensive wildland-urban interface along most of the Parkway's boundaries. While this proximity can create natural resources management challenges for the Parkway, the surrounding urban context also highlights the regional importance of the open space corridor for conservation and the recreation opportunities that it provides. Knowledge of the physical attributes and current uses of the Parkway, as well as an in-depth understanding of the existing ecological, cultural, and recreational resources along the river corridor, will directly inform future management actions.

## **REGULATORY SETTING**

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### **FEDERAL**

#### ***WILD AND SCENIC RIVERS SYSTEM***

Congress created the National Wild and Scenic Rivers System in 1968, in so doing creating a policy of preserving rivers that “possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values” with the intent of creating “a national system of protected rivers that co-existed with use and appropriate development” ([www.rivers.gov](http://www.rivers.gov)). The Wild and Scenic Rivers Act requires that a river be “free-flowing” (free of dams) in order to be eligible for designation, and also includes three classifications: wild river areas, scenic river areas, and recreational river areas. The construction of dams or hydroelectric projects within any section of a river designated within the Wild and Scenic Rivers Act is prohibited, as is any water resources project that would have “direct and adverse” effects on the values that caused the river to be designated (Section 7, National Wild and Scenic Rivers Act).

To complement the National Wild and Scenic Rivers Act, the California Wild and Scenic Rivers System was enacted in 1972. The National and California Acts contain similar provisions, policies and definitions. The California Wild and Scenic Rivers Act is contained in Public Resources Code Section 5093.50 – 5093.70.

From Nimbus Dam to the confluence of the Sacramento River, the Lower American River is classified as a “recreational” river in the National and California Wild and Scenic River System (designated in 1981). To maintain Wild and Scenic River status, projects may not:

- Adversely impact the free-flowing characteristics of the river; and/or,
- Affect the ability of the river to meet the criteria of a wild, scenic or recreational river.



## **STATE OF CALIFORNIA**

### ***CALIFORNIA EXPOSITION AND STATE FAIR ACT***

The California Exposition and State Fair (Cal Expo) is located on approximately 400 acres on the north bank of the American River, on the east side of Business 80. The undeveloped, floodplain portion of the Cal Expo property is within the Parkway. The California Exposition and State Fair Act (California Food and Agricultural Code 3301 – 3334) created the California Exposition and State Fair Agency. Of principle relevance, Code 3302 states that use changes in the floodplain area are prohibited until a management plan consistent with the Bushy Lake Preservation Act (see below) has been established.

### ***BUSHY LAKE PRESERVATION ACT***

Bushy Lake is a human-constructed water body within the Cal Expo property. The lake has varied in size over the years, depending on rainfall, the amount of groundwater pumping, and the height of the underlying water table. Although not originally formed by natural processes, over time many riparian and wetland plants colonized the lake environment, and for many decades the lake has provided important habitat for a variety of wildlife species. In recognition of this fact, the Bushy Lake Preservation Act was adopted in 1976 (Public Resources Code 5830 – 5835). The Bushy Lake area, while inside the Parkway, is owned by the State of California, California Exposition and State Fair.

The Bushy Lake Preservation Act specifies that the California Exposition and State Fair must preserve the California Exposition floodplain area, which includes Bushy Lake. Exceptions given are that parking within the preservation areas is allowed during the State Fair (though approved locations are specified), and group picnicking may continue in an area on the north side of Bushy Lake known as “picnic island”. Any proposed land use changes or uses within the California Exposition floodplain must be consistent with the Bushy Lake Preservation Act.

## **SACRAMENTO COUNTY LAND USE PLANS**

### ***GENERAL PLAN***

The ARPP is an Element of the Sacramento County General Plan. The General Plan Land Use Diagram designates the lands inside the Parkway as either Recreation or Natural Preserve, with one exception: an area owned by Sacramento Regional County Sanitation District designated as Public/Quasi-Public. The General Plan definitions of these designations are below.

**Recreation:** The Recreation designation provides areas for active public recreational uses, including community parks, County parks, and activity areas within the Parkway. Some facilities types are too small or numerous to be identified on the Land Use Diagram, but they may be in the text of the Plan mapped at a more detailed scale. The Recreation land use designation may also apply to lands within floodplains in urbanizing areas.

Pursuant to adoption of a Master Drainage Plan it would be appropriate to modify the Recreation designation to reflect the more precise land use designations established in the Master Drainage Plan.

**Natural Preserve:** The purpose of this designation is to identify critical natural habitat for priority resource protection. The designation includes riparian Valley Oak woodland and permanent or seasonal marshes with outstanding wildlife value, the extent of which has declined greatly throughout the Central Valley during the 20th Century. This designation shows Natural Preserve on both public and privately owned land. Preserve boundaries do not include intensively farmed areas.

**Public/Quasi-Public:** The Public/Quasi-Public designation establishes areas for uses such as education, solid and liquid waste disposal, and cemeteries. This designation identifies public and quasi-public areas that are of significant size, under County jurisdiction, regional in scope, specified by State law, or have significant land use impacts. Some facilities (e.g. elementary schools and fire stations) are too small or numerous to show on the Land Use Diagram, but may be identified on other diagrams in the Plan.

### ***COMMUNITY PLANS***

There are eleven Community Plans that include portions of the Parkway. Arden Arcade, Carmichael, Cordova, Fair Oaks and Orangevale are within the jurisdiction of Sacramento County; Folsom is within the jurisdiction of the City of Folsom; Cordova is partially within the jurisdiction of the City of Rancho Cordova and partially within the jurisdiction of Sacramento County; and Downtown (now called Central City), East City (now called East Sacramento), North Sacramento, and South Natomas are within the jurisdiction of the City of Sacramento. For the portions of the Parkway within the above Community Plans, each jurisdiction has designated the land for recreational and open space uses.

### ***AMERICAN RIVER PARKWAY PLAN***

Within the context of the designations provided by the General Plan, Community Plans and Zoning, the ARPP provides more specific land use designations for areas within the Parkway: Open Space Preserve, Nature Study Area, Protected Area, Limited Recreation, Developed Recreation and Recreation Reserve. Any facilities proposed in the Parkway must be compatible with the applicable ARPP land use designation.

Summarized definitions excerpted from the ARPP are below.

**Open Space Preserve:** This designation is utilized for a few special areas along the face of the bluffs and a number of ravines, mostly in the communities of Fair Oaks and Carmichael that will be preserved as open space because they are valuable in their undeveloped state so that visual intrusion into the Parkway will not occur. The Open Space Preserve designation does not necessarily imply public ownership or use, but intends for the land to remain undeveloped, using measures necessary to accomplish its preservation. It is not the intent of this designation to regulate land uses allowed on private property in accordance with

the regulations of the Parkway Corridor Combining Zone (an overlay zone) and the underlying zoning that may permit development. Current zoning that permits development should not be inhibited by the Open Space Preserve designation. Parcels that are currently zoned for open space should not be rezoned to permit development.

Lands designated as Open Space Preserve are meant to remain undeveloped and maintained in a way that minimizes human activity and impact. These areas are categorized as such due to topography, inaccessibility, and other factors. Limited development and facilities, such as fences, sprinkler systems, and gates, are allowed solely for the purposes of restoring habitat and ensuring public safety. Open Space Preserve lands do not support recreational use because of topography, accessibility, and/or private ownership conditions. Recreational activities under this land use designation are prohibited.

**Nature Study Area:** This designation is applied to the most environmentally sensitive areas of the Parkway, including those with the special characteristics of flora, fauna, topography, available surface water, or other characteristics, that are appropriate for the interpretive education and other limited passive recreational activities. This category is the most restrictive of those that allow public use, and is intended to permit only those limited activities and improvements which would not be detrimental to the environmental qualities or features.

Nature Study Areas allow for the establishment and maintenance of minor structures and improvements, such as drinking fountains, portable restrooms, interpretive signage, and trail repairs. Permitted recreational activities include nature appreciation, pedestrian use (including walking, running, and hiking), picnicking in the Cal Expo Area, boating in the Discovery Park Pond, and interpretive programming in certain areas.

**Protected Area:** Protected Areas contain tracts of naturally occurring vegetation and wildlife, which although capable of sustaining light to moderate use with minimal alterations to the natural landscape, would be easily disturbed by heavy use. Protected Areas differ from Nature Study Areas in that general access in Protected Areas is encouraged, and convenience-type facilities are permitted to accommodate the anticipated increase in users. However, facilities and other improvements are limited to those which are needed for the public enjoyment of the natural environment.

These are typically large areas that can reasonably withstand moderate levels of public use and recreation without degrading substantially. However, heavy use of these lands is prohibited, as they are mostly intended to be protected or restored. These areas allow for the development of facilities and improvements (including trails, picnic tables, and restrooms) necessary for facilitating the public enjoyment of nature. Recreational activities allowed in Protected Areas include nature appreciation, picnicking along designated trails, day camping, pedestrian use

(walking, running, and hiking), equestrian activities, bicycling, and aquatic recreation excluding motorized boating.

**Limited Recreation:** The Limited Recreation designation is applied to lands on which active recreation may take place without development of extensive facilities. The Limited Recreation areas generally have characteristics of topography, vegetation, and wildlife habitat which are conducive to active recreation, but which are constrained from extensive development due to size, access, adjacent residential neighborhoods, or other special circumstances. In addition, Limited Recreation areas may serve as buffers between Developed Recreation areas and more restrictive land use areas.

Limited Recreation areas allow for active recreational activities limited in scope by size of land, lack of access, and other conditions. Non-recreational human uses such as agriculture and certain commercial activities are also allowed. Signage, picnic areas, and trails (and their supplementary features) are consistent with this land use designation. Recreational activities allowed in these lands include nature appreciation, pedestrian use (walking, running, and hiking), equestrian activities, picnicking, day camping, and aquatic recreation.

**Developed Recreation:** The Developed Recreation designation is the most intensive land use category and is applied to areas able to withstand heavy use. The purpose of the Developed Recreation category is to identify areas appropriate for active recreational development so that more sensitive areas will be retained in their more naturalistic condition. The Developed Recreation areas are found within major parks such as Discovery Park and Ancil Hoffman, and at most vehicle access areas. Developed Recreation areas are expected to attract the largest concentration of users. The intent is to provide the recreational opportunities for all users who can be safely accommodated, but not at the expense of destroying any portion of the Parkway or the enjoyment of the users.

Developed Recreation areas allow for all the facilities and activities permitted in the more restrictive land use designations, and support additional features such as interpretive centers, play apparatuses, and game fields. All activities allowed within the previous land use designations are allowed in Developed Recreation areas. Additional permitted activities include team sports, archery in the Discovery Park Area, golfing in the Campus Commons and Ancil Hoffman County Park Areas, and group overnight camping for educational and youth group purposes.

**Recreation Reserve:** The purpose of the Recreation Reserve category is to identify areas of the Parkway to be reserved for future recreational development, habitat restoration or education/interpretive programs. These lands are meant to be converted to other land use designations in the future. Recreation Reserve areas can be used for agricultural activities, nurseries, caretaker quarters, public utility facilities, and emergency access facilities (Sacramento County 2008a). While nature appreciation, pedestrian use (walking, running, and hiking), and aquatic recreation are allowed, currently the only Recreation Reserve area in the

Parkway is the Regional San parcel in Arden Bar; the parcel is leased to the Sacramento County Sheriff's Office.

The ARPP is the guiding land use plan document that effectively manages all land use activities within the Parkway. The ARPP lays out a comprehensive approach through area plans, goals, and policies to inform land use decisions related to development, recreation, preservation, conservation and other human uses within the Parkway. The Parkway Concept is summarized as follows:

The American River Parkway is a unique regional facility which shall be managed to: a) preserve naturalistic open space and protect environmental quality within the urban environment, and b) contribute to the provision of recreational opportunities in the Sacramento area.

The ARPP builds upon the above-defined concept with the following overarching goals:

- To provide, protect, and enhance for public use a continuous open space greenbelt along the American River extending from the Sacramento River to Folsom Dam.
- To provide appropriate access and facilities so that present and future generations can enjoy the amenities and resources of the Parkway.
- To preserve, protect, interpret, and improve the natural, archaeological, historical, and recreational resources of the Parkway, including an adequate flow of high-quality water, anadromous and resident fishes, migratory and resident wildlife, and diverse natural vegetation.
- To mitigate adverse effects of activities and facilities adjacent to the Parkway.
- To provide public safety and protection within and adjacent to the Parkway.

## **SIGNIFICANCE CRITERIA**

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A proposed project would have a significant land use and planning impact if it were to result in the following:

1. Physically divide an established community; or,
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

A proposed project would have a significant population and housing impact if it were to result in the following:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or,

2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The following Impacts and Analysis section reviews each of the above criteria compared to the NRMP with one exception; the NRMP would not result in any impact related to inducing unplanned population growth and therefore is not discussed further below.

## **IMPACTS AND ANALYSIS**

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### **IMPACT: PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY**

The land use policies of the NRMP generally carry through the land use policies adopted in the ARPP. The NRMP does not introduce new land use policies that may result in physical land use impacts within the Parkway; but it does promote policies to reduce physical impacts to the environment resulting from homeless encampments.

The homeless encampments located within the Parkway are not part of a formally sanctioned area for the unhoused; nevertheless, there is a community of homeless encampments informally located within the Parkway. As a natural floodway within the region, the Parkway experiences periodic seasonal flooding and areas of inundation, which make the Parkway an unpredictable place to live. Particularly after periods of flooding, there is debris from homeless encampments in waterways and areas immediately surrounding areas of inundation. The NRMP does not include ordinances or regulations to remove homeless encampments. The NRMP policy focuses on the reduction of environmental impacts that may result from the encampments, as follows:

#### **4.2 Reduce impacts associated with homeless encampments in the Parkway.**

- 4.2a Elimination or mitigation of the detrimental consequences associated with homeless encampments such as (1) accumulated debris, (2) environmental degradation, and (3) health and public safety issues including degradation of public infrastructure such as levees (as directed by the Martin v. Boise court decision).

The NRMP land use policy is designed to address potential impacts to the environment of homeless camps that are no longer occupied, or those (as directed by the Martin v. Boise court decision) that are directly impacting public infrastructure such as levees. The clean-up policies will, therefore, not physically divide an existing community.

A few Potential Resource Management Actions within the NRMP acknowledge pending projects that could result in physical impacts within the Discovery Park Area Plan. These pending projects are discussed in the ARPP and carry through into the NRMP:

- Purchase and naturalize Urrutia property.
- Address and minimize impacts associated with the proposed bridge crossing.

- Purchase and naturalize Riverdale Mobile Home Park.

Purchase of the Urrutia property, a former gravel mining area, would expand potential land use and management activities within the Discovery Park Area Plan. The former mine is not currently active. The NRMP recommends naturalization of the property. This Potential Resource Management Action was discussed in the ARPP and carried through into the NRMP. The Potential Resource Management Action remains consistent with the land use policies of the Parkway.

The Sacramento Regional Transit (RT) Green Line to the Airport project includes a bridge over the American River referred to as the Downtown-Natomas-Airport Bridge. The ARPP acknowledged that construction of the bridge, which will parallel Truxel Road, will directly impact portions of the Discovery Park Area Plan. The Green Line to the Airport project has been analyzed in a number of studies and environmental documents, including a Programmatic Environmental Impact Report (PEIR) for the corridor that was certified by the RT Board of Directors in March of 2008, and a Final Environmental Impact Report for the Downtown-Natomas-Airport (DNA) Light Rail Transit Phase I Project (2009). An American River Crossing Alternative Study Final Report was also prepared in 2013 (RT, 2015). The environmental impacts of the new bridge crossing will be addressed in the Green Line to the Airport project documents; however, the NRMP supports measures to mitigate for construction impacts.

The ARPP recommended purchase of the former Riverdale Mobile Home Park, and the NRMP carries through this recommendation into that plan document. The mobile home park property is currently vacant. Development of the parcel is limited because of the location of the property within the floodplain. If purchased, the NRMP recommends naturalization of the parcel.

The NRMP was developed to support and complement the land use policies of the ARPP. The NRMP addresses natural resources management within the context of the ARPP policies. Like the ARPP, the NRMP land use policies will not result in a physical division of communities. *Impacts are less than significant* and no mitigation is warranted.

**IMPACT: CAUSE A SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO A CONFLICT WITH ANY LAND USE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT**

***WILD AND SCENIC RIVERS SYSTEM***

From Nimbus Dam to the confluence of the Sacramento River (a 23-mile stretch), the Lower American River is classified as a “recreational” river in the National and California Wild and Scenic River System (designated in 1981). There are two principle questions that must be asked about any project proposed within a designated Wild and Scenic River:

- Will the project adversely impact the free-flowing characteristics of the river?

- Will the project affect the ability of the river to meet the criteria of a wild, scenic or recreational river?

Neither the NRMP, nor any of the Potential Resource Management Actions will adversely impact the free-flowing characteristics of the river. Likewise, neither the project nor any of the Potential Resource Management Actions will affect the ability of the river to meet the criteria of a recreational river. Land use compatibility impacts with the Wild and Scenic Rivers Act policies are *less than significant*.

### ***COUNTY LAND USE PLANS***

A central part of land use planning is ensuring that proposed land uses are compatible with the existing site uses and uses on the surrounding lands. The NRMP assumes that there will be future projects proposed in the Parkway and that these projects will have impacts to natural resources. Chapter 8 of the NRMP classifies lands within the 19 area plans using three management categories: Conservation, Restoration, and Naturalization categories. A fourth category, Rehabilitation Overlay, will be used for the areas where future damages occur; this category is not currently used on any of the 19 area plan maps.

The NRMP will use the four management categories to guide potential conceptual management actions. The management categories and example resource management actions are described below:

- **CONSERVATION (low level of management intensity):** Conserving the values of areas that currently meet most applicable natural resource goals. This includes existing mitigation sites that require protection in perpetuity and/or non-mitigation sites that provide high quality habitat. Considering the dynamic nature of all natural habitats, additional actions (e.g., restoration/enhancement) may be deemed suitable in Conservation areas in order to maximize suitable habitat values. Implementing restoration/enhancement actions within existing formal mitigation sites should be consistent with existing regulatory agreements/commitments.

Example management actions include routine operations and maintenance activities such as:

- Weed management (mowing, herbicide application)
  - Small scale invasive plant material (i.e.: hand pulling)
  - Vegetation management for fire prevention
  - Management of illegal camping sites consistent with County policies
- **RESTORATION (moderate level of management intensity):** Existing conditions are considered to generally meet desired conditions, but have been degraded to varying degrees (e.g., fire, illegal camping, social trails, degraded understory, etc.) and should be improved (e.g., habitat restoration/enhancement) to meet goals. The need for ongoing rehabilitation of degraded areas is expected.

Example Management Actions may include the activities above under Conservation, plus:

- Invasive plant removal



- Vegetation management for fire prevention
- Planting native vegetation
- Management of social trails
- Management of camp sites and associated debris
- Redesign or relocation of facilities

● **NATURALIZATION (high level of management intensity):** Modifying areas that were substantially altered in the past in order to improve existing natural resource conditions or otherwise modify to meet the management objectives of the ARPP, NRMP, and Wild and Scenic River Act policies. This applies to areas previously altered and outcomes are generally native habitat types that would typically be expected to occur in the Parkway.

Naturalization also includes converting areas that have not been altered by past actions (unaltered) to heighten, intensify, or improve highly valued resource functions that may have been lost or degraded over time. Generally, this entails conversion of land cover type.

Example Resource Management Actions may include the activities above under Restoration, plus these types of actions in previously altered areas:

- Substantial earthwork to restore more natural hydrology and site features
  - Material removal (e.g., cobble and dredge tailings)
  - Replacement/amendment of substrate for planting
  - Substantial earthwork to create a modified hydrology
  - Material removal (e.g., channel bed and bank)
  - Addition of material (e.g., gravel)
  - Modification of substrate for planting
  - Grading a high elevation floodplain or channel feature to a lower elevation to support seasonal aquatic habitat.
- **REHABILITATION OVERLAY:** Any area, whether it be Conservation, Restoration, or Naturalization, could be degraded or damaged in the future and require action to improve their condition. Rehabilitation is suitable in any of the other categories and can happen anywhere in the American River Parkway, just as all areas in the Parkway are subject to degradation or damage.

Example Resource Management Actions generally may include those activities necessary to bring the site back to conditions prior to recent damage, which may include:

- Temporarily limiting public access
- Debris removal
- Post-fire cleanup

- Minor surface grading to address damaged conditions
- Large-scale planting of appropriate native vegetation
- Large-scale invasive plant removal (e.g., with mechanized equipment)

In addition to these definitions of management levels within the Parkway, the NRMP includes the following land use policy:

- 4.1 Minimize human use impacts on all Parkway resources.
  - 4.1a Locate and design future recreation use areas and facilities with sensitivity to water resources.
  - 4.1b Documentation and mapping of social trails in the Parkway.

The NRMP will not change the ARPP's existing land use designations. Furthermore, the goals of the NRMP, to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway support the ARPP. The ARPPU FEIR land use mitigation measures were specific to land use designations approved in that plan and do not apply to the NRMP.

The NRMP introduces best management practices to reduce human impacts to the Parkway, including the development of recreational use areas and facilities at least 100 feet from a waterway, and documentation of social trails. The purpose is to minimize the impacts of people who are visiting and recreating within the Parkway. The Potential Resource Management Actions outlined in the NRMP support the goals and policies of the ARPP.

The land use mitigation measures from the ARPPU FEIR do not apply to the NRMP. Because the land use policies of the NRMP complement those of the ARPP, the NRMP will not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts related to conflicts with land use plans and policies are *less than significant*.

#### **IMPACT: DISPLACE SUBSTANTIAL NUMBERS OF EXISTING PEOPLE OR HOUSING, NECESSITATING THE CONSTRUCTION OF REPLACEMENT HOUSING ELSEWHERE**

The Parkway is a recreational and naturalized corridor along the American River and the ARPP does not allow for housing within any of the area plans; however, a community of homeless encampments are informally located throughout the Parkway. The NRMP does not introduce new policies that may result in physical land use/population impacts within the Parkway; but it does promote policies to reduce physical impacts to the environment resulting from unsanctioned homeless encampments. The NRMP does not include ordinances or regulations to remove homeless encampments and instead provides management goals and actions related to the reduction of environmental impacts that may result from such encampments. As noted above, the NRMP does not physically divide an established community and will not displace substantial numbers of existing people or housing. Therefore, impacts related to population and housing are *less than significant*.

## **5 WATER QUALITY AND HYDROLOGY**

### **INTRODUCTION**

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The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan, is to provide a framework for conserving, restoring, or naturalizing natural and biological resources within the American River Parkway (Parkway). The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified those Potential Resource Management Actions at the Area Plan level that contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

NRMP physical resource goals pertaining to hydrology include the following:

- Improve water quality, and
- Stabilize bank conditions throughout the Parkway to minimize erosion and retain natural riverine processes.

NRMP Management Actions are introduced at a conceptual/programmatic level in the plan; as specific projects are proposed to implement the Potential Resource Management Actions, those projects will be subject to project-level review, including CEQA.

The American River Parkway Plan Update (ARPPU) FEIR (County Control No. 2003-GPB-0332) Drainage and Hydrology Chapter evaluated potential water quality and hydrology impacts associated with the plan update. The analyses evaluated existing aquatic features, groundwater, drainage facilities, runoff volumes and trajectories. The prior analyses of the ARPPU FEIR remain applicable to the current project; however, this chapter will focus on the findings of the hydrological modeling prepared for the lower 23 miles of the Parkway. Discussions concerning groundwater use included in the prior EIR will not be revisited. Toward that end, this chapter is divided in two with the first part devoted to water quality and the second to hydrology.

## **WATER QUALITY**

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### **ENVIRONMENTAL SETTING**

The NRMP Potential Resource Management Action area is within the Parkway from Nimbus Dam to the confluence with the Sacramento River and encompasses about 5,000 acres. The Parkway is the floodway for the American River and is contained by levees along the lower 12 miles. The floodway is a mosaic of woodlands, scrub, and grasslands across elevations that range up to 270 feet. Parkway amenities include restrooms, shade structures, picnic tables, and parking (both gravel and paved) at various locations. Many of these features are located in association with more developed park areas with irrigated turf or along the paved bike trail that runs from the upper Parkway to the lower Parkway.

### **REGULATORY SETTING**

#### ***STATE OF CALIFORNIA***

The Porter-Cologne Water Quality Control Act is the principal law governing water quality regulation in California. This statute established the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards, which are charged with implementing its provisions. This act establishes a comprehensive program for the protection of water quality and the beneficial uses of waters in the State of California.

The Parkway is located within Region 5 administered by the Regional Water Quality Control Board. The applicable Basin Plan for the project area is the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins, Fifth Addition* (CVRWQCB, May 2018). The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water in the basin, in compliance with the federal Clean Water Act and the Porter-Cologne Water Quality Control Act.

The Porter-Cologne Act also incorporates many provisions of the federal Clean Water Act such as delegation of the National Pollutant Discharge Elimination System (NPDES) program to the SWRCB and Regional Water Quality Control Boards. The SWRCB provides program guidance and oversight, allocates funds, and reviews Regional Water Quality Control Boards decisions. The Regional Water Quality Control Boards have responsibility for individual permitting, inspection, and enforcement actions within each of the nine hydrologic regions of California. SWRCB Order 99-08-DWQ, *NPDES General Permit for Stormwater Discharges Associated with Construction Activity* (General Permit), authorizes a general permit for stormwater discharges associated with construction activities that disturb one or more acre of land. SWRCB Order 97-03-DWQ, *NPDES General Permit to Discharge Stormwater Associated with Industrial Activity* (General Industrial Permit) authorizes a general permit to regulate industrial stormwater discharges.

## **LOCAL**

Sacramento County has a NPDES Municipal Stormwater Permit issued by the Regional Water Quality Control Board. It requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

The Sacramento area-wide NPDES Municipal Stormwater Permit is a Phase I permit and applies to the County of Sacramento along with the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento. Originally issued in 1990, the Sacramento stormwater permit has been reissued several times. The most recent permit (NPDES Permit No. CAS082597) was adopted in December 2002, reissued in September 2008, and reissued again in April 2015. The Regional Water Quality Control Board replaced it with a region-wide MS4 permit in June 2016. The Permittees function independently on many tasks, including reviewing, processing and permitting plans for new development and redevelopment in their respective jurisdictions. New construction is required to comply with the Sacramento Region Stormwater Quality Design Manual (SQDM; 2018).

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities (CGP). CGP coverage is issued by the State Water Resources Control Board and enforced by the Regional Water Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction and verified by receiving a WDID#. The CGP requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on-site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that a WDID# has been obtained and must submit a copy of the SWPPP. Although the County has no enforcement authority related to the CGP, the County does have the authority to ensure sediment/pollutants are not discharged and is required by its Municipal Stormwater Permit to verify that SWPPPs include the minimum components.

Future projects must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's CGP.

## **SIGNIFICANCE CRITERIA**

This analysis uses similar significance criteria for water quality impacts as described in Chapter 7 of the ARPPU EIR. However, changes to Appendix G of the State CEQA Guidelines were adopted since publication of the ARPP FEIR, and the following significance criteria used herein reflect those modifications. In accordance with Appendix G, a project would be considered to have a significant effect on water quality if it would:

- Violate any water quality standards or waste discharge requirement or otherwise substantially degrade surface or ground water quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and/or,
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## **IMPACTS AND ANALYSIS**

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### **IMPACT: VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENT OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUND WATER QUALITY**

The following analysis and Mitigation Measures from the ARPPU FEIR carries through to the NRMP DSEIR. The analysis applies to NRMP Potential Resource Management Actions and analyzes impacts for the implementation of NRMP Potential Resource Management Actions within the context of near term, on-going state and federal projects:

All elements of the NRMP that will involve new construction have the potential to result in construction impacts to water quality. The primary impact is through sediment transport from disturbed ground, but may also include releases of construction vehicle fluids. For most projects, the existing Sacramento County erosion control ordinance will protect water quality. However, some projects may be too small to be captured by the ordinance, and the Parkway is a particularly sensitive area. Therefore, mitigation is included requiring all new construction projects to comply with Sacramento County's erosion and sediment control manual, and requiring all new construction to take place during the dry season. Compliance with the erosion control requirements of existing ordinances or the

HY-1 mitigation herein is essential to ensuring that construction water quality impacts are *less-than-significant*.

Many of the elements of the NRMP have the potential to result in post-construction water quality impacts. This includes transport of sediment from unpaved roads and trails, transport of pesticides/herbicides, and transport of vehicle fluids from parking areas. For most projects, the existing stormwater quality design manual applicable to Sacramento County will reduce impacts. However, some projects may not be large enough to require application of the design standards in the manual. The same reasoning applied to construction water quality applies here – the Parkway is a sensitive environment, and all projects should incorporate stormwater quality control designs. Compliance with the stormwater control requirements of existing ordinances or the HY-2 mitigation herein will ensure that post-construction water quality impacts are *less-than-significant*.

The ARPPU FEIR analyzed physical impacts of potential land use activities associated with the land use designation changes proposed at that time; thus, the analysis and mitigation speak to impacts related to “construction projects.” Since not all of the NRMP Potential Resource Management Actions would result in what is traditionally known as “construction” for a development project, the mitigation has been slightly updated to clarify that it would apply to all construction and/or all applicable NRMP Potential Resource Management Actions. The applicability of these measures would be assessed when future NRMP Potential Resource Management Actions are being proposed and analyzed but would apply to all future NRMP Potential Resource Management Actions that have the potential to result in erosion, sediment transport or otherwise impact stormwater quality. The prior ARPPU Mitigation Measures (HY-1 & HY-2) with slightly modified language, to account for the NRMP Potential Resource Management Actions, are as follows (new language is added in **bold underline** to easily denote the slight modifications):

**ARPPU Mitigation Measures as modified for the NRMP:**

**HY-1.** All new construction projects **and/or all applicable NRMP Potential Resource Management Actions** within the Parkway shall incorporate the design components within the latest version of the *Sacramento County Guidance Manual for Development of Erosion and Sediment Control Plans*. No grading shall be permitted from October 1 – April 30, unless the grading is associated with an emergency project or it can be demonstrated to the Department of Environmental Review and Assessment that there is an environmental benefit to wet-season construction.

**HY-2.** All new construction or redevelopment of facilities **and/or all applicable NRMP Potential Resource Management Actions** within the Parkway shall incorporate the design components within the latest version of the *Stormwater Quality Design Manual for the Sacramento and South Placer Regions*, unless the Department of Environmental Review and Assessment determines that the project does not have the potential to

release post-construction pollutants (e.g. signage). This shall include all new roads and trails, which shall be designed to minimize transport of sediment from the road or trail surface into nearby water bodies.

With the mitigation listed above impacts are less than significant.

**IMPACT: SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE PROJECT MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN**

The NRMP identifies Potential Resource Management Actions specific to each Area Plan to promote the conservation, restoration, and naturalization of biological communities within the Parkway. This analysis applies to the implementation of NRMP Potential Resource Management Actions only, and implementation of NRMP Potential Resource Management Actions within the context of near term, on-going State and Federal projects. Although the plan may necessitate the use of water to establish vegetation within the Parkway, it does not include construction or development necessitating on-going uses or an expansion of use or reliance on groundwater. Therefore, adoption of the NRMP will result in *less than significant impacts* to groundwater supplies, recharge, and management.

**IMPACT: IN FLOOD HAZARD, TSUNAMI, OR SEICHE ZONES, RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION**

The purpose of the NRMP is to promote the conservation, restoration, and naturalization of the natural resources within the Parkway. The NRMP Potential Resource Management Actions are designed to improve habitat within the Parkway, which naturally has areas of inundation and seasonal flooding. Naturalization efforts will be done in concert with mitigation measures HY-1 and HY-2 to ensure that impacts are less than significant. Furthermore, the NRMP area is inland and not mapped in an area where tsunami or seiche are likely to occur (USGS 2021). Naturalization of Area Plans within the Parkway is not likely to result in the release of pollutants due to project inundation. Therefore, with mitigation, impacts will be *less-than-significant*.

**IMPACT: CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN**

Implementation of the NRMP Potential Resource Management Actions will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. *No impacts* are anticipated.



## HYDROLOGY

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The ARPPU FEIR analyzed impacts and included hydrology mitigation measures specific to the physical improvements and land use designation changes proposed within the Area Plans through that document. The analysis concluded that, with mitigation, impacts to hydrological resources would be less than significant. The ARPPU FEIR mitigation measures remain applicable to the range of NRMP Potential Resource Management Actions proposed, and the NRMP DSEIR introduces new mitigation measures, as needed. The objectives of the NRMP Potential Resource Management Actions are to maintain or improve natural resource values in the Parkway, by either conserving, restoring, or naturalizing various areas throughout the Parkway. These activities have the potential to change surface features, including vegetation, which in turn can change hydraulics affecting flow velocities and water surface elevations.

As discussed below, in order to reduce this uncertainty, and avoid landscape and flood risk management conflicts in the Parkway, local interests worked with the U.S. Army Corps of Engineers (USCAE) and the California Central Valley Flood Protection Board (CCFPB), to create a calibrated two-dimensional depth-averaged hydrodynamic model referred to as the LAR HEC-RAS 2D (LAR2D) model. This model focuses on the flood control system elements extending from Folsom Dam to the Sacramento Weir along the Sacramento River that affect the hydraulics along the American River. The LAR2D is intended to serve as a planning and regulatory tool for managing proposed changes to the topography and land cover in a manner that preserves the design capacity and structural integrity of the flood control system.

## PROJECT BACKGROUND

The Parkway encompasses about 5,000 acres at the foot of the American River watershed. The majority of this landmass is confined by levees whose purpose is to safely contain watershed runoff released into the Parkway from Folsom Dam. During periods of intense rainfall in the watershed, the dam's water control manual prescribes the volume of these releases. The downstream levee system, which is part of a much larger flood management system known as the Sacramento River Flood Control Project, is designed based on engineering criteria tied to the WSEs generated by these prescribed releases. These WSEs are affected by the topography and land cover of the Parkway. Accordingly, proposed changes in topography and/or land cover that have the potential to raise WSEs or alter velocities must be reviewed and approved by the federal, state and local agencies responsible for managing the levee system in the Parkway. This process creates considerable uncertainty for agencies managing the Parkway who are mandated under the ARPP Policy 3.2 to:

“protect, enhance and expand the Parkway’s native willow, cottonwood, and valley oak-dominated riparian and upland woodlands that provide important shaded riverine aquatic habitat (SRA), seasonal floodplain, and riparian habitats; and the native live oak and blue oak woodlands and grasslands that provide important terrestrial and upland habitats.”

The NRMP for the Parkway is intended to serve as a roadmap for implementing Policy 3.2 as well as other Parkway Plan policies that have the potential to alter the land cover of the Parkway over time. The LAR2D was developed to analyze the potential impacts of implementation of the NRMP Management Actions within the Parkway in the context of other ongoing projects. It was necessary for the model to incorporate these other projects, namely the ARCF Project led by the USACE and the Water Forum projects, to provide accurate data.

The Congressionally-authorized ARCF project is currently focused on ensuring that the levee system downstream of Folsom Dam can safely convey releases up to 160,000 cubic feet per second (cfs) from Folsom Dam. Under this authority, USACE is directed to install bank protection in locations that may be susceptible to erosion during these high flows and to widen the Sacramento Weir and Bypass to ensure that the increased flow releases from Folsom Dam are safely conveyed through the flood system downstream of the American River. The bank protection along the American River and its associated habitat mitigation for unavoidable impacts to fish and wildlife habitat involve substantial changes to the topography and land cover of the Parkway while the modifications to the Sacramento Weir and Bypass function overall to lower water surface elevations in the lower reaches of the Parkway.

Finally, the Sacramento Water Forum has partnered with the U. S. Bureau of Reclamation under the authority of the Central Valley Project Improvement Act to develop a series of landscape alterations in the Parkway that are intended to provide improved spawning and rearing habitat for American River salmon and steelhead in order to ameliorate the impacts on these fish species from their historic habitat in the watershed above Folsom Dam.

## **ENVIRONMENTAL SETTING**

The American River is the dominant natural feature in the Parkway. During the flood season, flows and rainfall runoff from the upper American River watershed flow into the American River Parkway under controlled flow releases from Folsom Dam per the water control manual. Folsom Lake is utilized specifically for water storage during the flood season to ensure that the lower American River can safely pass flood flows through the system without overwhelming the levees.

Rainfall runoff from below Folsom Dam also enters the Parkway through open channels, overland runoff, and stormwater facilities that drain the urban area surrounding the Parkway and discharge to the American River. The stormwater facilities include two large outfalls in the eastern side of the Cal Expo Area Plan, one outfall in the River Bend Area Plan, and one outfall in the Rossmoor Bar Area Plan. There are also a number of small channels, swales and other linear water bodies that carry stormwater runoff into the Parkway and into the American River that are not maintained stormwater channels.

Most of the land within the Parkway is low lying and is inundated frequently enough to be located in the 100-year floodplain (Zone AE) on applicable Federal Emergency

Management Agency (FEMA) Flood Insurance Rate Maps and also designated as jurisdictional Waters of the United States by the USACE.

## **REGULATORY SETTING**

### ***RIVERS AND HARBORS APPROPRIATION ACT OF 1899***

The Rivers and Harbors Appropriation Act of 1899 (Act) addresses activities that involve construction of any new structure or alteration of any existing structure that obstructs or alters any navigable water of the U.S. Section 14 of the Act (33 United States Code [USC] 408) requires approval from the USACE Chief of Engineers, or designee, for alterations to certain public works, including federal project levees, so long as the alteration would not be injurious to the public interest and does not impair the usefulness of the work. Section 408 alterations would include actions that could change the hydraulic capacity of the floodway or change the authorized geometry of the federal project. Sacramento County will seek approval under 33 USC Section 408 for applicable NRMP Management Actions.

As described above, the LAR2D model used in the following analysis is intended to serve as a common analytical and floodway management tool, with an agreed to hydraulic baseline, to evaluate not only the Management Actions but other future projects under 33 USC Section 408.

### ***44 CFR 65.10 – MAPPING OF AREAS PROTECTED BY LEVEES***

Under its administration of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) will only recognize levee systems that meet, and continue to meet, minimum design, operation, and maintenance standards established by FEMA to provide protection from a flood having a one percent chance of being equaled or exceeded in any given year. Accordingly, as part of their flood hazard and risk mapping responsibilities, participants in the NFIP must identify the WSE associated with the 100-year flood (also referred to as the “base flood”) in all levee protected streams and rivers in their jurisdiction. Under this requirement, the County of Sacramento and the cities with jurisdiction over land use in the 100-year floodplain of the American River, must identify the WSE of the 100-year flood in the American River. Substantial changes in this WSE must be documented and reflected in the flood hazard maps approved by FEMA.

### ***CENTRAL VALLEY FLOOD PROTECTION PLAN (CVFPP)***

The purpose of the Central Valley Flood Management Planning (CVFMP) Program is to develop a sustainable, integrated flood risk management plan for areas protected by facilities of the state-Federal flood risk management system in the Central Valley of California. The program is one of several the DWR is implementing within FloodSAFE California to accomplish the goals of Propositions 1E and 84. The CVFMP Program consists of two primary projects: the State Plan of Flood Control and the CVFPP.

According to California Government Code Sections 65302.9 and 65860.1, every jurisdiction located in the Sacramento–San Joaquin Valley is required to update its

General Plan and Zoning Ordinance in a manner consistent with the CVFPP within 24 months after the CVFPP's adoption, which was adopted in the summer of 2012, and an update was adopted in 2017. The locations of the state and local flood risk management facilities, locations of flood hazard zones, and the properties located in these areas must be mapped and be consistent with the CVFPP. In addition, the CVFPP requires 200-year level of flood protection for urbanized or urbanizing areas (defined by a population of 10,000 or more) protected by facilities of the state-Federal flood risk management system in the Central Valley of California by the year 2025.

### ***CENTRAL VALLEY FLOOD PROTECTION PLAN CONSERVATION STRATEGY***

The CVFPP Conservation Strategy is a primary component supporting the CVFPP. It aligns and contributes to the attainment of all CVFPP goals, specifically focusing on the improvement of ecosystem quality, quantity, function, and sustainability within the State Plan of Flood Control. Its purpose is to provide actionable and measurable targets for improving riverine, aquatic, wetland, and riparian habitat in the flood system. The CVFPP Conservation Strategy provides data, information, and guidance to floodplain managers to assist with developing multi-benefit flood infrastructure improvement projects by integrating project components and management strategies that benefit native species and their habitats. Multi-benefit projects may also create additional public benefits such as sustaining agricultural production, improving water quality and water supply reliability, increasing groundwater recharge, supporting commercial fisheries, and providing public recreation and educational opportunities.

California Government Code Section 65007(a)(5) requires local agencies to “annually report to the Central Valley Flood Protection Board (CVFPB) on the efforts in working toward completion of the flood protection system.” State requirements are further described in the Urban Level of Flood Protection Criteria (ULOP Criteria; DWR, 2013). The most recent annual report for the region was submitted on August 12, 2020 to the CVFPB. Sacramento Area Flood Control Agency prepares the annual report to the CVFPB.

### ***CCR TITLE 23 DIVISION 1 – CENTRAL VALLEY FLOOD PROTECTION BOARD***

The Central Valley Flood Protection Board (CCFPB) regulates floodways throughout the Central Valley including the American River downstream of Folsom Dam. Under Section 112 of CCR Title 23, the CCFPB requires applications to be filed for all proposed encroachments within the floodways under its jurisdiction. Standards for managing vegetation in these floodways are set forth in Section 131 which states in relevant part that (1) vegetation is permitted within revetment on stream banks unless in the judgment of the board it becomes a threat to the integrity of the revetment; (2) invasive or difficult to control vegetation, whether naturally occurring or planted, that impedes or misdirects floodflows is not permitted to remain on a berm or within the floodway; and (3) the board may require clearing and/or pruning of trees and shrubs planted within floodways in order to minimize obstruction of floodflows.

## **SIGNIFICANCE CRITERIA**

This analysis uses similar significance criteria for hydrology impacts as described in Chapter 7 of the ARPPU EIR. However, changes to Appendix G of the State CEQA Guidelines were adopted since publication of the ARPP FEIR, and the significance criteria used herein reflect those modifications. In accordance with Appendix G, a project would be considered to have a significant effect on hydrology if it would:

- Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - Result in substantial erosion or siltation on- or off-site;
  - 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 stormwater drainage systems or provide substantial additional sources of polluted runoff, or;
  - Impede or redirect flood flows.

For purposes of the hydraulic impact analysis a landscape alteration that causes any of the following conditions is considered a significant impact: (1) any increase in WSE (greater than 0.0 feet) within the area of incipient levee overtopping in the Parkway (approximately River Mile 7 to 11.5) when Folsom Dam is releasing flows of between 160,000 cfs and 192,000 cfs; (2) any increase in WSE greater than 0.1 feet in contact with or immediately adjacent to a non-federal levee (e.g., River Mile 18.5) when Folsom Dam is releasing 160,000 cfs; and (3) any measurable increase in flow velocity occurring when Folsom Dam is releasing between 115,000 cfs and 160,000 cfs at locations where such an increase could contribute to levee destabilization or could otherwise damage Parkway infrastructure or cause unacceptable impacts to Parkway land cover.

## **IMPACTS AND ANALYSIS**

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As noted at the beginning of this chapter, prior analyses of the ARPPU FEIR remain applicable to the current project; however, the impacts analysis below reflects the updated significance criteria of Appendix G of the State CEQA Guidelines. This analysis focuses on the findings of the LAR2D hydraulic modeling prepared for the lower 23 miles of the Parkway. The modeling specifically addresses whether implementation of the NRMP Potential Resource Management Actions could cause substantial erosion or siltation on- or off-site or could increase the amount of surface runoff in a manner that would result in flooding on- or off-site.

Please note that in addition to the mitigation measures specified below, all projects will be subject to State and Federal permitting processes, as required, which may include

coordination with CVFPB, USACE, and others. Projects with the potential to impact hydrology would be required to minimize their effects by existing ordinances, regulations, and standards.

### **Hydraulic Modeling**

The hydraulic modeling analysis is presented in a Hydrology Report titled *Natural Resource Management Plan Modeling Support Project: Cumulative Hydraulic Impact Assessment* dated October 29, 2021. The Hydrology Report is Appendix HY-1. The report assesses the hydrologic impacts of the NRMP Potential Resource Management Actions within the Lower American River (LAR) using a calibrated two-dimensional depth-averaged hydrodynamic model referred to as the LAR HEC-RAS 2D (LAR2D) model.

The LAR2D model provides an analysis of effects of the Potential Resource Management Actions by comparing the current state of the flood control system (existing flood system and Parkway landscape conditions) to the near future state of the flood control system assuming these actions are implemented in concert with other ongoing actions affecting the hydraulics along the American River including flood system modifications by the USACE under the American River Common Features (ARCF) Project (Sacramento Weir and Bypass widening, American River bank protection, and habitat mitigation within the Parkway) and the Sacramento Water Forum (Water Forum) fish spawning and rearing habitat improvement projects.

The comparative effects analysis measures the water surface elevations (WSEs) and velocities produced under the existing and near future conditions by three Folsom Dam release volumes used by USACE for flood risk assessments that help inform risk management and project design decision making. These release volumes are:

- 115,000 cfs – the historic design release of the flood system adopted at the time Folsom Dam was constructed;
- 160,000 cfs – the design release identified by Congress as part of its 1999 ARCF authorization for managing the most extreme flood events in the watershed; and,
- 192,000 cfs – the release which causes levee overtopping at the lowest points in the levee system.

For the hydraulic impact analysis, WSEs and velocities associated with each of these flows were measured under multiple scenarios as outlined in Table HY-1. The first scenario (1-S1) is the existing (or “baseline”) condition and the second scenario (2-S2) demonstrates the effects of constructing only the Sacramento Weir widening project element of the ARCF Project. The third scenario (3-S12) reflects the full buildout of the ARCF Project (weir widening, bank protection, and habitat mitigation). The fourth scenario (4-NRMP 1), provides the effects of the NRMP Management Actions without the ARCF and Water Forum projects. The fifth scenario (5-NRMP2), provides the cumulative effects on the WSEs and velocities in the American River with the ARCF Project, Water Forum projects, and the remaining NRMP Potential Resource Management Actions.

**Table HY-1: Scenarios Modeled in NRMP Hydraulic Study**

Scenario Number	Scenario Details
1 - S1	Baseline Condition
2 - S2	Sacramento Weir widening (an element of the ARCF Project)
3 - S12	ARCF Project (Sacramento Weir Widening, Bank Protection, and Habitat Mitigation)
4 - NRMP1	NRMP Potential Resource Management Actions (not including ARCF or Water Forum projects)
5 - NRMP2	NRMP Potential Resource Management Actions (including ARCF and Water Forum projects)

The hydraulic analysis compared results between the following scenarios:

- Baseline condition and Sacramento Weir Widening (S2 minus S1)
- Baseline condition and ARCF Project (S12 minus S1)
- Baseline condition and NRMP Potential Resource Management Action (NRMP1 minus S1)
- Baseline condition and NRMP Potential Resource Management Action and Water Forum projects (NRMP2 minus S12)
- Baseline condition and NRMP Potential Resource Management Actions, ARCF Project, and Water Forum projects (NRMP2 minus S1)

In order to inform scenarios NRMP 1 and NRMP 2, the modeling analysis incorporated all of the NRMP Potential Resource Management Actions that could have impacts on hydrology. It is recognized that these actions which are identified in Table HY-2 range from conceptual designs to 100% level of design and therefore additional analysis will be required to ensure there are no significant impacts.

**Table HY-2: NRMP Hydraulic Analysis Inputs<sup>1</sup>.**

Continue CSUS research and habitat development	Improve habitat and public access at Camp Pollock
Develop conceptual naturalization plan	Improve habitat values on Carmichael Creek
Develop conceptual naturalization plan for areas altered by mining	Implement USACE ecosystem restoration project
Develop naturalization plan for Arden Pond	Improve native riparian and oak woodland communities
Enhance native woodlands and grasslands	Improve or maintain spawning riffle
Enhance woodland savanna and/or grasslands	Increase tall tree overstory in burned areas
Establish low-growing native vegetation under power lines	Lower floodplain or maintain lowered floodplain
Establish native riparian species/remove	Manage invasive vegetation
Establish valley oak riparian woodland	Purchase and naturalize Riverdale mobile home park
Expand oak habitats in conservation and naturalization areas	Purchase and naturalize Urrutia property
Expand or improve wildlife connectivity opportunities	Re-contour and improve substrate to support woody vegetation
Expand riparian corridor	Re-contour mined areas to support oak habitats
Expand wildlife connectivity opportunities	Rehabilitate homeless encampment impacts
Implement USACE ecosystem restoration project	Remediate social trail impacts to promote native vegetation growth
Improve degraded riparian habitats	Remove urban rubble/redesign bank
Improve fallow agricultural areas with woodland savanna or grassland	Suppress fires in mature vegetation
Improve floodplain connectivity to reduce fish stranding	

Based on the above assumptions, the impact analysis that follows focuses on the individual effects of the NRMP Potential Resource Management Actions compared to the baseline condition (NRMP1 minus S1); and the cumulative effects of these actions when combined with the ARCF and Water Forum projects (NRMP2 minus S1).

**IMPACT: SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH ALTERATION OF THE COURSE OF**

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<sup>1</sup> For detailed locations of the listed NRMP Potential Resource Management Actions by Area Plan, see Appendix HY-2.



## **A STREAM OR RIVER OR THROUGH THE ADDITION OF IMPERVIOUS SURFACES, IN A MANNER WHICH WOULD:**

### **RESULT IN SUBSTANTIAL EROSION OR SILTATION ON- OR OFF-SITE OR SUBSTANTIALLY INCREASE THE RATE OR AMOUNT OF SURFACE RUNOFF IN A MANNER WHICH WOULD RESULT IN FLOODING ON- OR OFF-SITE;**

The LAR2D modeling indicated that by comparison to the baseline condition, during the selected high flow releases the NRMP Potential Resource Management Actions alone (without the ARCF and Water Forum projects) would increase WSEs and velocities in some locations and could cause substantial erosion and/or result in flooding. The velocity at 160,000 cfs increases by 0.5 to 1 ft/s within the vicinity of Woodlake and Bushy Lake particularly along the north levee at River Mile (RM) 3 to 3.5, and at RM 4 and at RM 5 as result of proposed woodland restoration. The WSEs increased between about 0.15-0.25 feet at various locations from about RM 3.5 in the Discovery Park Area up to about RM 14 at the highest flows of 160,000 cfs and 192,000 cfs (See Figures 17-22 and Table 11 of Appendix HY-1).

It is important to note that the hydraulic analysis showed that NRMP Potential Resource Management Actions involving maximum density woodland restoration at four (4) specific locations within the River Bend, Rossmoor Bar, and Lower Sunrise area plans would result in significant velocity and WSE impacts. As a result, these actions were eliminated from the analysis. However, this does not preclude the possibility that with further design refinements and additional hydraulic analysis in the future, consistent with Mitigation Measure HY-3, some version of these restoration and naturalization actions could be acceptably implemented under the NRMP. Figure 53 of Appendix HY-1 illustrates the locations of the affected sites and the 160,000 cfs velocity differences.

The hydraulic modeling demonstrated that, absent on-going federal and state flood and habitat protection projects, implementation of the NRMP Potential Resource Management Actions on their own could cause unacceptable velocity and WSE impacts. Therefore, implementation of the NRMP Potential Resource Management Actions with the existing conditions, could result in ***potentially significant impacts***. This scenario is possible in the event that federal and state flood and habitat projects are delayed, cease, or otherwise change.

However, because of the cumulative, on-going projects noted above, implementation of NRMP actions alone is not a likely scenario. Rather these actions will occur in concert with near-term and on-going state and federal flood and habitat protection projects. Therefore, the most appropriate way to assess the impacts of the NRMP actions is by combining them with these other near term and ongoing projects.

The LAR2D Modeling indicated that when the NRMP Potential Resource Management Actions are combined with the Water Forum projects and the currently underway ARCF Project there is a net reduction of WSEs within the leveed reach for the high flow releases. One exception is at the 192,000 cfs flows from approximately RM 5.5 to RM 6.5 where the WSEs increase to between 0.05 and 0.15 feet for a short stretch. However, this

location is not at a location of potential incipient overtopping. Upstream of the federal levees, the cumulative scenario results showed no WSE increases greater than 0.1 ft occurring adjacent to non-federal levees and surrounding areas have greater than 3 ft of freeboard for the 160,000 cfs peak design discharge. It is important to note that this does not include the 4 sites mentioned above located in River Bend, Rossmoor Bar and Lower Sunrise. The velocity increases significantly in the leveed reach primarily as a result of the ARCF Project and in the upper reaches the largest velocity increases occur adjacent to Water Forum projects.

The ARCF project will be completed within 5-7 years, prior to, or in concert with, implementation of NRMP Potential Resource Management Actions, which will occur over the next few decades. As a result, utilizing the cumulative scenario, which includes a conservative estimate of future hydraulic effects, is the most accurate comparison of hydraulic effects

The LAR2D hydraulic model provides a tool by which impacts to the Plan Areas within the LAR may be assessed. As noted above, implementation of the project only (NRMP Potential Resource Management Actions absent on-going federal and state flood and habitat projects) may increase velocity and/or WSE within the Plan Areas and result in **potentially significant impacts**. The LAR2D model may be used to identify the appropriate location, scale, and caliber of NRMP management action within a Plan Area to bring velocity and/or WSE within that Plan Area and the Parkway within acceptable levels; however, full implementation of the NRMP Potential Resource Management Actions is only possible in the context of on-going federal and state flood and habitat projects. This scenario is important to note in the event that these cumulative projects pause or cease.

Implementation of the NRMP Potential Resource Management Actions within the cumulative context of the on-going federal and state flood and habitat projects would impact velocity and/or WSE to a lesser degree within the Plan Areas and larger Parkway. With implementation of new Mitigation Measure HY-3 (application of the LAR2D modeling), impacts within the cumulative context are **less-than-significant**. Compliance with existing regulations will ensure that the on-site storm drainage is adequate and impacts to off-site drainage facilities are **less-than-significant**.

### ***New NRMP DSEIR Mitigation Measure***

**HY-3:** Hydraulic analysis of NRMP Potential Resource Management Actions within the context of on-going state and federal projects (Scenario NRMP2 minus S1) using the LAR2D Model prior to implementation of Management Actions.

The Hydrology Report titled *Natural Resource Management Plan Modeling Support Project: Cumulative Hydraulic Impact Assessment* (Hydrology Report) prepared by cbec eco engineering dated October 29, 2021, can be referenced to inform the implementation of NRMP Management Actions moving forward. Prior to implementation of Potential Resource Management Actions (see Table HY-2), the LAR2D will be used to evaluate for potential impacts to flood control systems

using the NRMP2 minus S1 (NRMP with ARCF, and Water Forum projects) scenario. The modeling will reflect the specific Potential Resource Management Action, location within the Area Plan, within the context of near-term and on-going state and federal flood control and habitat projects. If the modeling indicates that implementation of the Management Action may increase the potential for localized erosion of a flood control levee or other critical infrastructure or features, the scope, location, and caliber of the Potential Resource Management Action will be redesigned to ensure that there are no significant velocity and/or WSE impacts.

**CREATE OR CONTRIBUTE RUNOFF WATER WHICH WOULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS OR PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF**

The purpose of the NRMP is to promote the conservation, restoration, and naturalization of biological and natural resource communities within the Parkway. Implementation of the NRMP Potential Resource Management Actions will not result in new construction and/or development of impervious surfaces; however, they may increase result in impacts. Application of mitigation measures HY-1, HY-2, and HY-3 will ensure that impacts are ***less-than-significant***. Therefore, with mitigation, it is not anticipated that NRMP management actions will result in a creation or contribution of runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff.

**IMPEDE OR REDIRECT FLOOD FLOWS**

The purpose of the NRMP is to promote the conservation, restoration, and naturalization of biological and natural resource communities within the Parkway. Implementation of the NRMP Potential Resource Management Actions will not result in physical improvements or stormwater runoff discharge that would obstruct, impede, or otherwise redirect designated flood zones or naturally occurring floodplains; nor will these actions place buildings or new construction in high-risk flood areas. ***Less-than-significant*** impacts are anticipated for potential impedances or redirection of flood flows.

**CUMULATIVE IMPACTS**

Implementation of potential Resource Management Actions will be analyzed using the LAR2D hydraulic model. The LAR2D models for cumulative effects (Appendix HY-1). The analysis above includes a discussion and impact determination related to cumulative hydrology impacts. Cumulative impacts for hydrology will be ***less than significant***.

## **6 BIOLOGICAL RESOURCES**

### **INTRODUCTION**

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The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan (ARPP), is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified those Potential Resource Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

NRMP biological resource goals include the following:

- Assess biological resources within the Parkway;
- Conserve high-quality native habitats;
- Restore high-quality native habitats that require improvement;
- Naturalize habitats that have been altered by human activity;
- Rehabilitate habitats damaged or degraded by fire or homeless populations;
- Expand corridors that connect disparate native vegetation communities and wildlife habitat; and,
- Reduce the prevalence of invasive, non-native species.

The Potential Resource Management Actions are introduced at a conceptual/programmatic level in the NRMP; as specific projects are proposed to implement the Management Actions, those projects will be subject to project-level review, including CEQA.

The American River Parkway Plan Update (ARPPU) FEIR (County Control No. 2003-GPB-0332) Biological Resources Chapter evaluated potential impacts to biological resources. The ARPPU FEIR proposed land use and physical improvements to specific Area Plans within the Parkway; the biological resource mitigation measures were tailored to cover these specific actions. The ARPPU FEIR concluded that, with mitigation, impacts

to biological resources would be less than significant. Those measures are carried forward in this document and may be updated to support current best management practices for the range of Potential Resource Management Actions proposed.

The following chapter includes an updated California Natural Diversity Database (CNDDDB) species list and provides updates in regulatory guidance for habitat and species. The chapter begins with a summary of the biological setting of the Parkway, followed by a discussion of the regulatory frameworks applicable to Parkway resources.

## **ENVIRONMENTAL SETTING**

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The Parkway is an open space greenbelt spanning approximately 29 miles, from the Folsom Dam to the confluence of the American and Sacramento rivers. Major vegetation types in the Parkway include grassland, oak woodland, willow riparian, cottonwood forests, ponds, marshes/seeps, introduced vegetation, and agricultural. The Parkway also includes wetlands and seasonal floodplain areas. Undeveloped “bars” (elevated landforms near a river) containing larger areas of natural vegetation are occasional on both the north and south side of the river in the upper half of the Parkway. These bars and designated parks include (from east to west) Sailor Bar, Sacramento Bar, Rossmoor Bar, Ancil Hoffman County Park, River Bend Park, and Arden Bar. Due to past mining activities along and in the river, there are also significant areas of barren land and mine tailings/rock piles. The river and the associated habitat support a variety of wildlife species, including many species listed by the state or the federal government as “special status” (e.g. Endangered). These special status species include the Valley Elderberry Longhorn Beetle, the Chinook and Steelhead Salmon, Swainson’s Hawk, Bank Swallow and the Northwestern Pond Turtle. The habitat also hosts a variety of other non-special-status wildlife species, including breeding and foraging habitat for birds of prey, perching birds, waterfowl, mammalian predator and prey species, frogs, toads, salamanders, and fish. Additional environmental setting information on special status species and habitat types found within the Parkway are included below.

### **SPECIAL STATUS SPECIES**

A special status species is one that has been identified as having relative scarcity and/or declining populations. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidate for federal listing, and those classified as species of special concern. Also included are those species considered to be “fully protected” by the California Department of Fish and Wildlife (CDFW), those granted “special animal” status for tracking and monitoring purposes, and those plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS).

Multiple species status designations are applied to animals and plants; relevant definitions are provided below<sup>1</sup>.

*Endangered Species:* Any species, which is in danger of extinction throughout all or a significant portion of its range.

*Threatened Species:* Any species, which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

*Species of Concern:* Any species with declining population levels, limited ranges, and/or other factors that make them vulnerable to extinction and may ultimately qualify the species for threatened or endangered status.

*Fully Protected:* The classification of Fully Protected was California's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Most have subsequently been defined as endangered or threatened, but there are exceptions.

*Special Animals:* A general term that refers to all of the taxa that CDFW is interested in tracking, regardless of their legal or protection status. Though the species themselves have not declined to the extent that they are listed by one of the classifications noted above (endangered, etc.), such species are closely associated with a habitat that is declining in California.

*List 1B Plants:* Plants that are rare throughout their range, and have declined significantly over the last century. The majority of plants on this list are endemic to California.

*List 2 Plants:* The same as List 1B plants, except that List 2 plants are common outside of California.

Species considered for presence are those species with potential occurrence as indicated on the official USFWS Information for Planning and Consultation (IPaC) species list, California Natural Diversity Database (CNDDDB) quadrangle (quad) queries (Taylor Monument, Rio Linda, Citrus Heights, Folsom, Sacramento West, Sacramento East, Carmichael, & Buffalo Creek U.S. Geological Survey 7.5-minute quads), CNPS, the Cornell Lab of Ornithology's eBird database, and the AARPU FEIR. The likelihood of a special status species to be present within the Parkway was determined using the sources listed above and other topical literature as cited. Table BR-1 reports the likelihood of occurrence based on habitat presence either within the Parkway or in proximity of the Parkway, survey results (if any), and nearby recorded species occurrences. Likelihood

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<sup>1</sup> Source: California and Federal Endangered Species Acts, <http://www.dfg.ca.gov/wildlife/nongame/ssc/>, [http://www.dfg.ca.gov/wildlife/nongame/t\\_e\\_spp/fully\\_pro.html](http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html), and <http://www.cnps.org/cnps/rareplants/ranking.php>

of occurrence is rated as: Not Expected to Occur, Could Occur, and Known to Occur. These are defined as:

- *Not Expected to Occur: Species is unlikely present on the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.*
- *Could Occur: Suitable habitat is available on the project site; however, there are little to no other indicators that the species might be present.*
- *Known to Occur: The species, or evidence of its presence, was observed on the project site during project surveys, or was otherwise documented.*

Species that are not present or are not expected to occur are lightly shaded in gray in the table below. Species not likely to occur within the Parkway are not discussed further in this chapter.

**Table BR-1: CNDDB Results**

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State/CNPS		
Invertebrates				
California linderiella <i>Linderiella occidentalis</i>	–	–	Inhabit shallow vernal pools and other seasonal wetlands.	Could occur. The Parkway contains suitable habitat for the species. There are 54 occurrences within the search area, with 1 occurrence within the Parkway, within the Sailor Bar area.
Midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	–	–	Inhabit shallow vernal pools, vernal swales, and various artificial ephemeral wetland habitats in the Sacramento (SSHCP 2018).	Could occur. The Parkway contains suitable habitat for the species. There are 7 occurrences within the 9-quad search area; none of these occurrences are within the Parkway. All of the recorded occurrences are within the Mather area, with the nearest recorded occurrence approximately 5 miles southeast of Rossmoor Bar.
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	–	–	Inhabits seasonal wetlands, including vernal pools.	Could occur. No recorded occurrences within the Parkway; however, the Parkway contains suitable habitat for the species. It is unlikely that species would be found given its extreme rarity. There is one known occurrence within the search area. The occurrence is located within the Mather area, approximately 4.26 miles southeast of Rossmoor Bar.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T	–	Dependent on elderberry shrubs (host plant); potential habitat is shrubs with stems 1 inch in diameter within Central Valley.	Known to occur. 31 recorded occurrences within the search area; 19 are located in the Parkway. Elderberry shrubs are present throughout many of the Area Plans. Further discussion below.
Vernal pool fairy shrimp	T	–	Vernal pools and other seasonal wetlands in valley and foothill grasslands. Tends to occur in smaller	Known to occur. The Parkway contains suitable habitat for the species. There are 45

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State/CNPS		
<i>Branchinecta lynchi</i>			wetland features (less than 0.05 acre in size) (USFWS 1994).	occurrences within the search area, with one occurrence within the Parkway, in the Sailor Bar area. Further discussion below.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	E	–	Vernal pools and other seasonal wetlands in valley and foothill grasslands that pond for sufficient duration to allow the species to complete its life cycle. Typically found in ponds ranging from 0.1 to 80 acres in size (USFWS 1994).	Could occur. The site has suitable habitat for the species. There are 53 occurrences within the search area; no recorded occurrences within the Parkway. The nearest occurrences are located in the Mather area.
<b>Amphibians &amp; Reptiles</b>				
California red-legged frog <i>Rana draytonii</i>	FT	SC	Inhabits ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. Submerged root masses and undercut banks are important habitat features for this species.	Not expected to occur. The site does not contain suitable habitat (semi-permanent freshwater habitat). The species is considered extirpated from the Sacramento Valley floor.
California tiger salamander <i>Ambystoma californiense</i>	FT	ST	Vernal pools and seasonal wetlands with a minimum 10-week inundation period and surrounding uplands, primarily grasslands, with burrows and other belowground refugia (e.g., rock or soil crevices).	No occurrences. Not expected to occur. The study area does not provide suitable habitat for this species (deep ponds that pool for roughly three continuous months). There are 10 occurrences within the 9-quad search area, with the nearest occurrence located approximately 4.01 miles to the northeast.
Giant garter snake <i>Thamnophis gigas</i>	T	T	Slow-moving streams, sloughs, ponds, marshes, inundated floodplains, rice fields, and irrigation/drainage ditches on the Central Valley floor with mud bottoms, earthen banks, emergent vegetation, abundant small aquatic prey and absence or low numbers of large predatory fish. Also require upland refugia not subject to flooding during the snake's inactive season.	Not expected to occur. GGS are typically absent from larger rivers because of lack of suitable habitat and emergent vegetative cover. Riparian woodlands typically do not provide suitable habitat because of excessive shade and lack of prey populations. There are 39 occurrences within the search area, all of which are in the Natomas and Rio Linda; however, there are no recorded occurrences within the Parkway. The nearest recorded occurrence is located approximately 1.75 miles northwest of Discovery Park.
Western pond turtle <i>Emys marmorata</i>	–	SC	Forage in ponds, marshes, slow-moving streams, sloughs, and irrigation/drainage ditches; nest in nearby uplands with low, sparse vegetation.	Known to occur. The Parkway contains both foraging and nesting habitat for the species. The drainage channel is ephemeral and is generally too narrow and shallow to support the species. There are 11 recorded occurrences within the search area, with three occurrences within the Parkway (Ancil Hoffman & Sailor Bar areas). Further discussion below.
Western spadefoot <i>Spea hammondi</i>	–	SC	Vernal pools and other seasonal ponds with a minimum three-week inundation period in valley and adjacent foothill grasslands.	Could occur. The Parkway contains suitable habitat. There are 6 occurrences within the search area; none of the occurrences are



Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State/CNPS		
				within the Parkway. The nearest occurrence is located approximately 1.08 miles to the northeast of Sailor Bar in Phoenix Park.
<b>Birds</b>				
Bald Eagle <i>Haliaeetus leucocephalus</i>	–	E; FP	Forages primarily in large water bodies and rivers. Winters throughout California. Typically nests in northern mountain and foothills, but some nest in the Central Valley vicinity, near to their foraging habitat. Typically spotted around the Folsom Lake area.	Could occur. The Parkway contains foraging habitat for the species, but the species is not known to nest within the Parkway. There are no recorded occurrences within the CNDDDB search area; however, there are multiple sightings on eBird within the Parkway and much higher concentrations in the Folsom Lake area.
Bank Swallow <i>Riparia riparia</i>		T	Nesting habitat is of concern to CDFW. Nests at least 1 meter (3.3 feet) above ground or water in nearly vertical banks/cliff faces comprised of soft soils such as fine sandy loam, loam, silt loam, and sand.	Known to occur. Colonial nester in vertical banks of creeks and rivers – requires fine-textured/sandy soils to excavate holes.
Burrowing Owl <i>Athene cunicularia</i> (burrow sites)	SCC	SC	Nests and forages in grasslands, agricultural lands, open shrublands, and open woodlands with existing ground squirrel burrows or friable soils. Suitable burrow sites consist of short, herbaceous vegetation with only sparse cover of shrubs or taller herbs (Shuford and Gardali 2008: 221).	Known to occur. Multiple Parkway area plans contain suitable habitat for the species. There are 38 CNDDDB records within the 8-quad search area; however, only one occurrence is located within the Parkway, in the Paradise Beach area. Additionally, the ARPP notes that the species has been observed within the Cal Expo area. Further discussion below.
Cooper's Hawk <i>Accipiter cooperi</i>	–	–	Nests in a wide variety of woodland and forest habitats. Dense stands of live oak, deciduous riparian, or other forest habitats near water are preferred. Nests are placed in deciduous trees in crotches 10-80 ft above the ground (CWHR 2019).	Known to occur. The Parkway contains suitable nesting and foraging habitat. There are five known CNDDDB records within the search area, two of which are within the Parkway. Further discussion below.
Double-crested Cormorant <i>Phalacrocorax auritus</i>			Found in diverse aquatic habitats, such as ponds, lakes, rivers, lagoons, estuaries, and open coastline; more widespread in winter. According to the Cornell Lab of Ornithology ( <a href="http://www.birds.cornell.edu">www.birds.cornell.edu</a> ) this species' nesting range does not include California.	Known to occur. While the Parkway may provide foraging habitat for the species, the species is not known to nest in California; therefore, subsequent projects would not have the potential to impact nesting double-crested cormorant. Further discussion below.
Ferruginous Hawk <i>Buteo regalis</i>	–	–	Forages in large, open tracts of grasslands, sparse scrubland, and deserts. It frequents open grasslands, sagebrush flats, desert scrub, low foothills and surrounding valleys, and fringes of pinyon-juniper habitats. Nesting occurs in lone trees or on telephone poles; species is not known to breed in California (CWHR 2019).	Could occur. The Parkway contains suitable foraging habitat for the species; however, the species is not known to breed in California. Future construction activities would not have the potential to impact nesting ferruginous hawks. There is one recorded occurrence within the search area, outside of the Parkway, within

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State/CNPS		
				the Mather Preserve area, approximately 2.82 miles south of Ancil Hoffman.
Golden Eagle <i>Aquila chrysaetos</i>	–	FP	Foothills and mountains throughout California; uncommon nonbreeding visitor to lowlands in the Central Valley. Nests on cliffs and escarpments or tall trees; forages in annual grasslands, chaparral, and oak woodlands with plentiful prey.	Could occur. The Parkway contains suitable foraging habitat for the species, but the species is not typically found nesting at lower elevations. There is one occurrence outside of the Parkway, located approximately 2.82 miles south of Ancil Hoffman, in the Mather Area. Further discussion below.
Great Blue Heron <i>Ardea herodias</i>	–	–	Found along calm freshwater and seacoasts. Usually nests in trees near water, but colonies can be found away from water.	Known to occur. The Parkway contains suitable nesting and foraging habitat. There are 10 recorded occurrences within the 8-quad search area. Four of those occurrences are located along the American River, three of them within the Parkway (Discovery Park, River Bend Park, and Sacramento Bar). The ARPP EIR notes that both the Rossmoor Bar and River Bend Park areas have had active rookeries (nesting colony). Further discussion below.
Great Egret <i>Ardea alba</i>	–	–	Nests in colonies with other species, in shrubs and trees over water, and on islands. Feeds in variety of wetlands.	Known to occur. The Parkway contains suitable nesting and foraging habitat. There are 6 recorded occurrences within the 8-quad search area. There are two occurrences along the Lower American River, with one of them within the Parkway, on the south bank of the Arden Bar area. The ARPP EIR notes that both the Rossmoor Bar and River Bend Park areas have had active rookeries (nesting colony). Further discussion below.
Least Bell's Vireo <i>Vireo bellii pusillus</i>	E	E	Typically found in dense willows and other low, dense riparian vegetation within valley foothills. Formerly a common summer resident throughout the Sacramento Valley, the species has declined drastically throughout California because of cowbird parasitism, habitat destruction, and degradation (CDFW 2021). The species is now mostly associated with coastal areas in San Benito and Monterey counties and in coastal Southern California.	Not expected to occur. While the Parkway contains suitable nesting and foraging habitat for the species, the species is extremely rare within the Sacramento Valley. There is only one recorded CNDDDB occurrence within downtown Sacramento from 1877. There are only four sightings of the species within the Sacramento County, on eBird. The last sighting was in 2013 in the Upper Beach Lake area near Elk Grove.
Loggerhead Shrike <i>Lanius ludovicianus</i>	–	SC	Nests in a densely-foliaged shrub or tree. Prefers open grasslands or scrub with shrubs or trees and low, sparse herbaceous cover with perches available (fences, posts, utility lines). In	No occurrences. The valley grassland provides suitable foraging habitat. There are no known CNDDDB records of loggerhead shrike in Sacramento County; however, this species is frequently observed in open

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
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			California, the critical nesting season in is from March into August (CHWR 2019).	grasslands in the Central Valley, including portions of Sacramento County as indicated by eBird (2020) observations.
Merlin <i>Falco columbarius</i>	–	–	Dense tree stands close to bodies of water are needed for cover. Uses a wide variety of habitats. Frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. Winters in California from September to May. Does not breed in California (CDFW 1999).	Known to occur. The Parkway provides suitable foraging habitat for the species. There is one recorded occurrence in the 8-quadrant search area; the location is outside of the Parkway, but along the Lower American River in the Mississippi Bar area. However, there are multiple sightings with photographs of the species within the Parkway on eBird. Since the species is not known to breed in CA, there is not potential for future projects to disturb nesting merlins. Further discussion below.
Northern Harrier <i>Circus cyaneus</i>	–	SC	Breed and forage in a variety of open (treeless) habitats that provide adequate vegetative cover, an abundance of suitable prey, and scattered hunting, plucking, and lookout perches such as shrubs and fence posts. Habitats include freshwater marshes, brackish and saltwater marshes, wet meadows, weedy borders of lakes, rivers and streams, annual and perennial grasslands, vernal pool complexes, weed fields, ungrazed or lightly grazed pastures, low-growing crop fields, sagebrush flats, and desert sinks (Shuford and Gardali 2008).	Known to occur. The Parkway contains suitable nesting and foraging habitat for the species. There are no recorded CNDDDB occurrences within the 8-quadrant search area; however, the ARPP EIR states the species was observed by County staff in the Cal Expo area at Bushy Lake. This species is frequently observed in the Parkway and throughout Sacramento County as indicated by eBird (2021) observations. Further discussion below.
Peregrine Falcon <i>Falco peregrinus anatum</i>	–	FP	Found in a variety of habitats, but mostly in areas with cliffs for nesting and open areas for foraging. Is known to substitute large human-made structures, including buildings, for cliff nesting habitat.	Known to occur. The Parkway contains suitable foraging and nesting habitat for the species. There are no known CNDDDB occurrences within the 8-quadrant search area; however, the ARPP EIR states the species has been observed foraging within the Cal Expo area of the Parkway. There are also multiple observations throughout the Parkway on eBird (2021). Further discussion below.
Purple Martin <i>Progne subis</i>	–	SC	Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats. Utilizes abandoned woodpecker holes and tree cavities in valley oak and cottonwood forests for nesting. Also has been found nesting in vertical drainage holes under freeways and bridges. Open area required for foraging.	Known to occur. The Parkway contains suitable foraging and nesting habitat (bridges and elevated rail crossings) for the species. There are 10 recorded, CNDDDB occurrences within the 8-quadrant search area, none of which are located within the Parkway. Most of the recorded occurrences are located along freeway and bridge structures. There are multiple observations recorded in eBird within the Parkway boundaries. Further discussion below.

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State/CNPS		
Snowy Egret <i>Egretta thula</i>	–	–	Nest in colonies on thick vegetation in isolated places—such as barrier islands, dredge-spoil islands, salt marsh islands, swamps, and marshes. They often change location from year to year. During the breeding season Snowy Egrets forage in estuaries, saltmarshes, tidal channels, shallow bays, and mangroves. They winter in mangroves, saltwater lagoons, freshwater swamps, grassy ponds, and temporary pools, and forage on beaches, shallow reefs, and wet fields (Cornell Ornithology Lab 2021).	Known to occur. The Parkway contains suitable foraging habitat for the species. There is one recorded occurrence within the 8-quad search area; however, it is outside of the Parkway at the north end of the Sacramento International Airport complex.
Song Sparrow <i>Melospiza melodia</i>	–	SC	Inhabits tidally influenced marshes with cord grass, pickleweed, and/or gumplant. Year-round, non-migratory species. Typically associated with the Suisun Bay area from the vicinity of the confluence of the Sacramento and San Joaquin rivers west to the Carquinez Straits (CDFW 2008).	Known to occur. There is one occurrence in the 8-quad search area from June 1900. The Parkway is located approximately 40 miles northeast of the confluence of the Sacramento and San Joaquin rivers.
Swainson's Hawk <i>Buteo swainsoni</i>	–	T	Forages in grasslands and agricultural lands; nests in riparian and isolated trees.	Known to occur. There are 64 CNDDDB occurrences within the 8-quad search area, 13 of which occur within the Parkway or in areas adjacent to it. The Parkway provides suitable foraging and nesting habitat for the species. Further discussion below.
Tricolored Blackbird <i>Agelaius tricolor</i> (nesting colony)	–	E	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. Requires open water and protected nesting substrate, such as flooded, spiny, or thorny vegetation (Schuford and Gardali 2008: 439).	Could occur. There are 26 CNDDDB occurrences within the 8-quad search area; however, none of these records are located in the Parkway. Although there are no recorded occurrences, the Parkway does contain suitable nesting and foraging habitat for the species. Further discussion below.
Yellow-billed Cuckoo <i>Coccyzus americanus occidentalis</i>	T	E	Prefer isolated wooded riparian corridors surrounded by extensive arid uplands. Known breeding populations in California, exist along the Sacramento River and Feather River (Dettling MD, Seavy NE, Howell CA, Gardali T 2015).	Known to occur. There is one occurrence within the 8-quad search area. The occurrence, from 1877, has a 5-mile radius and is located in downtown Sacramento. The Parkway contains suitable habitat for the species. Further discussion below.
White-tailed Kite <i>Elanus leucurus</i>	–	FP	White-tailed kites occur in herbaceous and open stages of most habitats in cismontane California. Areas with substantial groves of dense, broad-leaved deciduous trees are used for nesting and roosting. Nests are typically located from 20 to 100 feet above the ground near the top of dense oak, willow, or other tree stands, and are often	Known to occur. There are 27 known CNDDDB records within the 8-quad search area, 11 of which occur within the Parkway. The site contains suitable nesting and foraging habitat for the species. Further discussion below.

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
	Federal	State/CNPS		
			located near an open foraging area with a dense population of voles (CWHR 2019).	
<b>Mammals</b>				
American badger <i>Taxidea taxus</i>	–	SC	Suitable habitat occurs in the drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Badgers are generally associated with treeless regions, prairies, parklands, and cold desert areas.	Could occur. There are four known CNDDB records with the 8-quad search area; however, none of these are located within the Parkway. The nearest recorded occurrence is located approximately 0.83 miles south of the Howe Avenue bridge crossing. The Parkway contains suitable habitat for the species. Further discussion below.
Pallid bat <i>Antrozous pallidus</i>	–	SC	Grasslands, agricultural fields, and desert habitat. Roosts in rock crevices, caves, mine shafts, under bridges, in buildings and tree hollows. Some hibernate; many remain active all year in low to mid-elevations.	Could occur. There is one occurrence within the 8-quad search area, which is located outside of the Parkway. The Parkway provides various natural and built habitats for the species. Further discussion below.
Western red bat <i>Lasiurus blossevillii</i>	–	SC	This species roost primarily in trees along edge habitats adjacent to streams, fields, or urban areas. The species can be found within either natural or human-made structures, such as caves, mines, crevices (including under bridges), hollow trees, and in abandoned or seldom-used buildings. Young are born to the species in the spring and early summer (maternity colonies typically begin to form in April, and births occur from May through early July).	Could occur. There are no occurrences within the 8-quad search area; however, the Parkway provides various natural and built habitats for the species. Further discussion below.
<b>Fish</b>				
Steelhead Trout ( <i>Oncorhynchus mykiss</i> )	T	-	Most of Sacramento County is within the distinct population segment area for this species. Critical habitat has been designated within Sacramento County on the Sacramento River, American River, Mokelumne River, and Dry Creek (both north and south creeks). Spawning has been documented on the Cosumnes River. (NMFS 2009) The listing applies to the Sacramento and San Joaquin Rivers and their tributaries.	In the project area, the American River. Upstream spawning migration period from November through May.
Chinook Salmon ( <i>Oncorhynchus tshawytscha</i> )	SC	SC	Distribution occurs throughout the Sacramento River and through a portion of the American River, but the distribution maps do not include the Cosumnes River as habitat. State listing is for runs in the Sacramento River, specifically. Federal listing is for the Sacramento River and its tributaries.	In the project area, the American River. Upstream spawning migration period from November through May.
Sacramento Splittail	-	SC	The species prefers low-salinity, shallow-water habitat. The species is primarily found in the	In the project area, the American River. Spawning occurs over flooded stream bank

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
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<i>(Pogonichthys macrolepidotus)</i>			Delta, and are only rarely found in the main Sacramento River channel unless spawning. Spawning may occur in the Sacramento River below the Feather River confluence, and runs from late January through July.	vegetation in sloughs and in slow moving large rivers.
<b>Plants</b>				
Legenere ( <i>Legenere limosa</i> )	SC	-/1B	Vernal pools; elevation 0 – 2,900 ft (blooms Apr. – Jun.)	This species has potential to occur in any of the Parkway's Area Plans in areas of grasslands or vernal pools within moist, clay soil.
Pincushion navarretia ( <i>Navarretia myersii</i> ssp. <i>myersii</i> )	-	-/1B	Vernal pools; elevation 65 – 1,100 ft (blooms May)	This species has potential to occur in any of the Parkway's Area Plans in areas of grasslands or vernal pools within moist, clay soil.
Bogg's Lake hedge-hyssop ( <i>Gratiola heterosepala</i> )	-	E/1B	Marshes and swamps, vernal pools/clay; elevation 30 – 7,790 ft (blooms Apr. – Aug.)	This species has potential to occur in any of the Parkway's Area Plans in areas of grasslands or vernal pools within moist, clay soil.
Ahart's dwarf rush ( <i>Juncus leiopermus</i> var. <i>ahartii</i> )	SC	-/1B	Valley and foothill grassland/mesic; elevation 100 – 330 ft (blooms Mar. – May)	This species has potential to occur in any of the Parkway's Area Plans in areas of grasslands or vernal pools within moist, clay soil.
Slender orcutt grass *( <i>Orcuttia tenuis</i> )	T	E/1B	Vernal pools; elevation 115 – 5,775 ft (blooms May – Oct.)	This species has potential to occur in any of the Parkway's Area Plans in areas of grasslands or vernal pools within moist, clay soil.
Sacramento orcutt grass ( <i>Orcuttia viscida</i> )	T	E/1B	Vernal pools; elevation 100 – 330 ft (blooms Apr. – Jul.)	There are no documented CNDDB occurrences of this species within the Parkway. However, there are documented occurrences immediately adjacent to the easternmost portion of the Parkway to the north, along Riva Ridge Drive and 5 others approximately 1.2 miles northeast of the easternmost portion of Parkway, within and immediately north of Mississippi Bar. There is no USFWS-designated critical habitat for this species within the Parkway, however there is an area of USFWS- designated critical habitat for this species in Phoenix Park, located approximately 1-mile northeast of the Parkway from the easternmost portion. This species has potential to occur throughout the Parkway in grasslands or vernal pools on areas of moist, clay soil.
Sanford's arrowhead	-	-/1B	Marshes and swamps; elevation 0 – 2,000 ft (blooms May – Oct.)	Potential habitat for this species occurs within the Discovery Park, Cal Expo, SARA

Species	Listing Status <sup>1</sup>		Habitat	Potential for Occurrence <sup>2</sup>
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( <i>Sagittaria sanfordii</i> )				Park, and Ancil Hoffman Park Area Plans within freshwater emergent wetland communities, including Woodlake, Cal Expo, and Paradise Beach Area Plans.
<p>Note: CNDDDB = California Natural Diversity Database; USFWS = U.S. Fish and Wildlife Service;</p> <p><b><sup>1</sup> Legal Status Definitions</b></p> <p><b>Federal:</b></p> <p>E           Endangered (legally protected)</p> <p>T           Threatened (legally protected)</p> <p>D Delisted</p> <p>SCC Species of Conservation Concern</p> <p><b>State:</b></p> <p>D Delisted</p> <p>FP          Fully protected (legally protected)</p> <p>SC          Species of special concern (no formal protection other than CEQA consideration)</p> <p>E          Endangered (legally protected)</p> <p>T          Threatened (legally protected)</p> <p><b><sup>2</sup> Potential for Occurrence Definitions</b></p> <p>Not expected to occur: Species is unlikely to be present on the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.</p> <p>Could occur: Suitable habitat is available on the project site; however, there are little to no other indicators that the species might be present.</p> <p>Known to occur: The species, or evidence of its presence, was observed on the project site during project surveys, or was otherwise documented.</p> <p>*This species was not listed in the project area on the CNDDDB, but was included because it shares similar habitats as the Sacramento orcutt grass, which was on the CNDDDB.</p> <p>Source: CDFW 2020, CNDDDB 2020, USFWS 2020, eBird - Cornell Lab of Ornithology 2020</p>				

## HABITAT TYPES

### ***RIPARIAN HABITAT***

Within the Parkway, riparian forest and woodland communities persist on stable upper terraces, channel bars, islands, and engineered embankments that rarely flood, but maintain shallow depths to perennially available groundwater. The vegetation structure of riparian forest and woodland habitat consists of an upper layer of winter deciduous trees and a multi-layered sub-canopy of riparian shrubs and tree saplings that can tolerate winter flooding and/or a year-round high-water table. A total of 1,813 acres of riparian forest and woodland habitats exist within the Parkway. Several riparian communities discussed below and depicted on the Parkway vegetation map represent an aggregation of smaller areas mapped in the field by Regional Parks.

- White Alder - A total of 20 acres of naturally occurring white alder (*Alnus rhombifolia*) alliance occurs in small stands, primarily on islands and riverbanks within the Arden Bar, Paradise Beach, Campus Commons, and Ancil Hoffman County Park Areas. The understory of these communities typically includes sandbar willow (*Salix exigua*), Goodding's black willow (*Salix gooddingii*), arroyo

willow (*Salix lasiolepis*), and infrequent white alder and Fremont cottonwood (*Populus fremontii*) saplings.

- Hind's Walnut - Hind's walnut (*Juglans hindsii*) alliance (Sawyer et al. 2009) occurs as small, isolated stands that occupy 83 acres of Parkway between the Woodlake and Rossmoor Bar Areas. In Woodlake (17 acres, the largest stand has been partially damaged by fire. The tree canopy of these communities is dominated by Hind's walnut, with smaller, declining components of valley oak (*Quercus lobata*) and Fremont cottonwood.
- Fremont Cottonwood - Approximately 583 acres of Fremont cottonwood alliance (Sawyer et al. 2009) is distributed intermittently along the length of the Parkway, with more than half located on broad floodplains downstream of the Campus Commons Area. Fremont cottonwood forests also is present in narrow bands along the edges of confined lower American River channel segments, and in portions of the Sailor Bar, Upper Sunrise, and Sacramento Bar Areas. The Discovery Park Area contains the largest contiguous stand of cottonwood woodland in the Parkway.
- Valley Oak - The valley oak alliance (Sawyer et al. 2009) is a transitional woodland and forest type that integrates with riparian habitats and upland oak woodlands and forests. A total of 407 acres have been mapped, with the largest contiguous stand occurring within the Discovery Park Area on Bannon Island. A second smaller, but scenic and high-quality example, can be found in the Lower Sunrise Area. This community has dense tree canopy dominated by valley oak and occasional interior live oak with other riparian trees, such as white alder, Oregon ash, Fremont cottonwood, box elder, Gooding's black willow, and Hind's walnut.
- Great Valley Mixed Riparian Forest - Great Valley mixed riparian forest (Holland 1986) is distributed throughout 674 acres of the Parkway. This community has a highly variable species composition with deciduous hardwood forest co-dominated by three or more tree species, including white alder, valley oak, Fremont cottonwood, Hind's walnut, California sycamore (*Platanus racemosa*), box elder, Oregon ash, and various willow species. Interior live oak is also a common component of mixed riparian forests upstream of Arden Bar, particularly in the Upper Sunrise and Sailor Bar Areas.

### **VALLEY AND FOOTHILL GRASSLAND**

The Parkway contains 525 acres of valley and foothill grasslands. The largest contiguous area of valley and foothills grasslands occurs in the Woodlake Area, although other notable grasslands are present in the Rossmoor Bar, Discovery Park East, River Bend, Upper Sunrise, and Sailor Bar Areas. Decades of anthropogenic impacts have facilitated the spread of non-native species and restricted the establishment of native perennial grasses and forbs. Extensive areas are dominated by invasive species such as yellow star thistle (*Centaurea solstitialis*), vetch (*Vicia* spp.), Bermuda grass (*Cynodon dactylon*), and pepperweed (*Lepidium latifolium*). Other common non-native grass species observed within the valley and foothill grassland community include wild oats (*Avena* spp.), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), and foxtail barley (*Hordeum murinum*).



Within the Parkway, 179 acres of valley and foothill grassland support a significant component of native grasses and forbs, such as wildrye, needlegrass, poppies, and tarplant. Areas that support the highest proportion of native forbs include Sailor Bar, Upper Sunrise, and the El Manto portion of Rossmoor Bar. Similarly, portions of Cal Expo and restored portions of SARA Park and Arden Bar have high-quality native grass components.

### ***OAK WOODLAND AND FOREST***

The Parkway contains 729 acres of oak woodland and forest vegetation communities. The overstory is dominated by a variety of hardwood species including interior live oak, California buckeye (*Aesculus californica*), valley oak, and blue oak (*Quercus douglasii*). Oak woodland and forest communities provide the largest patches of contiguous natural habitat, with the most extensive area situated within the River Bend Park Area. The following oak woodland alliances and mixed oak woodland types were mapped and characterized by Regional Parks' natural resource staff.

- Interior Live Oak - A total of 583 acres of interior live oak alliance grows along elevated floodplains in the upper reaches of the Parkway. Approximately half of this acreage occurs within the River Bend Park Area, with other large areas found in the Ancil Hoffman County Park, Rossmoor Bar, Sacramento Bar, and Upper Sunrise Areas. The overstory of this vegetation alliance is dominated by interior live oak with occasional valley oak and Hind's walnut.
- Blue Oak - A total of 80 acres of blue oak alliance (Sawyer et al. 2009) occurs mainly within the Sailor Bar Area, along with small areas mapped at Ancil Hoffman Park and Sunrise Bluffs. The canopy of this community is dominated by blue oak with occasional interior live oak and valley oak. Blue elderberry, toyon, poison oak, and blue oak saplings are common in the mid-story. The understory supports annual grasses and several native forbs, including harvest brodiaea (*Brodiaea elegans* ssp. *elegans*), soap root (*Chlorogalum* sp.), California poppy, lupines (*Lupinus* spp.), and common madia.
- Mixed Oak Forest - A total of 65 acres of mixed oak forest occurs in the Nature Study Area of Ancil Hoffman Park upstream of the Rossmoor Bar and Upper Sunrise Areas. The overstory is co-dominated by valley oak and interior live oak, often with a minor component of Fremont cottonwood and Hind's walnut. The mid-story includes blue elderberry, coyote brush, poison oak, and blackberry, and exhibits natural recruitment of interior live oak and Hind's walnut saplings. The understory supports annual grasses, creeping wild rye (*Leymus triticoides*), fennel, poison hemlock, and Dutchman's pipevine.

### ***FOOTHILL PINE***

A total of six acres of foothill pine alliance occurs within the Upper Sunrise Area. This woodland community is botanically diverse and distinct from other vegetation types in the Parkway. Foothill pine forms the overstory with interior live oak saplings in the understory. Common shrubs and small trees in the understory include sticky monkeyflower (*Diplacus aurantiacus*), buckbrush (*Ceanothus cuneatus*), mock orange (*Philadelphus lewisii*),

toyon, coyote brush, and poison oak. The understory also contains native forbs and grasses in canopy openings.

### **GRAVEL BAR CHAPARRAL**

Chaparral communities are characterized by small- to medium-sized shrubs with semi-woody, flexible stems and branches. A total of 274 acres of chaparral occurs within the Parkway in small, interspersed stands that often intergrade with riparian woodland and forest habitat along high floodplain benches and terraces of the lower American River. Widely scattered patches of chaparral also appear on cobbly gravel bars at the Rossmoor Bar, Ancil Hoffman Park, River Bend Park, and Sacramento Bar Areas. Chaparral shrub species include deerweed (*Acmispon glaber*), lupine, coyote brush, California brickellbush (*Brickellia californica*), California buckwheat (*Eriogonum fasciculatum*), and California coffeeberry. In shrub canopy openings, this community supports a sparse to intermittent herbaceous understory of native grasses and forbs including western goldenrod (*Euthamia occidentalis*), pearly everlasting (*Anaphalis margaritacea*), lupine, California poppy, clarkia (*Clarkia* sp.), and rayless golden aster (*Hetherotheca oregano*). Invasive species, such as Spanish broom (*Spartium junceum*), are common in this habitat type.

### **ELDERBERRY SAVANNA**

A total of 227 acres of elderberry savanna occurs within the Parkway, with the highest concentration at the Cal Expo Area. Elderberry savanna is open grassland with low-growing, scattered shrubs. Common species in the shrub layer include blue elderberry and coyote brush, with occasional valley oak saplings and patches of sandbar willow. This community tends to support a patchy understory of annual grasses, creeping wildrye, yellow star thistle, vetch, fennel, and poison hemlock. Elderberry savannas were planted in the 1980s for mitigation in the Cal Expo, Discovery Park, SARA Park, River Bend Park, Lower Sunrise, and Sailor Bar Areas. These restored sites were also planted with a variety of riparian species and are expected to transition into Great Valley mixed riparian forest.

### **FRESHWATER EMERGENT WETLAND**

Freshwater emergent wetland communities occur on low-lying topographic areas such as ponds, depressions, and urban drainages on terrace floodplains, as well as on low stream terraces that are frequently saturated or flooded. The Parkway contains three acres of freshwater emergent wetland habitat within the Cal Expo Area. Unmapped freshwater emergent wetland occurs as an understory component to areas mapped as riparian woodland and forest within secondary channels, point bars, in-channel bars, active floodplains, and low-lying topographic areas, such as ponds and depressions, that are frequently inundated or saturated. Freshwater emergent wetland vegetation is composed of upright, rooted hydrophytic monocots (grass-like plants) and forbs, as well as floating emergent aquatic plants. Vegetation composition within this habitat type varies according to the amount and duration of soil saturation associated with subtle elevation gradients. Common species include sedges (*Carex* spp.), rushes (*Juncus* spp.), horsetail (*Equisetum hyemale*), tall cyperus (*Cyperus eragrostis*), spike rush (*Eleocharis* spp.),

cocklebur (*Xanthium strumarium*), and perennial pepperweed on intermittently saturated soils; broadleaf cattail (*Typha latifolia*), bulrush (*Schoenoplectus* spp.), seep monkeyflower (*Erythranthe guttata*), smartweed (*Persicaria punctata* and *P. lapathifolia*), watercress (*Rorippa* spp.), and marsh purslane (*Ludwigia peploides*) on permanently saturated soils; and mosquito fern (*Azolla filiculoides* and *A. mexicana*) and other floating emergent aquatic plants in permanently inundated areas of the Parkway.

### **OPEN WATER**

A total of 597 acres of the Parkway is characterized as open water. This includes both riverine habitats within primary and secondary channels of the lower American River, as well as off-channel ponds. Riverine habitats are defined by intermittent or continually running water, including rivers and streams. The open water of riverine habitat, including the river, unvegetated shoreline, gravel bars adjacent to the river channel, and off-channel ponds, provide resting and foraging areas for waterfowl, shorebirds, wading birds, belted kingfisher (*Ceryx alcyon*), black phoebe (*Sayornis nigricans*), and tree swallow. Habitats associated with lakes are also considered open water habitat and are characterized by depressions filled with standing water. This habitat type can vary in size, from small ponds to large areas such as flooded lakes or reservoirs. The primary lacustrine features are Urrutia Pond, Bushy Lake, William B. Pond, and the shallow pools at Sacramento Bar.

## **REGULATORY SETTING**

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### **FEDERAL**

#### **FEDERAL ENDANGERED SPECIES ACT**

Under the Federal Endangered Species Act (FESA) of 1973, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as endangered or threatened. FESA defines “endangered” species as any species in danger of extinction throughout all or a significant portion of its range. A “threatened” species is any species that is likely to become an “endangered” species within the foreseeable future throughout all or a significant portion of its range. Additional special-status species include “candidate” species and “species of concern.” “Candidate” species are those for which the Department of Interior, United States Fish and Wildlife Service (USFWS) has enough information on file to propose listing as endangered or threatened. “Species of concern” are those for which listing is possibly appropriate but for which the USFWS lacks sufficient information to support a listing proposal. A species that has been “delisted” is one whose population has met its recovery goal target and is no longer in jeopardy of extinction. Taking of federally listed species is prohibited under Section 9 of FESA. To “take” is defined by FESA (Section 3[19]) to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

All government agencies must review their actions and determine if a “may affect” situation occurs with respect to a federally listed or proposed species. If the agency

makes a “may affect” determination, it is then required to request concurrence with a “may affect, but not likely to adversely affect” finding or formally consult with the USFWS or National Marine Fisheries Service (NMFS).

For federal agencies, the consultation is conducted under Section 7 of FESA. The agency submits a Biological Assessment to USFWS that evaluates the potential adverse effects to federally listed species. The USFWS then prepares a Biological Opinion that addresses the requirements that must be followed to avoid, minimize, and compensate for impacts to federally listed species and their habitat.

For non-federal agencies, the consultation is conducted under Section 10 of FESA. The agency submits an incidental take<sup>2</sup> permit application to USFWS accompanied by a habitat conservation plan (HCP). The purpose of the habitat conservation planning process associated with the permit is to ensure there is adequate minimization and mitigation of the effects of the authorized incidental take. The purpose of the permit is to authorize the incidental take of a listed species, not to authorize the activities that result in take (USFWS 2005).

#### **USFWS SACRAMENTO OFFICE DISCLAIMER**

There are a number of biological resources located within the Parkway, including wetlands and special status species. As a requirement of the USFWS, the following notification is provided to proponents of any project that has the potential to adversely affect threatened or endangered species:

“The applicant is hereby notified of additional conditions as stipulated by the U.S. Fish and Wildlife Service. Features of the applicant’s project may adversely affect federally listed threatened or endangered species. An applicant must go through one of two processes to obtain authorization to take federally listed species incidental to completing his or her project. One of the processes is formal consultation. When the authorization or funding of a Federal agency is an aspect of a project that may affect federally listed species, Section 7 of the Endangered Species Act requires the Federal agency to formally consult with the Service. Formal consultation is concluded when the Service issues a biological opinion to the Federal agency. The biological opinion includes terms and conditions to minimize the effect of take on listed species. The Federal agency must make the terms and conditions of the biological opinion into binding conditions of its own authorization to the project applicant. An example of this process is when the U.S. Army Corps of Engineers consults with the Service prior to issuing a permit to fill jurisdictional waters under Section 404 of the Clean Water Act. The terms and conditions of the biological opinion become binding on the project applicant through the Corps’ 404 authorization. When no Federal funding or authorization is involved in a project, an applicant must prepare a habitat conservation plan and

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<sup>2</sup> Incidental take is take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a federal agency or applicant (50 CFR 402.2).

obtain a permit directly from the Service in accordance with Section 10(a)(1)(B) of the Act. For additional information on these processes please contact the Endangered Species Division of the U.S. Fish and Wildlife Service's Sacramento Fish and Wildlife Office at (916) 414-6600".

### ***FISH AND WILDLIFE COORDINATION ACT***

The Fish and Wildlife Coordination Act authorizes the USFWS and State agencies responsible for fish and wildlife resources to investigate all proposed federal undertakings and nonfederal actions that need a federal permit or license that would control or modify a stream or water body and to make mitigation and enhancement recommendations to the involved federal agency. "Recommendations...shall be as specific as practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages (16 U.S.C. §661)." In addition, the Act requires that wildlife conservation be coordinated with other features of water resource development programs.

### ***MIGRATORY BIRD TREATY ACT***

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §703-711) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered a "take" and is potentially punishable by fines and/or imprisonment. Take is defined as any attempt to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, (and) any part, nest, or eggs of any such bird.

### ***EXECUTIVE ORDER 13186: RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS***

Executive Order 13186 was created in 2001 to further the intent of the migratory bird conventions, the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Acts, the Fish and Wildlife Service Coordination Act, and FESA. It requires federal agency actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement, within two years, a Memorandum of Understanding with the USFWS that will promote the conservation of migratory bird populations. Each memo will establish protocols for implementation of the memo and for reporting accomplishments.

### ***EXECUTIVE ORDER 13112: INVASIVE SPECIES***

Under Executive Order 13112, projects that occur on federal lands or are federally funded must, subject to the availability of appropriations, and within administration budgetary limits, use relevant programs and authorities to (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to, and control, populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; and (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded.

### ***CLEAN WATER ACT***

The USACE has jurisdiction and permitting authority under Section 404 of the Clean Water Act over the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE determines the significance of and approves, restricts, or prohibits discharges through application of the Section 404(b)(1) guidelines, the substantive criteria for dredging and fill material discharges under this act. These guidelines have been developed by the U.S. Environmental Protection Agency in conjunction with the USACE. The guidelines are based on the precept that dredged and fill material should not be discharged into aquatic ecosystems, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern. Under the Fish and Wildlife Coordination Act, the USFWS advises the USACE on projects involving dredge and fill activities in waters and wetlands of the United States. Work on some of the management action projects contemplated in the NRMP may require the County to obtain a USACE 404 Permit.

## **STATE OF CALIFORNIA**

### ***CALIFORNIA ENDANGERED SPECIES ACT***

Section 2080 of the California Endangered Species Act (CESA) prohibits the “take” of state-listed threatened and endangered species. The CESA defines take as any action or attempt to hunt, pursue, catch, capture, or kill any listed species. If a proposed project may result in take of a listed species, a permit pursuant to Section 2080 of CESA is required from the California Department of Fish and Wildlife (CDFW). Take of state-listed species is authorized by Section 2081 through a permit process. Take can also be authorized through Section 2835 with an approved Natural Community Conservation Plan (NCCP).

The CDFW also designates “fully protected” or “protected” species as those that may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFW. Species designated as fully protected or protected may or may not be listed as endangered or threatened.

### ***LAKE AND STREAMBED ALTERATION PROGRAM***

Fish and Game Code Section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will do one or

more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state.

Notification is generally required for any project that will take place in the vicinity of a river, stream, or lake. CDFW will determine whether a Lake or Streambed Alteration Agreement is required for the activity. An agreement will be required if the activity could substantially adversely affect an existing fish and wildlife resource. If an agreement is required, it will be prepared by CDFW in coordination with the applicant. The agreement will include measures, as necessary, to protect fish and wildlife resources while conducting the project. Numerous canals and ditches cross the Parkway, and, as indicated above, many of these are under USACE jurisdiction; therefore, a Streambed Alteration Agreement may be required for some management action projects under the NRMP.

### ***PUBLIC TRUST DOCTRINE***

The State Lands Commission has exclusive jurisdiction and ownership of all ungranted tidelands and submerged lands, and the beds of navigable rivers, sloughs and lakes. State ownership extends to lands that lie below the ordinary high-water mark of tidal waterways and the low-water mark of non-tidal waterways. The area between the low-water mark and the ordinary high-water mark of non-tidal waterways is subject to a "public trust easement". Projects which are installed within waterways cannot be constructed on the land within the "public trust easement" without first obtaining a lease from the State Lands Commission. Lease arrangements are typically made after necessary environmental review is completed.

## **LOCAL**

### ***SACRAMENTO COUNTY GENERAL PLAN***

The Sacramento County General Plan Conservation Element contains numerous goals, policies, concepts and strategies to protect and/or preserve biological resources. The following provides the policies applicable to the proposed Project:

CO-18. Support the Water Forum Agreement (WFA) recommended Lower American River Flow Standard.

CO-19. Support the WFA Lower American River Habitat Management Element.

CO-25. Support the preservation, restoration, and creation of riparian corridors, wetlands and buffer zones.

CO-58. Ensure no net loss of wetlands, riparian woodlands, and oak woodlands.

CO-59. Ensure mitigation occurs for any loss of or modification to the following types of acreage and habitat function:

- vernal pools,
- wetlands,
- riparian,
- native vegetative habitat, and
- special status species habitat.

CO-60. Mitigation should be directed to lands identified on the Open Space Vision Diagram and associated component maps (please refer to the Open Space Element).

CO-61. Mitigation should be consistent with Sacramento County-adopted habitat conservation plans.

CO-67. Preserves and conservation areas should have an established funding mechanism, and where needed, an acquisition strategy for its operation and management in perpetuity. This includes existing preserves such as the American River Parkway, Dry Creek Parkway, Cosumnes River Preserve and other plans in progress for riparian areas like Laguna Creek.

CO-75. Maintain viable populations of special status species through the protection of habitat in preserves and linked with natural wildlife corridors.

CO-79. Manage vegetation on public lands with special status species to encourage locally native species and discourage nonnative invasive species.

CO-80. Control human access to sensitive habitat areas on public lands to minimize impact upon and disturbance of special status species.

CO-88. Where removal of riparian habitat is necessary for channel maintenance, it will be planned and mitigated so as to minimize unavoidable impacts upon biological resources.

CO-89. Protect, enhance and maintain riparian habitat in Sacramento County.

CO-90. Increase riparian woodland, valley oak riparian woodland and riparian scrub habitat along select waterways within Sacramento County.

CO-91. Discourage introductions of invasive non-native aquatic plants and animals.

CO-92. Enhance and protect shaded riverine aquatic habitat along rivers and streams.



- CO-96. Reduce dependence on traditional levee protection methods where those methods conflict with habitat preservation efforts and where alternate methods exist which are compatible with preservation efforts and offer an acceptable level of bank stabilization.
- CO-97. Work with appropriate regulatory agencies to reduce bank and levee erosion by minimizing erosive wake activity generated by recreational and commercial boating.
- CO-98. Coordinate with federal, state and local agencies overseeing levee and bank stabilization to investigate and, whenever possible, utilize biotechnical or non-structural alternatives to other conventional stabilization methods.
- CO-99. Encourage habitat restoration and recreational opportunities as an integral part of bank and levee stabilization efforts.
- CO-101. Stabilize the banks of rivers and streams in a manner that increases flood protection and increases riparian habitat functions.
- CO-102. Promote and encourage habitat restoration efforts on and adjacent to our river floodways.
- CO-138. Protect and preserve non-oak native trees along riparian areas if used by Swainson's hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.
- CO-139. Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

#### **AMERICAN RIVER PARKWAY PLAN**

The ARPP is an element of the Sacramento County General Plan and is the governing land use document for the Parkway. The ARPP guides uses in the Parkway through specific land use designations tailored to each of the area plans and a set of allowed and prohibited uses for each designation. The land use designations are: Open Space Preserve, Nature Study Area, Protected Area, Limited Recreation, Developed Recreation and Recreation Reserve. Any facilities proposed in the Parkway must be compatible with the applicable ARPP land use designation.

The ARPP also includes numerous policies that guide land use in the Parkway including policies associated with biological resources. The ARPPU FEIR provides an overview and analysis of ARPP policies that pertain to biological resources within the Biological Resources chapter. Biological Resources mitigation measures specific to the potential land uses and policy impacts associated with the ARPP were adequately discussed in

the ARPPU FEIR. As discussed in the Introduction section, above, the NRMP largely responds and supplements the ARRP to provide relevant and defensible information for making informed decisions regarding management, maintenance, and enhancement of Parkway resources.

### ***OTHER WILDLIFE***

The Parkway is host to a wide range of wildlife species that are not rare, threatened or endangered and that are often spotted by Parkway visitors. Many of these species have adapted to their rural surroundings, and are not as shy of human presence as are their counterparts in uninhabited lands. Deer, turkey, pheasants, songbirds and burrowing mammals are spotted on a regular basis by Parkway visitors. There are many other types of wildlife, such as skunks and coyote, which are equally prevalent but are not seen as often because they tend to be active during the night or at dawn and dusk. There are also many aquatic, amphibious or reptilian species that escape notice because they are small or are hidden from sight in the grasses or within waterways. Although none of the common species are special status, their presence and the opportunity to spot them is an integral part of the Parkway experience.

## **PROPOSED PROJECT – NATURAL RESOURCES MANAGEMENT PLAN**

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As discussed in the Introduction section, the NRMP is a supplement to the ARPP that provides a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. Chapter 4 of the NRMP provides an overview of biological resources within the Parkway - vegetation communities, wildlife habitat, sensitive habitat, habitat connectivity, and special status species – and describes existing impacts to these resources from invasive species and wildland fire. The NRMP also describes impacts to these resources from human use of the Parkway (e.g. recreational use, special events, homelessness). One of the basic objectives of the NRMP is to minimize or avoid impacts to biological resources through Potential Resource Management Actions. These Potential Resource Management Actions are detailed in Chapter 8 of the NRMP and the Project Description chapter of this SEIR.

## **SIGNIFICANCE CRITERIA**

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Standards for determining thresholds of significance were established based on the State CEQA Guidelines and professional standards. Impacts to biological resources were considered significant if the project would result in any of the following:

1. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a special-status-species in local or regional regulatory guidance, plans, policies, or regulations or by CDFW or USFWS;

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by CDFW or USFWS;
3. Have a substantial adverse effect on protected state or federally protected wetlands or surface waters, as defined by the Army Corps of Engineers Wetland Delineation Manual (1987 ed.) and/or as defined by Sections 401 and 404 of the Clean Water Act (including, but not limited to, seeps, vernal pools, swales, drainages, and perennial waterways) through direct removal, filling, hydrological interruption, or other means;
4. 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;
5. Conflict with any local policies or ordinances protecting biological resources; or
6. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or approved local, regional, or state habitat conservation plan.

## **METHODOLOGY**

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The methodologies used to determine significance rely on documents published by or endorsed by regulatory agencies. The applicable documents and methods are cited and described in the applicable impact discussions, below. In absence of such published documents, the analyses rely on the general definitions of significance.

Note that in addition to the analysis and mitigation measures specified below, all projects will be subject to state and federal permitting processes, as required. Therefore, projects may include coordination with the California Department of Fish and Wildlife (CDFW), Central Valley Flood Protection Board (CVFPB), United States Fish and Wildlife Service (USFWS), United States Army Corps of Engineers (USACE), and others. Projects with the potential to impact hydrology would be required to minimize their effects by existing ordinances, regulations, and standards.

## IMPACTS AND ANALYSIS

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### **IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATION, ON ANY SPECIES IDENTIFIED AS A SPECIAL STATUS SPECIES**

#### ***INVERTEBRATES***

##### **VERNAL POOL INVERTEBRATES**

There are a variety of invertebrate species which rely on vernal pools and similar seasonal wetland habitat. Species associated with vernal pools include California linderiella, midvalley fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, and Ricksecker's water scavenger beetle. All of these species spend their life cycle within the margins of the vernal pool. None of these species are readily observed through casual observation. Thus, lack of recorded sightings is not cause to conclude that the species is not present. If suitable habitat is present, the species should be assumed to be present unless surveys have found the species to be absent. Discussion of the California linderiella, midvalley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp are grouped under the heading of Vernal Pool Crustaceans, because the survey protocols and mitigation requirements are applied to all four species.

Both the water flea and Ricksecker's water scavenger beetle are listed in the CNDDB, but neither has any special status. Therefore, other than to note that the Parkway contains habitat for both species, no other discussion of these un-imperiled species is included. Impacts are less-than-significant. The vernal pool fairy shrimp and vernal pool tadpole shrimp are both special status branchiopods (from the Class name, Branchiopoda). Two other species, the midvalley fairy shrimp and California linderiella, are not special status but are often included on the CNDDB and other listings because where one of these species is present, it is likely that one of the listed species is also present. The Project does not involve net-loss of the wetland habitat where these species live their entire life cycle. The USFWS has published standard protocol for the species. Any suitable habitat is presumed to have listed branchiopods present unless determinate surveys demonstrate that they are not present. If presence is either confirmed or assumed, USFWS requires 1:1 compensation through creation of habitat, and either 2:1 or 3:1 compensation through habitat preservation.

#### ***PROJECT IMPACTS***

The above invertebrate species are known to occur or have the potential to occur in the Parkway. The ARPPU FEIR identified activities that could impact invertebrate species, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in disturbance that could result in impacts to invertebrate species. With Mitigation Measure BR-21, as revised below, impacts are ***less than significant***.

### **INVERTEBRATES: VELB**

The valley elderberry longhorn beetle (VELB) relies on a single host plant, the elderberry bush, for food, shelter, and nesting habitat. The species itself is rarely seen – presence is determined if there are holes on the stems of elderberry plants in an area. These holes are the exits bored by beetles that have completed pupation inside the plant and are now exiting as breeding adults. Typically, a stem must be at least one inch in diameter in order to support a larva.

### ***PROJECT IMPACTS***

There are many locations throughout the Parkway where elderberry plants are present, and many of these plants show evidence that the species is present. There are also elderberry restoration/mitigation sites within the Parkway, such as the sites in the River Bend area. The ARPPU FEIR identified activities that could impact invertebrate species, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in ground disturbance that could result in impacts to invertebrate species. With Mitigation Measure BR-22, as revised below based on USFWS standard protocols, impacts are ***less than significant***.

### ***AMPHIBIANS AND REPTILES***

#### **WESTERN POND TURTLE**

The western pond turtle (*Emys marmorata*)<sup>3</sup>, is listed as a California Species of Special Concern by CDFW. According to the CDFW Life and History Account for the species, the western pond turtle is an aquatic turtle that usually leaves the aquatic site to reproduce, aestivate, or overwinter. Western pond turtles require some slack- or slow-water aquatic habitat. High-gradient streams with minimal cover or basking habitat are not suitable. In pond environments the species typically only leaves the water to reproduce, whereas in stream environments the turtles more commonly leave the water to aestivate or overwinter, in addition to leaving for reproduction. Turtles leave the water to overwinter in October or November, and typically become active in March or April. Mating typically occurs in late April or early May, but may occur year-round. Most egg-laying occurs in May or June, but may occur as early as April or as late as August. The hatchlings remain in the nest over the winter, and emerge in the spring. Suitable nesting locations have dry soils (usually in a substrate with a high clay or silt fraction) on a slope that is unshaded and may be at least partially south-facing. The nest site can be up to 1,300 feet from the aquatic habitat, but it is more typical for the nest to be within 650 feet of aquatic habitat.

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<sup>3</sup> The western pond turtle was identified as being comprised of two subspecies, one of which was the northwestern pond turtle (*Clemmys marmorata marmorata*). It is still listed as such in the Fish and Game Life History Account, as the account was written in 1994; however, the current special animals list clarifies that subsequent research has shown that the subspecies designations were not warranted, and the western pond turtle is now tracked only by species, not subspecies.

The Life History Account conservatively recommends a buffer of 1,650 feet to ensure that neither adults nor nests will be impacted.

### **PROJECT IMPACTS**

The western pond turtle is known to occur within the Parkway, as it contains foraging and nesting habitat for the species. There are eleven recorded occurrences of western pond turtle within the project search area and three recorded occurrences within the Parkway, specifically within the Ancil Hoffman County Park and Sailor Bar area plans.

The ARPPU FEIR identified ground-disturbing activities that could impact western pond turtles, and identified mitigation measures to reduce impacts to less than significant. The NRMP management activities have the potential to result in ground disturbance that could result in impacts to western pond turtles. The CDFW has not published mitigation or other regulatory guidance for the treatment of impacts to this species. As a result, mitigation is focused on preventing construction activities from resulting in direct mortality of a western pond turtle. A survey shall be required within 24-hours prior to ground-disturbing activities to ensure that there are no western pond turtles within or near the construction area. With mitigation measure BR-23, as revised below, impacts to western pond turtle are ***less than significant***.

### **WESTERN SPADEFOOT**

Western spadefoot toads spend most of their lives in underground burrows, only coming to the surface to breed in wetlands. Mitigation has already been included in this document that will prevent net-loss of wetlands, so no net-loss of breeding habitat is expected (the most significant contributing factor in the decline of the species). The ARPPU FEIR identified ground-disturbing activities that could impact amphibian species. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in ground disturbance that could result in impacts to western spadefoot. Mitigation measure BR-28 has been included to ensure that preconstruction surveys are implemented to avoid impacts to individual western spadefoot, resulting in impacts that are ***less than significant***.

### **BIRDS**

Based on the types of habitat present on or near the Parkway, the following special status avian species are known to occur, or have the potential to occur, within the Parkway: Bald Eagle, Burrowing Owl, Cooper's Hawk, Double-crested Cormorant, Ferruginous Hawk, Golden Eagle, Great Blue Heron, Great Egret, Merlin, Northern Harrier, Peregrine Falcon, Purple Martin, Snowy Egret, Swainson's Hawk, Tricolored Blackbird, Yellow-billed Cuckoo, Bank Swallow, and White-tailed Kite. This section also addresses nesting raptors and migratory birds in general, which are also afforded protections pursuant to the California Fish and Game Code and the Migratory Bird Treaty Act (MBTA) regardless of status.

### **NESTING RAPTORS**

The ARPPU FEIR identified activities that could impact nesting bird species, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in disturbance that could result in impacts to individual nesting birds.

The previously identified mitigation measure (BR-18) remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices. To avoid impacts to nesting raptors, mitigation involves pre-construction nesting surveys to identify any active nests and to implement avoidance measures if nests are found – if construction will occur during the nesting season of March 1 to September 15. The purpose of the survey requirement is to ensure that construction activities do not agitate or harm nesting raptors, potentially resulting in nest abandonment or other harm to nesting success. If nests are found, the project proponent is required to contact CDFW to determine what measures need to be implemented in order to ensure that nesting raptors remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of natural screening. If no nesting raptors are observed, no further mitigation will be required; however, prior to commencement of NRMP management activities, adherence with mitigation measure BR-18, will result in ***less than significant*** impacts to nesting raptors.

### **SWAINSON'S HAWK**

The Swainson's hawk (*Buteo swainsoni*) is listed as a Threatened Species by the State of California and is a candidate for federal listing as threatened or endangered. It is a migratory raptor typically nesting in or near valley floor riparian habitats during spring and summer months. Swainson's hawks were once common throughout the state, but loss of nesting habitat (trees) and the loss of foraging habitat (grasslands) through the conversion of these habitat types to certain incompatible agricultural and urban uses has caused an estimated 90% decline in their population.

Swainson's hawks feed primarily upon small mammals, birds, and insects. Their typical foraging habitat includes native grasslands, alfalfa, and other hay crops that provide suitable habitat for small mammals. Certain other row crops and open habitats also provide some foraging habitat. The availability of productive foraging habitat near a Swainson's Hawk nest site is a critical requirement for nesting and fledgling success. In central California, about 85% of Swainson's Hawk nests are within riparian forest or remnant riparian trees.

### ***PROJECT IMPACTS - SWAINSON'S HAWK NESTING***

Swainson's Hawk are known to occur and nest within the Parkway. The ARPPU FEIR identified activities that could impact Swainson's Hawk, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to

promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in disturbance that could result in impacts to nesting birds. The previously identified mitigation strategy remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices.

Protocol nesting surveys will be required, consistent with Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000), prior to new project-specific level construction/management activities associated with the NRMP. At a minimum surveys shall be conducted for the two survey periods immediately prior to the start of construction activities (see Table BR-1) and the survey area shall include both the would cover the project area and include a ½-mile buffer around the project footprint. The purpose of the survey requirement is to ensure that construction activities do not agitate nesting hawks, potentially resulting in nest abandonment or other harm to nesting success. If Swainson's Hawk nests are found, the CDFW shall be contacted to determine what measures need to be implemented in order to ensure that nesting hawks remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest and the types of activities. Adherence to mitigation measures BR-29 shall reduce impacts to ***less than significant***.

**Table BR-1: Recommended Survey Periods for Swainson's Hawk (TAC 2000)**

Period #	Timeframe	# of surveys required	Notes
I.	Jan. 1 – Mar. 20	1	Optional, but recommended
II.	Mar. 20 – Apr. 5	3	
III.	Apr. 5 – Apr. 20	3	
IV.	Apr. 21 – June 10	N/A	Initiating surveys is not recommended during this period
V.	June 10 – July 30	3	

#### ***PROJECT IMPACTS – SWAINSON'S HAWK FORAGING HABITAT***

The NRMP Resource Management Actions support the preservation, conservation, and restoration of natural and biological resources within the Parkway; therefore, it is not anticipated that there will be impacts to grasslands that may serve as foraging habitat for Swainson's hawks. ***Less than significant impacts*** to Swainson's hawk foraging habitat are anticipated.

#### **MIGRATORY BIRDS**

The ARPPU FEIR identified activities that could impact nesting bird species, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological



impacts to these communities. The management activities have the potential to result in disturbance that could result in impacts to nesting birds.

The previously identified mitigation strategy remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices. Vegetation in the project vicinity provides nesting habitat for migratory birds. To avoid take of nesting migratory birds, mitigation measure BR-19 requires that activities occur outside of the nesting season or requires that nests be buffered from construction activities until the nesting season is concluded; therefore, impacts to migratory birds will be ***less than significant***.

### **BANK SWALLOW**

The bank swallow (*Riparia riparia*) nest in nearly vertical banks/cliff faces and requires substrates comprised of soft soils such as fine sandy loam, loam, silt loam, and sand. Suitable banks for nesting must be at least 1 meter (3.3 feet) above ground or water for predator avoidance. Suitable colony nest sites are scattered throughout the species' remaining California range; they are most often found adjacent to large rivers in the Sacramento Valley and occasionally in gravel and sand mines that provide and maintain nesting habitat. Colony sites are often used in subsequent years as long as the substrate and burrows remain intact. Bank swallows breed between April and July. The species is listed as Threatened by the State of California.

The ARPPU FEIR identified activities that could impact bank swallow, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in activities that could result in impacts to nesting birds. The previously identified mitigation measure (BR-17) remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices. Therefore, impacts to bank swallows are ***less than significant***.

### **WESTERN BURROWING OWL**

According to the CDFW life history account for the species, Burrowing Owl (*Athene cunicularia*) habitat can be found in annual and perennial grasslands, deserts, and arid scrublands characterized by low-growing vegetation. Burrows are the essential component of burrowing owl habitat. Both natural and artificial burrows provide protection, shelter, and nesting sites for burrowing owls. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also use human-made structures such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are listed as a California Species of Special Concern due to loss of breeding habitat.

Burrowing owls are known to occur within the Parkway. The ARPPU FEIR identified activities that could impact Burrowing Owl and identified mitigation measures to reduce

impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in disturbance that could result in impacts to nesting burrowing owls. Mitigation measure BR-30 has been included that requires protocol level surveys in suitable habitat and if owls are observed CDFW shall be consulted prior to construction activities. Implementation of this mitigation measure reduces impacts to Burrowing owls to ***less than significant***.

### **PURPLE MARTIN**

The purple martin (*Progne subis*) is a migratory species which is typically present in California from mid-March to late September. The species is listed as a California Species of Special Concern due to impacts to nesting habitat. The species is typically a colonial nester, and nest sites include crevices in cliffs and hollow trees, though the species is also known to use nest boxes provided by humans. Nesting season extends from May to mid-August. The only area of Sacramento County known to host nesting purple martin is the general area near downtown Sacramento, where the best-known colony occupies the underside of the I-Street bridge off-ramp. (Species Account for the Purple Martin, "California Bird Species of Special Concern," 2008).

Purple martin is known to occur in the Parkway as it contains suitable foraging and nesting habitat (bridges and elevated rail crossings) for the species. There are multiple observations recorded in eBird within the Parkway boundaries. Additionally, there are ten recorded CNDDB occurrences within the region but not within the Parkway. Most of the recorded occurrences are located along freeway and bridge structures.

The ARPPU FEIR identified activities that could impact purple martin and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in ground disturbance that could result in impacts to individual nesting birds. The previously identified mitigation strategy remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices. Mitigation measure BR-31 has been included that requires pre-construction surveys and coordination with CDFW prior to construction if nests are found. Implementation of this mitigation measure reduces impacts to Purple martins to ***less than significant***.

### **TRICOLOR BLACKBIRD**

The Tricolored Blackbird (*Agelaius tricolor*) is protected under the California Fish and Game Code (Sections 3503 and 3800). In March of 2019, Tricolored Blackbird was listed as a Threatened Species under the California Endangered Species Act.

Reasons for decline of tricolored blackbird populations include loss of nesting and foraging habitat. According to the CDFW Life History Account for the Tricolored Blackbird the species is mostly a resident in California, and common locally throughout

the Central Valley. The species is a colonial nester which breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herbs. Nesting colonies usually support a minimum of 50 pairs. The species feeds in grassland and cropland habitats. The usual breeding season is mid-April into late July.

The ARPPU FEIR identified activities that could impact Tricolored Blackbird, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in disturbance that could result in impacts to individual nesting birds. The previously identified mitigation measure (BR-16) remains appropriate to mitigate impacts associated with the NRMP. Where appropriate, specific mitigation measure language has been updated from the previously adopted mitigation to reflect current best practices. With mitigation measure BR-16, as revised below, impacts from management actions are ***less-than-significant***.

#### **WESTERN YELLOW-BILLED CUCKOO**

The Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*), was listed as a Federally Threatened species effective on November 3, 2014. The western population of the species breeds along river systems west of the Rocky Mountains. Western Yellow-billed cuckoos require relatively large (greater than 50 acres), contiguous patches of multilayered riparian habitat along broad, lower flood-bottoms of larger river systems for nesting. Cottonwood-willow forests are preferred.

Historically, breeding western yellow-billed cuckoos occurred west of the Continental Divide, from British Columbia south into northern Mexico. They no longer occur in much of their historic range, but breed instead rarely and locally along rivers in Arizona, California, and New Mexico. Yellow-billed cuckoos generally arrive in California during June, and begin migration to wintering grounds in South America by late August.

Breeding populations of this species in California are concentrated along the upper Sacramento River from Red Bluff to Colusa, and along the South Fork of the Kern River. Small numbers of breeding pairs have also been detected along the Feather River from Oroville to Verona, and in a few locations in southern California.

The Parkway contains riparian woodland that the cuckoo could potentially utilize for habitat. The cuckoo nests almost exclusively in patches of contiguous riparian habitat covering 50 acres or more like the Parkway, which contains large expanses of riparian habitat. There are two recorded observations of the cuckoo within the Parkway (eBird 2014). The nearest observation is within the William B. Pond Recreation area and was recorded as a cuckoo calling about 100 yards south of the bike trail. The other occurrence was recorded in riparian habitat directly across the river from Paradise Beach.

**PROJECT IMPACTS**

The Parkway woodlands provide habitat that could be used by western Yellow-billed Cuckoo. The ARPPU FEIR identified activities that could impact western Yellow-billed Cuckoo, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those Potential Resource Management Actions that would result in the fewest biological impacts to these communities. Impacts to nesting western Yellow-billed Cuckoo will be covered through application of mitigation measures for the Migratory Bird Treaty Act nesting bird survey (mitigation measure BR-19). With implementation of mitigation, impacts to western Yellow-billed cuckoos are ***less than significant***.

**MAMMALS****AMERICAN BADGER**

According to the CDFW life history account for the species, the American badger (*Taxidea taxus*) is an uncommon, permanent resident which is most often found in drier open stages of shrub, forest, and herbaceous habitats. Badgers dig burrows in soils, which are easily crumbled and broken down, and regularly dig new burrows to use for cover during the night. Badgers may exhibit some torpor in winter, but do not hibernate. Home ranges vary by geography and season, but are generally quite large (up to 1,500 acres for males). Badgers mate in the early summer and fall, and young are born in March and April; females bear and rear young within burrows. Badgers prey on small mammals, reptiles, and insects. The conversion of suitable habitat to either urban or agricultural uses has contributed to the decline of the species, as has the usage of rodenticides and other “pest” control mechanisms – which has resulted in direct mortality due to ingestion and also a substantial reduction in the prey base. The American badger is state-listed as a Species of Special Concern.

**PROJECT IMPACTS**

The NRMP Potential Resource Management Actions support the preservation, conservation, and restoration of natural and biological resources within the Parkway, including its biological communities, which include shrub, forest, and herbaceous areas. The plan will protect habitat for the American Badger within the Parkway, which means that impacts to habitat that support the American Badger are not anticipated. The ARPPU FEIR included mitigation to ensure that in the event that badgers are identified within the Parkway, that information be recorded and conveyed to CDFW. Mitigation measure BR-20 from the ARPPU FEIR remains appropriate and has been included for the current project. Mitigation identifies recordation requirements from the ARPPU FEIR for American Badger. Impacts to American Badger are ***less than significant***.

## ***FISH***

### **CHINOOK SALMON**

According to the Public Draft Recovery Plan for the Chinook salmon<sup>4</sup> (*Oncorhynchus tshawytscha*) have an array of life history patterns which allow the species to take advantage of seasonal changes in river conditions. The main variants are based on the timing of the migration from ocean environments to river environments for spawning, and are: fall-run, late fall-run, winter-run, and spring-run. The Sacramento River supports all four runs of salmon, and the larger tributaries to the river (American, Yuba, and Feather rivers) provide habitat for some of these runs. The Sacramento River winter-run Chinook salmon is listed as Endangered and the Central Valley spring-run Chinook salmon is listed as Threatened by both the state and federal Endangered Species Acts. The entire length of the Sacramento River is designated Critical Habitat for the Sacramento River winter-run Chinook salmon and the Central Valley spring-run Chinook salmon. The American River downstream of Nimbus Dam is designated Critical Habitat for the Central Valley spring-run Chinook salmon, as are several sloughs connected to the Sacramento River in the Delta (Georgiana, Steamboat, Horseshoe, Threemile, and Sevenmile sloughs).

Winter-run Chinook salmon are primarily restricted to the main stem Sacramento River, with spawning occurring north of Red Bluff, and rearing and migration occurring south of Red Bluff and juveniles have been observed in the American River. Adult migration through the Delta and into the lower Sacramento River occurs December through July 1, spawning occurs between late April and mid-August, and fry emergence occurs from mid-June to mid-October. Fry begin moving downstream as early as mid-July and as late as March, usually after remaining up to one year in upstream habitats. Smaller fry require streamside habitats with riparian vegetation and associated areas that provide food, cover, and slower water velocities. As the fry become larger, they may be found in deeper water with higher velocities, but still need refuges for resting.

Central Valley spring-run Chinook salmon habitat needs are the same as those described above. Upstream migration occurs in late January and early February, and fish enter the Sacramento River between March and September (primarily in May and June). Spawning occurs between mid-August and early October in the upper reaches of the watersheds; the southernmost spawning area is in Yuba County. Fry emergence is from November to March, and juveniles remain in freshwater habitats for 12 – 16 months. In Sacramento County, the rivers are noted as migration and rearing habitat. Based on studies of relative abundance during various seasons, juveniles are absent from Sacramento River tributaries from April through September, but are present in the Delta year-round.

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<sup>4</sup> National Marine Fisheries Service, “Public Draft Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the District Population Segment of Central Valley Steelhead”, October 2009.

### **CENTRAL VALLEY STEELHEAD**

According to the Public Draft Recovery Plan for the steelhead<sup>5</sup> (*Oncorhynchus mykiss*), the species can be a freshwater resident or anadromous. Freshwater residents are called rainbow trout and the anadromous version are called steelhead. There are multiple distinct population segments of steelhead, including the Northern California, Central California Coast, and Central Valley populations. The Central Valley steelhead is federally-listed as Threatened, and the species uses the San Joaquin and Sacramento Rivers and their tributaries.

In Sacramento County, the main stem Sacramento River and Delta-area sloughs are noted as migration and rearing habitat. The portion of Dry Creek in northern Sacramento County is also noted as migration and rearing habitat and spawning occurs in the upper reaches of Dry Creek, in Placer County. Spawning also occurs within the American River between Nimbus Dam and Paradise Beach (near Fair Oaks Boulevard). Note that steelhead migration and spawning also occurs within the Cosumnes River and in lower reaches of the Mokelumne River, but that the steelhead which migrate and spawn here are considered independent populations from the Central Valley distinct population segment. The Sacramento River, the American River up to Nimbus Dam, Dry Creek in northern Sacramento County, and the Mokelumne River are designated as Critical Habitat. Several sloughs connected to the Sacramento River in the Delta (Georgiana, Steamboat, Horseshoe, Threemile, and Sevenmile sloughs) are also designated Critical Habitat.

Central Valley steelhead enter freshwater from August through April, where they wait until flows in tributaries are high enough to allow entry for spawning. Spawning typically occurs from December through April. Eggs may incubate from 1.5 to four months before hatching, depending on the water temperature. Juvenile steelhead typically migrate to the ocean in spring and early summer, at one to three years old, with peak migration through the Delta in March and April; however, studies have shown that juveniles in the Sacramento River Basin migrate downstream during most months of the year.

### **SACRAMENTO SPLITTAIL**

According to the Recovery Plan for Sacramento Delta fish<sup>6</sup>, Sacramento splittail (*Pogonichthys macrolepidotus*) is a freshwater fish which is tolerant of salinity, and is endemic to the Central Valley. Though once widely distributed throughout Central Valley lakes and rivers, during most of the year the species' range is limited to portions of the Delta which are outside of Sacramento County, and are largely absent from the main Sacramento River channel. The species is a California Species of Special Concern.

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<sup>5</sup> National Marine Fisheries Service, "Public Draft Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the District Population Segment of Central Valley Steelhead", October 2009.

<sup>6</sup> United States Fish and Wildlife Service, "Recovery Plan for the Sacramento/San Joaquin Delta Native Fishes", November 1996.

Sacramento splittail migrate upstream to spawn, and may be found as far up as the confluence of the Sacramento and Feather Rivers. The timing of spawning varies based on the habitat available. In the upper Delta spawning takes place from March through May, whereas in the tidal freshwater and saltwater habitats of the Sacramento-San Joaquin estuary spawning may occur as early as late January and last through July. Most spawning occurs from February through April. Sacramento splittail spawn on submerged vegetation in flooded areas. The loss of this flooded riparian habitat, along with changes to water flows associated with water diversions, is considered a primary factor in the species' decline.

### **PROJECT IMPACTS**

The above fish species are known to occur or have the potential to occur in the Parkway. The overall goals and implementation of the plan would result in a net benefit to fish species and habitat within the Parkway. Depending on the extent of improvements proposed for the NRMP Potential Resource Management Actions, the above fish species may be impacted during individual project implementation. Adherence to the applicable mitigation measures adopted with the ARPPU FEIR (mitigation measure BR-24) shall reduce impacts to ***less than significant***.

### ***SPECIAL STATUS PLANTS***

All of the rare plants with the potential to be present in the Parkway are dependent on surface water habitats. In fact, many of the species are rare because they are only found in vernal pools, a habitat whose prevalence has been significantly reduced in California compared to the historic range.

The ARPPU FEIR identified activities that could impact rare plants, and identified mitigation measures to reduce impacts to less than significant. The overall goal of the NRMP is to promote successful biological communities within the Parkway, and the NRMP identifies those management actions that would result in the fewest biological impacts to these communities. The management activities have the potential to result in ground disturbance that could result in impacts to individual rare plants. The previously identified mitigation strategy remains appropriate to mitigate impacts associated with the NRMP. Mitigation is included to require rare plant surveys for any wetland, marsh or stream habitats prior to construction within 250 of the habitat margin. If rare plants are found, authorization to impact the plants must be granted from Fish and Wildlife and/or Fish and Game. Any mitigation resulting from those permit actions must prioritize transplantation of the rare plants to an unaffected wetland. Adherence to the applicable mitigation measures adopted with the ARPPU FEIR (mitigation measure BR-25) shall reduce impacts to the rare plant species to ***less than significant***.

### **MITIGATION MEASURES:**

**BR-21. *Vernal Pool Crustaceans*** (revised from ARPPU as follows) - Presence of listed vernal pool crustaceans (*Branchinecta lynchi* & *Lepidurus packardii*) shall be assumed unless determinate surveys that comply with the USFWS protocol "Survey Guidelines of the Listed Large Branchiopods" (published on May 31, 2015) conclude that the species is absent. In order to reduce impacts to listed

vernal pool branchiopods and wetland habitat the applicant shall comply with one or a combination of the following:

- A. *Total Avoidance: Species is present or assumed to be present.* Unless a smaller buffer is approved through formal consultation with the USFWS, construction fencing shall be installed a minimum of 250 feet from the delineated wetland margin. All construction activities are prohibited within this buffer area. If total avoidance is achieved, no further action is required.
- B. Compensate for habitat removed. Mitigate for all vernal pools consistent with the Programmatic Formal Endangered Species Act Consultation published on February 28, 1996 for vernal pool branchiopods, if the project qualifies. Also, obtain all applicable permits from USFWS, USACE, CDFW, and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site wetlands and mitigate for habitat loss in accordance with the published regulatory guidelines.

**BR-22. VELB** (revised from ARPPU as follows) - To reduce project impacts to the VELB habitat to a less than significant level the following mitigation measures, consistent with U.S. Fish and Wildlife Conservation Guidelines for the Valley Elderberry Longhorn Beetle, will be required:

- A. For construction prior to obtaining the applicable permits allowing removal of the elderberry plants, protective measures shall apply. Prior to initiating construction, the following measures shall be completed:
- B. Temporary construction fencing and flagging shall be installed at least 165 feet outside the edge of the driplines of the elderberry plants. In areas where encroachment on the 165 -foot buffer has been approved by U.S. Fish and Wildlife, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant and provide documentation of U.S. Fish and Wildlife approval of the reduced setback.
- C. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.
- D. Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.
- E. Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.



- F. Prior to construction within the 165-foot buffer area (or lesser buffer, as approved by U.S. Fish and Wildlife) established around the elderberry plants shrubs.
- G. implement one of the following methods (or a combination of the following two methods) to reduce impacts to the Valley Elderberry Longhorn Beetle to a less than significant level:
  - i) Either: Elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level shall be transplanted to a conservation area approved by U.S. Fish and Wildlife. The project applicant shall consult with the U.S. Fish and Wildlife on all transplantation activities and obtain all applicable permits.

And/Or:

- ii) The project applicant shall compensate for the loss of elderberry plants on the site to the satisfaction of the U.S. Fish and Wildlife and shall obtain any/all applicable permit(s) from the Army Corps and the U.S. Fish and Wildlife.

**BR-23. *Western Pond Turtle*** (revised from ARPPU as follows) - To avoid impacts to western pond turtles the following measures shall apply:

- A. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.
- B. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat.
- C. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. CDFW and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.

**BR-28. *Western Spadefoot Toad*** - Prior to surface disturbance in suitable habitat for Western Spadefoot Toad within the proposed project activity areas, a qualified biologist shall conduct surveys to determine the presence of the western spadefoot toad (*Spea hammondi*).

- A. Surveys shall be conducted at the appropriate time of the year (typically February-March when eggs, larvae, or tadpoles can be detected). If Western Spadefoot Toad is encountered during surveys, a site-specific avoidance, minimization, and/or relocation plan shall be prepared and ensure any measures in the approved plan are in place prior to project activities. If relocation (including out of harm's way), Western Spadefoot Toad shall only be relocated by a qualified biologist with the appropriate state and/or federal handling authorizations.
- B. Within suitable aquatic or upland western spadefoot habitat, all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within suitable habitat will be inspected for western spadefoot toad.
- C. If erosion control is implemented within suitable aquatic or upland western spadefoot habitat, non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls held together without synthetic netting containing burlap are examples of acceptable erosion control materials.

**BR-18. *Nesting Raptors*** - If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between March 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree and ground nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required. If any active nests are found, the Environmental Coordinator and California Fish and Wildlife shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest.

**BR-29. *Swainson's Hawk Survey (TAC 2000)***. If construction, grading, or project-related improvements are to commence between February 1 and September 15, focused surveys for Swainson's hawk nests shall be conducted by a qualified biologist within a ½-mile radius of project activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). To meet the minimum level of protection for the species, surveys should be completed for the

two survey periods immediately prior to commencement of construction activities in accordance with the 2000 TAC recommendations. If active nests are found, CDFW shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any activities. If no active nests are found during the focused survey, no further mitigation will be required.

**BR-19. *Migratory Birds*** (revised from ARPPU as follows) - For all migratory bird species not covered in other mitigation measures (including western yellow-billed cuckoo), the following guidelines shall be followed:

- A. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 day prior to construction by a qualified biologist.
- B. Vegetation slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any vegetation that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.
- C. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.

**BR-17. *Bank Swallow*** - Any construction activity within 200 feet of the bank of the American River shall comply with the following: A focused survey for bank swallow nests shall occur between April 1 and July 1 and be conducted by a qualified biologist no less than 14 days and no more than 30 days before construction commences. If active nests are found, the applicant shall consult with the CDFW for appropriate avoidance measures. If no active nests are found during the focused survey, submit a written report with date and the name of biologist to Planning and Environmental Review. Upon receiving the report, no further mitigation will be required.

**BR-30 *Burrowing Owl***. Prior to the commencement of construction activities (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:

- A. A survey for burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (~500 feet) of the project impact zone.

- B. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (~100 feet), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.
- C. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.
- D. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012).
- E. If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and consult with California Fish and Wildlife prior to construction, and will be required to submit a Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012) should be used in the development of the mitigation plan.

**BR-31. *Purple Martin Nest Protection.*** Prior to the commencement of construction, a survey for nesting purple martins shall be conducted by a qualified biologist during the typical nesting period (May 1 to August 15). The survey shall cover potential nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no nests are found during the survey, no further mitigation will be required. If any nests are found, the developer shall consult with the CDFW to design and implement appropriate avoidance measures which shall ensure that the nesting area is not disturbed, and will remain a viable nesting location in the future.

**BR-16. *Tricolor Blackbird*** (revised from ARPPU as follows) - If construction activity (which includes clearing, grubbing, or grading) is to commence within 300 feet of suitable nesting habitat between March 1 and July 31, a survey for nesting

tricolored blackbirds shall be conducted by a qualified biologist. The survey shall cover all potential nesting habitat on-site and off-site up to a distance of 300 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 300 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no tricolored blackbird were found during the pre-construction survey, no further mitigation would be required. If an active tricolored blackbird colony is found on-site or within 300 feet of the project site the project proponent shall do the following:

- A. Consult with the CDFW to determine if project activity will impact the tricolored blackbird colony(s). Provide the Environmental Coordinator with written evidence of the consultation or a contact name and number from CDFW. Implement all protective measures recommended by CDFW.
- B. With CDFW permission, the applicant may avoid impacts to tricolored blackbird by establishing a 300-foot temporary setback, with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat). The breeding season typically ends in July.
- C. If tricolored blackbird habitat is permanently destroyed follow the CDFW procedure to mitigate for habitat loss, and submit documentation of the mitigation to the Environmental Coordinator.

**BR-20. *American Badger.*** To reduce potential impacts to American badger, the following shall be required:

- A. A qualified biologist shall conduct focused surveys for American badger dens within 2 weeks prior to ground-disturbing activities in suitable habitat (i.e., undeveloped grassland) within the Parkway. The survey shall cover the limits of ground disturbance and a 100-foot buffer. Any potentially active American badger dens located during the survey that show signs of recent activity shall be evaluated (typically with remote cameras) to determine activity status.
- B. If an active American badger den is detected during the breeding season (typically from March through May), then prior to construction, the qualified biologist shall establish a 100-foot no-disturbance buffer (e.g., mesh exclusion fencing, flagging, or similar) around the den. The buffer shall be maintained until the qualified biologist determines that the den is no longer active, and the young are no longer dependent upon the den for survival. If a natal den site cannot be avoided throughout the life of the project (including operations and maintenance), destruction of the natal den burrow shall only proceed after the natal den is no longer active and no badger are present within the burrow.

- C. If construction occurs during the non-breeding period (i.e., typically from June through February) and an active non-natal den is found in or immediately adjacent to the construction footprint, a qualified biologist shall attempt to trap or flush the individual (e.g., passive exclusion with one-way doors) and relocate it to suitable habitat away from construction. After exclusion/relocation is completed, the vacated or unoccupied den can be excavated, and construction can proceed.

**BR-25. *Fish.*** In order to avoid impacts to the steelhead, chinook salmon and Sacramento splittail, the following measures must be implemented for all work within the Ordinary High Water Mark of the American River:

- A. In-channel construction and riparian revegetation work on the main channel of the American River during the peak migration period for all three species (November through May, or specific periods that are specified in permits issued for the project by the National Marine Fisheries Service, U.S. Fish and Wildlife Service and/or the California Department of Fish and Game) shall be prohibited.
- B. Erosion control measures that prevent soil and sediment from entering the river shall be installed, monitored for effectiveness and maintained throughout construction operations.
- C. Refueling of construction equipment and vehicles and storage of fuel shall not occur within the leveed floodway.
- D. Truck and concrete equipment wash-down shall not occur within the leveed floodway.
- E. Equipment and vehicles operated within the leveed floodway shall be checked and maintained daily to prevent leaks of fuels, lubricants or other fluids into the river.
- F. Litter and construction debris shall be removed from below the Ordinary High Water Mark daily, and disposed of at an appropriate site.
- G. Comply with water pollution protection provisions and conditions established by the Department of Fish and Game and all regulatory authorities with jurisdiction over the project.
- H. An erosion control and water quality protection plan shall be prepared and implemented that will be subject to the review and approval of the County Department of Water Resources.

**BR-25. *Rare Plant Survey.*** Rare plant surveys will be required in any wetland, marsh, or stream habitats prior to any grading, grubbing, or excavation within 250 feet of the wetland margin. The rare plant surveyor shall have:

- A. experience as a botanical field investigator;
- B. taxonomic experience and a knowledge of plant ecology (the surveyor should have some college coursework in plant taxonomy and ecology, and be a biological professional), and
- C. familiarity with the local flora and potential rare plants in the habitats to be surveyed.

The surveys shall be conducted when the rare plants at the site will be easiest to identify (i.e. flowering stage), and when the plants reach that stage of maturity. A minimum of three site visits shall be required, during the plants' flowering period in order to determine absence. Each site visit must be no less than 7 days apart.

Submit a written report to Planning and Environmental Review. The survey report should include a brief description of the vegetation, survey results, photographs, time spent surveying, date of surveys, a map showing the location of the survey route and any rare plant populations and copies of any rare plant occurrence forms. Notify Fish and Game and Fish and Wildlife if species are found, and apply for "take" authorization (state law section 2081 of the Fish and Game Code and federal Endangered Species Act) prior construction. Priority shall be given to transplanting individual plants to a different surface water in the Parkway, unless it can be demonstrated to the satisfaction of Planning and Environmental Review that transplantation is infeasible.

**IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT ON ANY RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL PLAN, POLICIES, REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S FISH AND WILDLIFE SERVICE**

The following discussion addresses the following natural communities highlighted in the environmental settings section above: valley and foothill grasslands, riparian forest and woodland, riparian scrub, oak woodland and forest, foothill pines, gravel bar chaparral, freshwater emergent, and open water. Specific impacts to surface waters are discussed in the waters section below.

**SIGNIFICANCE CRITERIA**

The significance of an environmental impact to biological resources cannot always be determined through use of a specific quantifiable threshold. CEQA Guidelines Section 15064(b) affirms this by the statement: "An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." Except where a specific methodology is outlined in one of the sections below, significance of an impact to the biological resources discussed in this chapter rely on the policies, codes and regulations described above, as well as the following CEQA Sections:

*Section 15065:*

(a) A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur:

- (1) The project has the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.

*Section 15382:*

"Significant effect on the environment" means 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. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

**PROJECT IMPACTS: SENSITIVE NATURAL COMMUNITIES**

The Parkway contains riparian, oak woodland, and annual grassland biological communities. These areas are further classified into sub-categories of riparian forest and woodland, riparian scrub, oak woodland and forest, foothill pines, gravel bar chaparral. The specific functions and vegetative composition of these communities are discussed further in the environmental settings section above, and the NRMP itself. These communities support willow, cottonwood, valley oak, interior live oak, and blue oak along with a host of other riparian trees.

One of the goals of the NRMP is to protect and further naturalize the sensitive natural communities in the Parkway. The NRMP identifies the following objectives/performance measures as identified in the project description:

- 1.2a Conservation of at least 176 acres of high-quality native riparian vegetation communities in the first 3-5 years.
- 1.2b Conservation of at least 6 acres of high-quality native grassland vegetation communities in the first 3-5 years.
- 1.2c Conservation of at least 54 acres of high-quality native woodland vegetation communities in the first 3-5 years.
- 1.2d Conservation of at least 5 acres of high-quality native elderberry vegetation communities in the first 3-5 years.
- 1.3a Restoration of at least 25 acres of high-quality native riparian vegetation communities in the first 3-5 years.
- 1.3b Restoration of at least 25 acres of high-quality native grassland vegetation communities.



- 1.3c Restoration of at least 25 acres of high-quality native woodland vegetation communities.
- 1.3d Restoration of at least 5 acres of high-quality native elderberry vegetation communities.
- 1.4a Naturalization of at least 50 acres (3-5 years) and at least 60 acres (6-10 years) of native riparian vegetation communities.
- 1.4b Naturalization of at least 5 acres (3-5 years) and at least 50 acres (6-10 years) of native grassland vegetation communities.
- 1.4c Naturalization of 10 acres (3-5 years) and 111 acres (6-10 years) of native woodland vegetation communities.
- 1.4d Naturalization of 30 acres (3-5 years) of native elderberry vegetation communities.
- 1.4e Implementation of 30-65 acres of salmonid habitat enhancement projects in coordination with project proponents within 3-5 years.

Implementation of the NRMP would have a net benefit on all of the natural communities located within the Parkway. Individual projects may have temporary or permanent impacts on isolated features that comprise these communities (such as individual native trees, isolated wetland features/waters, and species impacts). These impacts are largely temporary or limited in scope, and have been discussed further in other topical sections of this chapter. The proposed project is designed to preserve and naturalize riparian and woodland areas that have been impacted by man-made or natural activity along the Parkway. Therefore, overall impacts to sensitive natural communities are ***less than significant***.

### **IMPACT: HAVE A SUBSTANTIAL ADVERSE EFFECT ON PROTECTED STATE OR FEDERALLY PROTECTED WETLANDS OR SURFACE WATERS**

Streams and wetlands provide important functions and values, both for surrounding ecosystems and for people. They provide food, water, shelter, breeding grounds and nurseries for numerous species. Many endangered plant and animal species are dependent on stream and wetland habitats (and the associated riparian zone) for their survival. Wetland hydrologic functions include the reduction of flow velocity, ground-water recharge or discharge, the retention of flood waters and the influence of wetlands on atmospheric processes. Wetland water-quality functions include the trapping of sediment, pollution control, and the biochemical processes that take place as water enters, is stored in, or leaves a wetland. Stream habitats supply drinking water, support recreational opportunities, provide fish and wildlife habitat, contain floodwater and supply water to agriculture.

The United States, State of California, and County of Sacramento have all adopted no-net loss policies for wetlands. No net-loss policies were adopted due to the importance of wetlands as part of a functioning ecosystem, and based on the fact that wetlands are breeding habitat for many listed species. Based on this policy, it is assumed that any loss of wetland is significant if net-loss results. The term “surface waters” is used to describe any wetland, stream or other feature that is above ground.

Seasonal wetlands and vernal pools are a distinct type of wetland feature. Determining whether this subcategory type is present requires a wetland assessment, or delineation, that involves soil samples and borings, plant sampling and other measures. This more detailed level of field analysis is not required at this stage in the planning process – a delineation would be completed as part of the planning process for implementation of a project.

### **WETLAND OR SURFACE WATERS PROJECT IMPACTS**

The NRMP is a programmatic document; specific projects within wetlands are not proposed as part of the plan. A wetland delineation was not prepared in support of the plan. NRMP Potential Resource Management Actions may impact protected wetlands and/or surface waters; however, the intent of the NRMP is to preserve and naturalize areas that have been impacted by man-made activity in the Parkway. Thus, impacts to wetlands and protected waters may be minimal or non-existent for most of the management actions considered in the NRMP. Directly or indirectly impacting wetlands or waters of the U.S. or State require permits from the USACE for all jurisdictional features, the Regional Water Quality Control Board (RWQCB) for all waters, and the CDFW for features that meet the definition under Section 1600 of the Fish and Game Code. Permits may require mitigation to compensate for the temporary or permanent removal of wetlands or surface waters.

As concluded in the ARPPU FEIR, impacts to wetlands and/or surface waters are reduced to a *less than significant* level with implementation of compensatory mitigation in accordance with the Sacramento County *General Plan* Wetland Policies (CO 58 and 59) at a minimum. Compensatory mitigation for wetland and surface water impacts will take place as projects become ready for implementation.

NRMP Potential Resource Management Actions have the potential to have similar types of impacts on wetlands and/or surface waters identified in the ARPPU FEIR. Individual management actions will be evaluated for potential impacts to wetlands and/or surface waters during construction or implementation activities. In the event that an activity associated with the NRMP would impact waters, adherence to the BR-2 Wetland Impacts mitigation measure below, shall reduce impacts to ***less than significant***.

### **MITIGATION MEASURES:**

**BR-2. *Wetland Impacts*** (revised from ARPPU as follows) - All projects that have identified wetlands within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following:

To compensate for the permanent loss of wetlands, the applicant shall perform one or a combination of the following prior to issuance of building permits, and shall also obtain all applicable permits from the Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Central Valley Regional Water Quality Control Board, and the California Department of Fish and Wildlife:

- A. Where a Section 404 Permit has been issued by the Army Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation

and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of achieving a no net-loss of wetlands. The required Plan shall be submitted to the Sacramento County Environmental Coordinator, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service for approval prior to its implementation.

- B. If regulatory permitting processes result in less than a 1:1 compensation ratio for loss of wetlands, the Project applicant shall demonstrate that the wetlands which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.

**IMPACT: 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**

The project is located within the Parkway, an open space corridor and waterway for native resident, migratory fish, and other wildlife species, which contains native resident or migratory wildlife corridors for a variety of species. The ARPPU FEIR determined that improvements associated with the project could impact resident or migratory species within the Parkway. The prior conclusion and mitigation remains appropriate for the current project.

Depending on the extent of improvements proposed for the NRMP Potential Resource Management Actions, the movement of any native resident, migratory fish, or wildlife species and/or native resident or migratory wildlife corridors may be impacted. The intent of the proposed project is designed to restore and naturalize habitat areas that have been impacted by human uses and/or natural activity along the Parkway to protect and conserve important resources within the Parkway. Thus, there is potential to maintain and perhaps increase the acreage that native resident, migratory fish, or other wildlife species use within the Parkway. For example, NRMP Potential Resource Management Actions for some Parkway area plans include improve spawning rifle to create suitable habitat for salmonids and lowering the floodplain to improve rearing habitat for target fish species. Adherence to the applicable mitigation measures identified for individual migratory species in this chapter, impacts would be reduced to ***less than significant***.

**MITIGATION MEASURES:**

Mitigation Measures BR-16 through BR-31.

## **IMPACT: CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES**

### ***NATIVE TREES***

Sacramento County has identified the value of its native and landmark trees and has adopted measures for their preservation. The Tree Ordinance (Chapter 19.04 and 19.12 of the County Code) provides protections for landmark trees and heritage trees. The County Code defines a landmark tree as “an especially prominent or stately tree on any land in Sacramento County, including privately owned land” and a heritage tree as “native oak trees that are at or over 19” diameter at breast height (dbh).” Chapter 19.12 of the County Code, titled Tree Preservation and Protection, defines native oak trees as valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*) and states that “it shall be the policy of the County to preserve all trees possible through its development review process.” It should be noted that to be considered a tree, as opposed to a seedling or sapling, the tree must have a diameter at breast height (dbh) of at least 6 inches or, if it has multiple trunks of less than 6 inches each, a combined dbh of 10 inches. The Sacramento County General Plan Conservation Element policies CO-138 and CO-139 also provide protections for native trees:

CO-138. Protect and preserve non-oak native trees along riparian areas if used by Swainson’s Hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.

CO-139. Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

Native trees other than oaks include Fremont cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis*), gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding’s willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

### **NATIVE TREE PROJECT IMPACTS**

There are native trees throughout the Parkway. Depending on the extent of project improvements proposed for the NRMP Potential Resource Management Actions, native trees may be removed. With the intent of the NRMP to restore habitats along the Parkway, in some cases additional native trees maybe planted due to the proposed project. A tree inventory has not been completed for this area; therefore, the exact species, size and health of the trees are unknown. In order to comply with County

General Plan policies, a tree inventory will be required prior to project development and plan approval. It is unknown at this time when or where improvements may take place.

The ARPPU FEIR determined that the project would not involve large impacts to oak woodlands. Impacts are restricted to the removal of some individual trees, or to some minimal dripline encroachment. Therefore, the project does not have the potential to substantially reduce the habitat of a wildlife species, threaten to eliminate a plant or animal community or otherwise significantly affect biological resources with respect to oak woodland in the Area Plans. The prior conclusion remains appropriate for the current project. Native trees may be removed to achieve the larger goals of the NRMP. While a tree inventory has not been completed for the project area, mitigation consistent with adopted policies and ordinances protecting native tree resources is included. Impacts are *less than significant*.

### **MITIGATION MEASURES:**

**BR-11. *Transplanting Trees.*** In lieu of either BR-10 or BR-13, the oak tree(s) proposed for removal may be transplanted to an area outside the construction footprint. A Planning and Environmental Review ISA-certified arborist must concur that relocation of the tree(s) in question is feasible, and any transplantation shall be planned and conducted under the supervision of an ISA-certified arborist. The transplanted tree(s) shall be monitored for a period of three years. If during this time the tree(s) die, mitigation shall be required in accordance with Mitigation Measures BR-10 and BR-13.

**BR-12. *Native Oak Protection.*** With the exception of the trees removed and compensated for through Mitigation Measures above, all native trees of 6 inches dbh or larger whose trunks or driplines are within 100 feet of construction activities shall be preserved and protected as follows:

- A. A circle with a radius measurement from the trunk of the protected tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.
- B. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the protected trees prior to initiation of project construction, in order to avoid damage to the trees and their root systems.
- C. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected tree.
- D. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the dripline of the protected tree.

- E. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the dripline of the protected trees, unless specific authorization has been granted by the Environmental Coordinator. Where this is necessary and approved by the Environmental Coordinator, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines. In no case shall the impact area be greater than 20% of the protected tree dripline.
- F. Before grading or excavation for footings, walls, or trenching within five feet outside the driplines of protected trees, root pruning shall be required at the limits of grading or excavation to cut roots cleanly to a depth of the excavation or 36 inches (whichever is less). Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades or other approved root-pruning equipment under the supervision of an ISA Certified Arborist.
- G. All underground utilities and drain or irrigation lines shall be routed outside the driplines of protected trees. If lines must encroach upon the dripline, they should be tunneled or bored under the trees.
- H. If temporary haul or access roads must pass within the driplines of protected trees, a roadbed of six inches of mulch or gravel shall be created to protect the soil. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.
- I. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be tree-safe and not easily transported by water.
- J. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of an oak tree.
- K. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the dripline of the protected tree.
- L. Tree pruning required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker.
- M. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.
- N. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.

- O. Landscaping beneath protected oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the dripline of protected oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

**BR-13. *Tree Replacement.*** Replacement Planting Plans shall adhere to this measure. The removal of native oak trees shall be compensated by planting native oak trees equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by Planning and Environmental Review.

Equivalent compensation based on the following ratio is required:

- one preserved native oak tree < 6 inches dbh on-site = 1 inch dbh
- one D-pot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Replacement tree planting shall be completed prior to the start of construction or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.

Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved
2. Method of irrigation
3. If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.

6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees < 6-inches dbh to be preserved on-site.

No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.

Oak trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject Planning and Environmental Review approval.

If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

**IMPACT: CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN**

The Parkway is not included within any adopted habitat conservation plan, natural community conservation plan, or approved local, regional, or state habitat conservation plan. Species mitigation in this SEIR is consistent with habitat conservation plans.

**MITIGATION MEASURES:**

None recommended.



## **7 CULTURAL RESOURCES**

### **INTRODUCTION**

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The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan, is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified Potential Resource Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

NRMP cultural resources goals include the following:

- Protect archaeological and historical resources.
- Interpret environmental, archaeological, and historical resources and educate the public on the significance of the Parkway in the greater Sacramento region

The Potential Resource Management Actions are introduced at a conceptual/programmatic level in the NRMP; as specific projects are proposed to implement the Potential Resource Management Actions, those projects will be subject to project-level review, including CEQA. The American River Parkway Plan Update (ARPPU) FEIR identified potentially significant impacts that could result in future disturbance of known and unknown prehistoric and/or historic resources. Mitigation measures were adopted and incorporated into the American River Parkway Plan. The analysis below will evaluate and supplement the ARPPU FEIR and determine whether the cultural resources mitigation measures adopted for the ARPPU remain applicable and adequate to mitigate impacts of management activities proposed in the NRMP. Implementation of the NRMP Potential Resource Management Actions will be informed through the NRMP Monitoring Measures, which identifies the preparation of technical studies to further guide best management practices and associated mitigation on a project-specific level.

## **ENVIRONMENTAL SETTING**

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The Parkway is an open space greenbelt spanning approximately 29 miles, from the Folsom Dam to the confluence of the American and Sacramento rivers. The Parkway is rich in hydraulic mining history and Native American history. The contextual environmental setting presented in the ARPPU FEIR remains applicable to this analysis.

## **REGULATORY SETTING**

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### **FEDERAL**

Cultural resources are considered during federal undertakings chiefly under Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA. Other federal laws pertinent to cultural resources include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act (AIRFA) of 1978, the Archaeological Resources Protection Act (ARPA) of 1979, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1989, among others. Below is a more detailed description of applicable federal regulations.

#### ***ANTIQUITIES ACT***

The Federal Antiquities Act of 1906 was created with the intent to protect cultural resources in the United States. The Antiquities Act prohibits appropriation, excavation, injury, and destruction of “any historic or prehistoric ruin or monument, or any object of antiquity” located on lands owned or controlled by the federal government, without permission of the secretary of the Federal department with jurisdiction. Accordingly, the Antiquities Act provided early framework to protect cultural resources within the United States.

#### ***NATIONAL ENVIRONMENTAL POLICY ACT***

The National Environmental Policy Act (NEPA) requires that federal agencies assess whether federal actions would result in significant effects on the human environment. The Council on Environmental Quality’s (CEQ’s) NEPA regulations further stipulate that identification of significant effects should incorporate “the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register for Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources” (40 CFR 1508.27[b][8]).

#### ***NATIONAL HISTORIC PRESERVATION ACT***

Archaeological and built environment resources (buildings and structures) are protected through the National Historic Preservation Act (NHPA of 1966, as amended (16 United States Code [USC] 470f) and associated implementing regulations: Protection of Historic

Properties (36 Code of Federal Regulations [CFR] Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979.

Prior to implementing an undertaking (e.g., issuing a federal permit), federal agencies (e.g., U.S. Army Corps of Engineers [USACE]) are required under Section 106 of NHPA to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register of Historic Places (NRHP). NHPA Section 101(d)(6)(A) allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the NRHP. Under the NHPA, a find is significant if it meets the NRHP listing criteria under 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 installation, 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.

## **STATE**

The State of California implements NHPA through its statewide comprehensive cultural resource preservation programs. The California Office of Historic Preservation (OHP), an office of the California Department of Parks and Recreation (DPR), implements the policies of NHPA on a statewide level. OHP also maintains the California Historical Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the State's jurisdiction.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The California Environmental Quality Act (CEQA), as codified in Public Resource Code (PRC) Sections 21000 et seq. and implemented via the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.), is the principal statute governing the environmental review of projects in the State. CEQA requires a lead

agency to determine whether a project may have a significant effect on historical resources. If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)). Section 21083.2(g) describes a *unique archaeological resource* as 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 that 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.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A *historical resource* is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5(a)(2)); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Sacramento County does not currently have a local register.

Public Resources Code (PRC) Section 5024.1, Section 15064.5 of the Guidelines, and Sections 21083.2 and 21084.1 of the Statutes of CEQA were used as the basic guidelines for the cultural resources study. PRC Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purpose of the register is to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the California Register were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP.

In order to be considered a historical resource, a resource must be at least 50 years old. In addition, the State CEQA Guidelines define a historical resource as follows:

- a. A resource listed in the California Register of Historical Resources (CRHR).
- b. 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).
- c. Any object, building, structure, site, area, place, record, or manuscript that 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, provided the lead agency's determination

is supported by substantial evidence in light of the whole record. The CRHR 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 CRHR criteria are based on National Register of Historic Places (NRHP) criteria (PRC Section 5024.1[b]). Certain resources are determined by CEQA to be automatically included in the CRHR, including California properties formally eligible for or listed in the NRHP. To be eligible for listing in the CRHR as a historical resource, a prehistoric or historic-period resource must be significant at the local, state, and/or federal level under one or more of the following 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.
4. Has yielded, or may be likely to yield, information important in prehistory or history (14 CCR Section 4852[b]).

For a resource to be eligible for the CRHR, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet NRHP criteria may still be eligible for listing in the CRHR.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and State CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the State CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources. 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:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.

- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2 [g]).

The State CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (14 CCR Section 15064[c][4]).

### ***MADERA OVERSIGHT COALITION, INC. V. COUNTY OF MADERA (2011)***

In the past, it was common practice for many CEQA practitioners to provide performance-based mitigation for cultural resources, stipulating that further evaluation and treatment of resources would be performed in the future. The 2011 decision from the *Madera Oversight Coalition, Inc. v. County of Madera* (2011 [199 Cal. App.4th 48, 81]) case determined this practice to be unacceptable under CEQA and required evaluation of cultural resources subject to CEQA to be performed at a level sufficient to characterize the resources prior to EIR certification (instead of waiting until preconstruction or construction stages of a project).

### **SACRAMENTO COUNTY GENERAL PLAN**

The Sacramento County General Plan Conservation Element, states under Section VIII, Cultural Resources, the following goal and six objectives:

Promote the inventory, protection and interpretation of the cultural heritage of Sacramento County, including historical and archaeological settings, sites, buildings, features, artifacts and/or areas of ethnic historical, religious or socio-economic importance.

1. Comprehensive knowledge of archeological and historic site locations.
2. Attention and care during project review and construction to ensure that cultural resource sites, either previously known or discovered on the project site, are properly protected with sensitivity to Native American values.
3. Structures with architectural or historical importance preserved to maintain contributing design elements.
4. Known cultural resources protected from vandalism unauthorized excavation, or accidental destruction.
5. Properly stored and classified artifacts for ongoing study.
6. Public awareness and appreciation of both visible and intangible historic and cultural resources.

To implement the primary goal and the objectives, the Conservation Element contains the following policies:

- CO-150. Utilize local, state and national resources, such as the NCIC, to assist in determining the need for a cultural resources survey during project review.
- CO-155. Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinternment shall have priority. The project developer shall provide the burden of proof that offsite reinternment is the only feasible alternative. Reinternment shall be the responsibility of local tribal representatives.
- CO-157. Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.
- CO-158. As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.
- CO-169. Restrict the circulation of cultural resource location information to prevent potential site vandalism. This information is exempt from the "Freedom of Information Act".

***AMERICAN RIVER PARKWAY PLAN***

The American River Parkway Plan contains policies that are directly related to management or preservation of cultural resources within the Parkway. Generally, the policies in Table CR-1, below, provide a framework to protect sensitive cultural resources within the Parkway. As shown in Table CR-1, many of the policies of the American River Parkway Plan that pertain to cultural resources apply to, are related to, or speak to the NRMP Potential Resource Management Actions.

**Table CR–1: Policies of the American River Parkway Plan that Pertain to Cultural Resources**

<b>3.14</b>	Portions of the Parkway may be temporarily closed to certain uses in order to restore habitat values, visual quality, and recreation opportunities, upon assessment that the environmental resources, aesthetics, or recreational setting of the Parkway have become degraded.
<b>3.15</b>	Archaeological resources and historical sites shall be preserved until determination of their historical importance can be made and decisions about their disposition are reached.
<b>3.17</b>	No development shall occur within the boundaries of State-registered archaeological sites.
<b>3.21</b>	Sensitive cultural and natural features utilized for interpretation should be monitored for overuse and corrective action taken to ensure long-term protection.
<b>3.22</b>	All programs featuring a native culture should be handled sensitively, accurately and with the support of that culture group.
<b>10.6</b>	Following acquisition, reclaim and restore the Gardenland Sand and Gravel Mine (Urrutia) site to enhance its fish and wildlife habitat value, accommodate historical and cultural interpretive activities, with related minor interpretive facilities in Limited and Developed Recreation areas, including demonstrations of California Indian lifeways, and support picnicking, hiking and wildlife viewing. (Discovery Park Area)
<b>10.17</b>	Protect and enhance existing resources in the area including habitat for threatened and endangered species, such as Valley Elderberry Longhorn Beetle, and the state registered archaeological site[s]. (Woodlake Area)
<b>10.48</b>	More intensive development in the Upper Sunrise Area should not be considered due to the unique quality of the vegetation and the cultural resources which should remain fully protected. (Upper Sunrise Area)



## DISCLOSURE OF CULTURAL RESOURCES INFORMATION

Public disclosure of site-specific cultural resources information is expressly exempt from the California Public Records Act, Government Code Sections 6250-6270. Furthermore, information obtained during Native American consultation or through consultation with the local and state agencies, including the North Central Information Center (NCIC), should remain confidential and is exempt from public disclosure under Senate Bill 922. Pursuant to General Plan Policy CO-169, Sacramento County staff has signed an “Agreement to Confidentiality” with the NCIC that states that site-specific information will not be distributed or released to the public or unauthorized individuals. An authorized individual is a professional archaeologist or historian that qualifies under the Secretary of Interior’s standards to view confidential cultural resources materials.

## SIGNIFICANCE CRITERIA

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In order for a cultural resource to be considered a “historic property” under NRHP criteria (i.e., eligible for inclusion on the NRHP), it must be demonstrated that the resource possesses *integrity* of location, design, setting, materials, workmanship, feeling and association, and must meet at least one of the following four criteria delineated by Section 106 (Advisory Council on Historic Preservation 2000), as listed in 36 CFR 60.4:

- (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) That are associated with the lives of persons significant in our past; or
- (c) That 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) That have yielded, or may be likely to yield, information important in prehistory or history.

The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP, enumerated above, and require similar protection to what NHPA Section 106 mandates for historic properties. According to PRC Section 5024.1(c)(1-4), a resource is considered *historically significant* if it meets at least one of the following 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 installation, 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.

Under CEQA, if an archeological site is not a significant “historical resource” but meets the definition of a “unique archeological resource” as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

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 that 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.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A significant historical resource meets any of these criteria for listing on the NRHP or CRHR, or qualifies as a “unique archaeological resource” under CEQA PRC Section 21083.2. Under CEQA, “A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects” (PRC Section 21083.2(h)).

Impacts to *significant* cultural resources (“historic properties” under NHPA and “historical resources” under CEQA) that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed on or eligible for listing on the CRHR are considered a significant effect on the environment (CEQA guidelines 15065(a)(1)). Impacts to *significant* cultural resources from a proposed Project are thus considered significant if a project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource which contribute to its significance or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Cause a substantial adverse change in the significance of an archaeological resource that is a historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of a built environment resource that is a historical resource pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

## **PROPOSED NRMP PROJECT DESCRIPTION: CULTURAL RESOURCES GOALS AND POTENTIAL RESOURCE MANAGEMENT ACTIONS**

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The NRMP builds upon the cultural resources policies of the American River Parkway Plan and includes specific goals and objectives for Potential Resource Management Actions related to cultural resources. Specifically, the focus of NRMP Goal Area 3 is cultural resources. NRMP Goal Area 3 includes two goals and associated objective/performance measures related to cultural resources (see Table CR-2).

**Table CR-2: NRMP Goal Area 3, Cultural Resources**

<b>Goal</b>	<b>Objective/Performance Measure</b>
3.1 Protect archaeological and historical resources.	3.1a Protection of 100% of the officially designated archaeological and historical resources.
3.2 Form a partnership with tribal governments to protect and manage cultural resources in the Parkway.	3.2a Establishment of regular annual meetings with tribal government representatives.

In addition to the above goals and objective/performance measures, the NRMP also includes Chapter 6, which provides a review of cultural resources studies and database searches conducted within/for the Parkway, a cultural resources setting and a discussion of management of cultural resources within the Parkway. Management discussed in Chapter 6, Section 6 are as follows (summarized):

- To determine the current state of cultural resources within the Parkway, perform an update to the existing Historic Resource Inventory (HRI) of the Parkway (Dames and Moore 1995).
- As a tool to inform and engage with the public on the preservation process, provide information on resources in the Parkway through signage and other educational information.
  - The NRMP notes that although signage and information cannot itself protect cultural resources against human and natural processes, it can preserve cultural history and can incentivize preservation of cultural resources to current and future generations.
- Regional Parks should ensure that all future projects minimize both direct and indirect impacts on cultural resources.
- Prior to approval of projects within the Parkway, cultural resources should be assessed by a qualified archaeologist to ensure that projects are not situated in or near an area that contains known archaeological resources. If these resources are present, care must be taken to ensure that proper archaeological investigation and mitigation occurs.
- During project construction, known archaeological sites shall be isolated, fenced off, and disturbed as little as possible.

- Regional Parks should maintain partnerships with tribal representatives as official policy for managing the cultural resources of the Parkway.
- Historic structures should be kept on a list and maintained to ensure that potential historic structures (such as those older than 50 years) undergo the proper historic evaluation, and that alteration or demolition of these structures is avoided or minimized and fully mitigated.

Chapter 8 of the NRMP is focused on management, implementation, and monitoring of NRMP actions within the Parkway. Cultural resources are addressed in the Implementation and Monitoring Plan section. Key points included in this section related to management of cultural resources are (summarized):

- Cultural resources are valuable to indigenous successors and critical in informing our knowledge of historical peoples and events; therefore, cultural interpretive activities are and should remain centered on the creation of demonstration areas and strategically-placed signage that disseminates information on and provides replicas of target resources.
- Ecological resources management can contribute to the preservation of cultural resources. The designation of sensitive habitat areas that either contain a cultural resource or act as a buffer between a cultural resource and more heavily used areas is an ecological resource management tool that also works to preserve cultural resources.
- Since much of the contemplated Potential Resource Management Actions will require additional review, CEQA and associated consultation (under AB 52 and SB 18 when applicable) is a tool for evaluating and preserving cultural resources.
- It is acknowledged that monitoring of cultural resources includes mapping and data management that should remain confidential to protect these areas.
- Regional Parks will attend annual meetings to discuss issues important to tribal governments that have an interest in the Parkway.

## **METHODOLOGY**

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### **INFORMATION CENTER RECORD SEARCH**

A records search from the North Central Information Center (NCIC) of the California Historical Resources Information System (CSU-Sacramento) was requested for the project on October 4, 2018. The search area included the entirety of the Parkway and areas within a 0.25-mile buffer of its boundaries. The NCIC records search identified 62 resources within the Parkway, 19 of them are prehistoric-era. The records search also identified eight additional prehistoric-era resources located outside of the Parkway, but within the 0.25-mile buffer.

## **FIELD ASSESSMENT**

No formal field assessments or reconnaissance-level surveys were conducted for the NRMP. Additionally, no formal field assessment was conducted for the American River Parkway Plan Update. However, a PER cultural resources specialist did conduct cursory pedestrian surveys of certain highly sensitive areas within the Parkway in order to confirm baseline conditions during preparation of the ARPPU FEIR. Additionally an intensive survey of the Parkway, entitled “Archaeological Inventory Report Lower American River Locality: American River Watershed Investigation for the U.S. Army Corps of Engineers, Sacramento District”, occurred in 1995. This inventory is the most complete study of the Parkway and it was utilized in establishing a baseline of resources in the Parkway.

## **IMPACTS AND ANALYSIS**

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### **IMPACT: HISTORICAL RESOURCES**

The Parkway contains numerous historic resources. In particular, remnants of historic mining activities are extremely prevalent and obvious within the Parkway. As with the prehistoric resources within the Parkway, most of these known historic resources are listed on or have been determined to be eligible for listing on the National Register of Historic Places and/or the California Register of Historic Resources. Thus impacts to these resources would also constitute significant environmental impacts. Impacts could include the alteration, demolition, or modification of any kind within or adjacent to these resources. Direct impacts are generally attributed to construction activities such as trenching, grading, dredging, clearing and grubbing, or similar activities that could affect already exposed resources or uncover subsurface resources. Indirect impacts are more difficult to define but examples include changes in surface flows that expose resources downstream of the project area or foot traffic deviating from an official trail resulting in a new trail with an eroding surface, which could further expose underlying resources.

The ARPPU FEIR acknowledges that cultural resources are present within the Parkway and that ground disturbing activities may have a potentially significant impact to historical resources. As shown above, the NRMP includes goals, objectives, and management criteria that is designed to protect and preserve cultural resources within the Parkway. The NRMP has a clear commitment to preservation and education to ensure historical resources are not impacted by both natural forces and physical developments. However, some of the Potential Resource Management Actions contemplated with the NRMP have the potential for ground disturbance, and therefore could result in the same impacts to historical resources that was contemplated in the ARPPU FEIR.

The cultural resources mitigation measures adopted with the ARPPU FEIR are appropriate for the current project with slight modifications to account for NRMP Potential Resource Management Actions. As concluded in the ARPPU FEIR, even with these mitigation measures it is still foreseeable that adverse impacts could occur to cultural resources for some NRMP Potential Resource Management Actions. Thus, similar to the ARPPU FEIR, the overall impact to historical resources due to implementation of the

NRMP is considered ***potentially significant***, even after application of all feasible mitigation.

### **MITIGATION MEASURES:**

The prior ARPPU Mitigation Measures (CR-1 – CR-6) with slightly modified language to Measures CR-2, CR-3, CR-4, and CR-6 to account for the NRMP Potential Resource Management Actions are as follows (new language is added in **bold underline** to easily denote the slight modifications):

- CR-1.** Retain all important cultural features in the design of all future Parkway projects, unless doing so is proven to be infeasible to the satisfaction of Planning and Environmental Review (PER).
- CR-2.** Prior to approval of grading plans or issuance of building permits, all proposed facilities projects **and/or all applicable NRMP Potential Resource Management Actions** within the Parkway must provide documentation that there are no cultural resources present within the construction area (including staging areas and similar). A qualified cultural resources professional shall perform a preliminary analysis of the construction area, to determine the relative sensitivity of the construction area. This need not include a formal cultural resources survey if the cultural resources investigator determines a finding of negative presence can be made from previous surveys or otherwise. If cultural resources are considered not to be present, Mitigation Measure CR-4 will still apply. If additional work is required, Mitigation Measure CR-3 and CR-4 shall apply.
- CR-3.** All projects **including all applicable NRMP Potential Resource Management Actions** that have been determined sensitive for known and/or unknown cultural resources within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following, to the satisfaction of PER:
  - A. Conduct an archaeological/historical survey and assessment, by a qualified professional archaeologist, of the area of direct impact. If the project area includes known resources, then the survey will assess the condition of the resource.
  - B. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine the significance of the resource.
  - C. Following the field investigations, a technical report describing the evaluation shall be prepared to the satisfaction of PER.
  - D. If based on the results of the field investigations the resource is not considered significant or important, no additional work would be required for that resource, and all construction related impacts would be considered less than significant.
  - E. If based on the results of the field investigations resources were identified as being significant the following mitigation would apply:

- a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels.

OR, if a redesign is determined infeasible by PER, then,

- b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of PER. Impacts to the resource would remain significant.

**CR-4.** Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities **and/or all applicable NRMP Potential Resource Management Actions**, work shall be suspended PER shall be immediately notified at (916) 874-6141.

At that time, PER will coordinate any necessary investigation of the find with appropriate specialists as needed. The project applicant shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

**CR-5.** Design interpretive uses so that locational data of sensitive cultural resources is not disclosed to the general public. If locational data of cultural resources is crucial to an interpretive use than the following shall apply:

- A. Limit accessibility to envisioned cultural interpretive uses by requiring docent led tours or restricting access through fencing or elevated wooden walkways.
- B. Consult with qualified cultural resources staff, local Native Americans, and historical societies during the design phases in order to create interpretive uses that are appropriate for specific cultural resources sites.

**CR-6.** The area utilized for Soil Born Farms and potential interpretive area, and all associated construction **and/or all applicable NRMP Potential Resource Management Actions** shall be located outside the limits of all known cultural resources sites.

## **IMPACT: ARCHEOLOGICAL OR PREHISTORIC RESOURCES**

The Parkway contains numerous documented archaeological and prehistoric resources. These resources include but are not limited to multi-component village sites, individual special-use sites, and prehistoric isolates. The Parkway contains a rich variety of sites

that are unique and important pieces of the history of the Parkway. Most of these known prehistoric resources are listed on or have been determined to be eligible for listing on the National Register of Historic Places and/or the California Register of Historic Resources. Impacts to these resources could include the alteration, demolition, or modification of any kind within or adjacent to these resources. Direct impacts are generally attributed to construction activities such as trenching, grading, dredging, clearing and grubbing, or similar activities that could affect already exposed resources or uncover subsurface resources. Indirect impacts are more difficult to define, but examples include changes in surface flows that expose resources downstream of the project area or foot traffic deviating from an official trail resulting in a new trail with an eroding surface, which could further expose underlying resources.

The ARPPU FEIR acknowledges that cultural resources are present within the Parkway and that ground disturbing activities may have an impact on those resources. As shown above, the NRMP includes goals, objectives, and management criteria that is designed to protect and preserve cultural resources within the Parkway. The NRMP has a clear commitment to preservation, education and consultation with tribal governments to ensure cultural resources are not impacted by both natural forces and physical developments. However, some of the Potential Resource Management Actions contemplated with the NRMP have the potential for ground disturbance, and therefore could result in the same impacts to archaeological and prehistoric resources that were contemplated in the ARPPU FEIR.

The cultural resource mitigation measures adopted with the ARPPU FEIR are appropriate for the current project. As concluded in the ARPPU FEIR, it is still foreseeable that adverse impacts could occur to cultural resources even though all reasonable mitigation is applied due to some NRMP Potential Resource Management Actions. Thus, similar to the ARPPU FEIR, the overall impact to archaeological and prehistoric resources due to implementation of the NRMP is considered ***potentially significant***, even after application of all feasible mitigation.

### **MITIGATION MEASURES:**

Implement Mitigation Measures CR-1 thru CR-6, as amended above.

### **IMPACT: DISTURB HUMAN REMAINS**

Section 5097.94 of the Public Resources Code and Section 7050 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide methods and means for the appropriate handling of such remains. This is supported by County General Plan Policies CO-155. If human remains are encountered, work should halt in that vicinity and the County coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. In the event that a burial is discovered during implementation of the project, strict adherence to



mitigation as outlined in Mitigation Measure CR-4 remains appropriate for the current project and ensures impacts are *less than significant*.

#### **MITIGATION MEASURES:**

Implement Mitigation Measure CR-4, as amended above.

#### **CUMULATIVE IMPACTS**

Implementation of the range of NRMP Management Actions, particularly those that are ground disturbing, in the Parkway could significantly impact historic, archaeological, or human resources. The archeology of prehistoric resources in their original contexts is crucial in developing an understanding of the social, economic, and technological character of the resources. The boundaries of an archeologically important site could extend beyond recorded/known sites. As a result, a meaningful approach to preserving and managing cultural research should focus on the likely distribution of cultural resources. The cultural system is represented archeologically by the total inventory of all sites and other cultural remains. However, proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing understanding of the past environmental conditions and cultures by recoding data about any sites discovered and preserving artifacts found. Mitigation is included to document and preserve cultural resources that are identified during implementation of the NRMP; however, cumulative impacts to cultural resources through implementation of management actions are *potentially significant*.

## **8 TRIBAL CULTURAL RESOURCES**

### **INTRODUCTION**

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In 2014, CEQA was amended by Assembly Bill 52 (AB 52) to create a separate category of cultural resources, “tribal cultural resources.” Since the FEIR was certified in 2008, the tribal cultural resources analyses were not conducted in accordance with AB 52. Therefore, pursuant to AB 52, this Subsequent EIR will analyze tribal cultural resources and identify mitigation measures to avoid or minimize potentially significant impacts.

The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan, is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified Potential Resource Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

NRMP cultural resources goals include the following:

- Protect archaeological and historical resources.
- Interpret environmental, archaeological, and historical resources and educate the public on the significance of the Parkway in the greater Sacramento region

The Potential Resource Management Actions are introduced at a conceptual/programmatic level in the NRMP; as specific projects are proposed to implement the Potential Resource Management Actions, those projects will be subject to project-level review, including CEQA. The American River Parkway Plan Update (ARPPU) FEIR identified potentially significant impacts that could result in future disturbance of known and unknown cultural resources, including tribal cultural resources. Mitigation measures were adopted and incorporated into the American River Parkway Plan. The analysis below will evaluate and supplement the ARPPU FEIR and determine whether the cultural resources mitigation measures adopted for the ARPPU remain applicable and adequate to mitigate impacts of management activities proposed in the NRMP. Implementation of the NRMP Potential Resource Management Actions will be informed through the NRMP Monitoring Measures, which identifies the preparation of

technical studies to further guide best management practices and associated mitigation on a project-specific level.

## **TRIBAL RESOURCES ENVIRONMENTAL SETTING**

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The American River Parkway is an open space greenbelt spanning approximately 29 miles, from the Folsom Dam to the confluence of the American and Sacramento rivers. After the prehistoric and historic use of the Parkway by the Valley Nisenan, much of the proceeding history of the Parkway is centered around gold and hydraulic mining. Remnant agricultural endeavors are also very apparent within the Parkway, in the form of lasting orchards, fences, ditches, and buildings.

### **ETHNOGRAPHIC CONTEXT**

Ethnography is the written record of a culture. Archaeology can be combined with ethnography to identify groups more specifically. Ethnographic records (from missions and other documents) show that the groups that inhabited Sacramento County are the Nisenan, or Southern Maidu, and the Plains Miwok, a subgroup of the Eastern Miwok. The Plains Miwok traditional territory included the lower reaches of the Cosumnes and Mokelumne Rivers and extended west to the Sacramento River from Rio Vista north to Freeport (Levy 1978). Ethnographers generally agree that Nisenan territory included the drainages of the Bear, American, Yuba, and southern Feather Rivers and extended from the Sacramento River east to the crest of the Sierra Nevada (Beals 1933, Faye 1923, Gifford 1927, Kroeber 1925, Powers 1976, Wilson and Towne 1978). Thus, the proposed Project is located within the territory commonly attributed to the ethnographic Nisenan.

### ***NISENAN***

As shown, ethnographically, the project area is in the southwestern portion of the territory occupied by the Penutian-speaking Nisenan. As a language, Nisenan (meaning “from among us” or “of our side”) has three main dialects – Northern Hill, Southern Hill, and Valley Nisenan, with three or four subdialects (Kroeber 1976, Shipley 1978, Wilson and Towne, 1978). The Valley Nisenan lived along the Sacramento River, primarily in large villages with populations of several hundred each. Between there and the foothills, the grassy plains were largely unsettled, used mainly as a foraging ground by both valley and hill groups. Individual and extended families “owned” hunting and gathering grounds, and trespassing was discouraged (Kroeber 1976, Wilson and Towne 1978). Residence was generally patrilocal, but couples actually had a choice in the matter (Wilson and Towne 1978).

Politically, the Nisenan were divided into “triblets”, made up of a primary village and a series of outlying hamlets, presided over by a more-or-less hereditary chief (Kroeber 1976, Wilson and Towne 1978). Villages typically included family dwellings, acorn granaries, a sweathouse, and a dance house, owned by the chief. The chief had little authority to act on his own or her own, but with the support of the shaman and the elders, the word of the chief became virtually the law (Wilson and Towne 1978).

Subsistence activities centered on the gathering of acorns (tan bark oak and black oak were preferred), seeds, and other plant resources, the hunting of animals such as deer and rabbits, and fishing. Large predators, such as mountain lions and wildcats were hunted for their meat and skins, and bears were hunted ceremonially. Although acorns were the staple of the Nisenan diet, they also harvested roots like wild onion and “Indian potato”, which were eaten raw, steamed, baked, or dried and processed into flour cakes to be stored for winter use (Wilson and Towne 1978). Wild garlic was used as soap/shampoo, and wild carrots were used medicinally (Littlejohn 1928). Seeds from grasses were parched, steam dried, or ground and made into a mush. Berries were collected, as were other native fruits and nuts. Game was prepared by roasting, baking, or drying. In addition, salt was obtained from a spring near modern-day Rocklin (Wilson and Towne 1978).

Hunting of deer often took the form of communal drives, involving several villages, with killing done by the best marksmen from each village. Snares, deadfalls, and decoys were used as well. Fish were caught by a variety of methods including use of hooks, harpoons, nets, weirs, traps, poisoning, and by hand (Wilson and Towne 1978).

Trade was important with goods traveling from the coast and valleys up into the Sierra Nevada mountains and beyond to the east, and vice versa. Coastal items like shell beads, salmon, salt, and foothills pine nuts were traded for resources from the mountains and farther inland, such as bows and arrows, deer skins, and sugar pine nuts. In addition, obsidian was imported from the north (Wilson and Towne 1978).

The Spanish arrived on the central California coast in 1769 and by 1776 the Miwok territory bordering the Nisenan on the south had been explored by Jose Canizares. In 1808, Gabriel Moraga crossed Nisenan territory, and in 1813, a major battle was fought between the Miwok and the Spaniards near the mouth of the Cosumnes River. Though the Nisenan appear to have escaped being removed to missions by the Spanish, they were not spared the ravages of European diseases. In 1833, an epidemic – probably malaria – raged through the Sacramento valley, killing an estimated 75 percent of the native population. When John Sutter erected his fort at the future site of Sacramento in 1839, he had no problem getting the few Nisenan survivors to settle nearby. The discovery of gold in 1848 at Sutter’s Mill, near the Nisenan village of Colluma (now Coloma) on the south fork of the American River, drew thousands of miners to the area, and led to widespread killing and the virtual destruction of traditional Nisenan culture. By the Great Depression, no Nisenan remained who could remember the days before the arrival of the Euro-Americans (Wilson and Towne 1978).

## REGULATORY SETTING

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### FEDERAL

#### ***SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT, 1966***

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The ACHP's implementing regulations are the "Protection of Historic Properties" 36 Code of Federal Regulations (CFR) Part 800. The Federal agency first must determine whether it has an undertaking that is a type of activity that could affect historic properties. Historic properties are those that meet the criteria for or are listed in the National Register of Historic Places (NRHP).

### STATE OF CALIFORNIA

#### ***DISCOVERY OF HUMAN REMAINS***

California law protects Native American burials, skeletal remains and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (Section 7050.5 of the Health and Safety Code and Public Resources Code {PRC} 5097.9).

When human remains are discovered, the protocol to be followed is specified in California Health and Safety Code, which states:

*In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code (PRC).*

State CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever human remains are uncovered and that the County Coroner be called in to assess the remains. If the County Coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section

15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discovery of human remains, the State CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5, subdivision (f), these provisions should include “an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the site while historical or unique archaeological resource mitigation takes place.”

### ***ASSEMBLY BILL 52***

On September 25, 2014, Governor Brown approved Assembly Bill 52, which requires CEQA lead agencies to begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project. The bill specifies that a project with an effect that may cause substantial adverse change in the significance of a tribal cultural resource may have a significant effect of the environment. The bill became effective July 1, 2015 and is codified in PRC, §21080.3.1.

To help determine whether a project may have such an effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (PRC, § 21080.3.1.)

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. “Tribal cultural resources” are defined as either:

- (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 of Historical Resources (CRHR)
  - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

## LOCAL

### ***SACRAMENTO COUNTY GENERAL PLAN***

CO-155. Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinternment shall have priority. The project developer shall provide the burden of proof that off-site reinternment is the only feasible alternative. Reinternment shall be the responsibility of local tribal representatives.

CO-157. Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.

CO-159. Request a Native American Statement as part of the environmental review process on development projects with identified cultural resources.

### ***AMERICAN RIVER PARKWAY PLAN***

The American River Parkway Plan contains policies that are directly related to management or preservation of tribal resources within the Parkway. Generally, the policies in Table TCR-1, below, provide a framework to protect and/or manage sensitive tribal resources within the Parkway.

**Table TCR-1: Policies of the American River Parkway Plan that Pertain to Tribal Resources**

<b>3.21</b>	Sensitive cultural and natural features utilized for interpretation should be monitored for overuse and corrective action taken to ensure long-term protection.
<b>3.22</b>	All programs featuring a native culture should be handled sensitively, accurately and with the support of that culture group.
<b>10.1</b>	Following acquisition, reclaim and restore the Gardenland Sand and Gravel Mine (Urrutia) site to enhance its fish and wildlife habitat value, accommodate historical and cultural interpretive activities, with related minor interpretive facilities in Limited and Developed Recreation areas, including demonstrations of California Indian lifeways, and support picnicking, hiking and wildlife viewing. (Discovery Park Area)

## **DISCLOSURE OF CULTURAL RESOURCES INFORMATION**

Public disclosure of site specific cultural resources information is expressly exempt from the California Public Records Act, Government Code Sections 6250-6270. Furthermore, information obtained during Native American consultation or through consultation with the local and state agencies, including the North Central Information Center (NCIC), should

remain confidential and is exempt from public disclosure under Senate Bill 922. Additionally, Sacramento County staff has signed an “Agreement to Confidentiality” with the NCIC that states that site-specific information will not be distributed or released to the public or unauthorized individuals. An authorized individual is a professional archaeologist or historian that qualifies under the Secretary of Interior’s standards to view confidential cultural resources materials.

## **SIGNIFICANCE CRITERIA**

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In accordance with Appendix G of the State CEQA Guidelines, a project would be considered to have a significant effect if it would cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC, §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with a cultural value to a California Native American tribe, that is:

Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

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, §5024.1. In applying the criteria set forth in subdivision (c) of PRC, §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under PRC Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources (21080.3.1(a)).

## **PROPOSED NRMP PROJECT DESCRIPTION: TRIBAL CULTURAL RESOURCES GOALS AND POTENTIAL RESOURCE MANAGEMENT ACTIONS**

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The NRMP builds upon the cultural resources policies of the American River Parkway Plan and includes specific goals and objectives for Potential Resource Management Actions related to tribal cultural resources. Specifically, the focus of NRMP Goal Area 3 is cultural resources. NRMP Goal Area 3 includes two goals and associated objective/performance measures related to cultural resources, including tribal cultural resources (see Table TCR-2).



**Table CR-2: NRMP Goal Area 3, Cultural Resources**

<b>Goal</b>	<b>Objective/Performance Measure</b>
3.1 Protect archaeological and historical resources.	3.1a Protection of 100% of the officially designated archaeological and historical resources.
3.2 Form a partnership with tribal governments to protect and manage cultural resources in the Parkway.	3.2a Establishment of regular annual meetings with tribal government representatives.

In addition to the above goals and objective/performance measures, the NRMP also includes Chapter 6, which provides a review of cultural resources studies and database searches conducted within/for the Parkway, a cultural resources setting and a discussion of management of cultural resources within the Parkway. Management discussed in Chapter 6, Section 6 that pertains directly to tribal cultural resources are as follows (summarized):

- To determine the current state of cultural resources within the Parkway, perform an update to the existing Historic Resource Inventory (HRI) of the Parkway (Dames and Moore 1995).
- As a tool to inform and engage with the public on the preservation process, provide information on resources in the Parkway through signage and other educational information.
  - The NRMP notes that although signage and information cannot itself protect cultural resources against human and natural processes, it can preserve cultural history and can incentivize preservation of cultural resources to current and future generations.
- Regional Parks should ensure that all future projects minimize both direct and indirect impacts on cultural resources.
- Prior to approval of projects within the Parkway, cultural resources should be assessed by a qualified archaeologist to ensure that projects are not situated in or near an area that contains known archaeological resources. If these resources are present, care must be taken to ensure that proper archaeological investigation and mitigation occurs.
- During project construction, known archaeological sites shall be isolated, fenced off, and disturbed as little as possible.
- Regional Parks should maintain partnerships with tribal representatives as official policy for managing the cultural resources of the Parkway.

Chapter 8 of the NRMP is focused on management, implementation, and monitoring of NRMP actions within the Parkway. Cultural resources are addressed in the Implementation and Monitoring Plan section. Key points included in this section related to management of cultural resources are (summarized):

- Cultural resources are valuable to indigenous successors and critical in informing our knowledge of historical peoples and events; therefore, cultural interpretive activities are and should remain centered on the creation of demonstration areas and strategically-placed signage that disseminates information on and provides replicas of target resources.
- Ecological resources management can contribute to the preservation of cultural resources. The designation of sensitive habitat areas that either contain a cultural resource or act as a buffer between a cultural resource and more heavily used areas is an ecological resource management tool that also works to preserve cultural resources.
- Since much of the contemplated Potential Resource Management Actions will require additional review, CEQA and associated consultation (under AB 52 and SB 18 when applicable) is a tool for evaluating and preserving cultural resources.
- It is acknowledged that monitoring of cultural resources includes mapping and data management that should remain confidential to protect these areas.
- Regional Parks will attend annual meetings to discuss issues important to tribal governments that have an interest in the Parkway.

## **METHODOLOGY**

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A formal cultural resources report was not prepared for the NRMP or the American River Parkway Plan 2008 Update (ARPPU) FEIR. However, record searches and past cultural resources reports, archived at Sacramento County Planning and Environmental Review, were utilized in establishing baseline assumptions of cultural resources within the Parkway for the ARPPU FEIR.

### **INFORMATION CENTER RECORD SEARCH**

A records search from the North Central Information Center (NCIC) of the California Historical Resources Information System (CSU-Sacramento) was requested for the project on October 4, 2018. The search area included the entirety of the Parkway and areas within a 0.25-mile buffer of its boundaries. The NCIC records search identified 62 resources within the Parkway, 19 of them are prehistoric-era. The records search also identified eight additional prehistoric-era resources located outside of the Parkway, but within the 0.25-mile buffer.

### **FIELD ASSESSMENT**

No formal field assessments or reconnaissance-level surveys were conducted for the NRMP. Additionally, no formal field assessment was conducted for the American River Parkway Plan Update. However, a PER cultural resources specialist did conduct cursory pedestrian surveys of certain highly sensitive areas within the parkway in order to confirm baseline conditions during preparation of the ARPPU FEIR. Additionally an intensive survey of the Parkway, entitled "Archaeological Inventory Report Lower American River

Locality: American River Watershed Investigation for the U.S. Army Corps of Engineers, Sacramento District”, occurred in 1995. This inventory is the most complete study of the Parkway and it was utilized in establishing a baseline of resources in the Parkway.

## **NATIVE AMERICAN CONSULTATIONS**

Pursuant to AB-52, on April 18, 2021, County staff mailed notification letters to the tribes that have formally requested notification. Further, all tribes were sent a copy of the Notice of Preparation for this document with the AB-52 notification. Written responses were received during the AB-52, 30-day review period from the United Auburn Indian Community (UAIC). Initial comments received by UAIC dated April 22, 2021 requested consultation on the project and noted concerns for an area adjacent to the Parkway in the City of Rancho Cordova’s jurisdiction. Staff responded to UAIC’s correspondence but no further response has been received related to consultation on the NRMP. Initial communication on consultation with Native American tribes will continue as project level CEQA documents related to the NRMP are prepared.

## **IMPACTS AND ANALYSIS**

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### **IMPACT: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE ON-SITE**

The Parkway is considered highly sensitive for tribal cultural resources (TCRs), which are dispersed throughout the Parkway. Numerous prehistoric resources have been uncovered in the Parkway and have been fully documented; however, there is a high probability of subsurface TCRs that are unknown and undocumented. These resources are irreplaceable and adverse impacts to them would be considered a significant environmental impact. The ARPPU FEIR analyzed the potential impacts to TCRs in the context of pre-historic and historic-era cultural resources.

Ground-disturbing activities have the potential to directly and indirectly impact TCRs within the Parkway. Direct impacts are generally attributed to activities such as trenching, grading, dredging, clearing and grubbing, or similar activities that could affect already exposed TCRs or uncover subsurface TCRs. Indirect impacts are more difficult to define, but examples include changes in surface flows that expose TCRs downstream of the project area or foot traffic deviating from an official trail resulting in a new trail with an eroding surface, which could further expose underlying resources. In order to reduce the likelihood of disturbance and reduce the potential for impacts, the ARPPU FEIR required mitigation measures for all projects within the Parkway and concluded that even with these mitigation measures impacts to cultural resources could remain significant.

No new impacts have been identified from the implementation of the Natural Resources Management Plan (NRMP). As shown above, the NRMP includes goals, objectives, and management criteria that is designed to protect and preserve TCRs within the Parkway. The NRMP has a clear commitment to preservation, education and consultation with tribal governments to ensure cultural resources/TCRs are not impacted by both natural forces

and physical developments. However, some of the NRMP's recommended Potential Resource Management Actions would involve ground-disturbing activities similar to those outlined above, and have the potential to impact TCRs.

Prior cultural resources mitigation measures from the ARPPU FEIR remain applicable to future NRMP Parkway projects with slight modifications to account for NRMP Management Actions (see the Cultural Resources Chapter). A new mitigation measure, specific to TCRs, has been incorporated for applicable NRMP projects involving ground-disturbing activities. This mitigation is intended to reduce potential impacts to TCRs; however, it is acknowledged that under some circumstances, that impacts to TCRs could remain ***potentially significant***.

### **MITIGATION MEASURES:**

See Mitigation Measures CR-1 through CR-6 in the Cultural Resources chapter.

**TCR – 1** Tribal entities that have requested notification under AB-52 shall be notified of discretionary projects implementing the NRMP that will result in ground disturbance during the planning process. Tribal entities shall be afforded the opportunity to consult and recommend project-specific feedback and mitigation measures.

### **CUMULATIVE IMPACTS**

Implementation of the range of NRMP Management Actions in the Parkway could significantly impact tribal cultural resources. The boundaries of tribal resources could extend beyond the boundaries of known/recorded sites. As a result, a meaningful approach to preserving and managing tribal resources should focus on the likely distribution of tribal resources, rather than on known records. Individual tribal cultural resources may also be part of larger systems or sites. Mitigation is included that requires consultation with tribes to determine project-specific mitigation measures; however, cumulative impacts to tribal cultural resources remain ***potentially significant***.

## **9 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE**

### **INTRODUCTION**

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The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan, is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified those Potential Resource Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

NRMP hazards, hazardous materials, and wildfire policies are discussed within the context of goals for biological resources:

- Assess biological resources within the Parkway.
  - Completion of periodic updates to wildfire and homeless encampment maps.
- Rehabilitate habitats damaged or degraded by fire or homeless populations;
  - Mapping and evaluation all areas damaged or degraded by wildfire or encampments annually.
- Reduce wildfire fuel and hazards in the Parkway:
  - Development and implementation of a plan for wildfire prevention, response, and recovery.
  - Development of a tracking system for wildfires in the Parkway.

Hazards and hazardous materials were found to have no impact or a less than significant impact in the American River Parkway Plan Update (ARPPU) FEIR (County Control No. 2003-GPB-0332); the ARPPU FEIR did not include a Hazardous Materials chapter.

The Hazards, Hazardous Materials, and Wildfire chapter of the NRMP SEIR analyzes potential effects that would result from implementation of the Potential Resource Management Actions identified in the NRMP, and provides mitigation measures to reduce

these effects to less than significant impacts. The chapter addresses the use, transportation, storage, and handling (i.e., potential accidents or spills) of hazardous materials. The chapter addresses changes to Appendix G of the California Environmental Quality Act (CEQA) Guidelines were adopted (December 2018), which require the Lead Agency to assess whether a project would expose people or structures to the risks associated with wildland fires.

## **REGULATORY SETTING**

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In the context of business and area plans regarding handling, release, and threatened release of hazardous materials, California Health and Safety Code Section 25501(n) generally defines a hazardous material as<sup>1</sup>

a material . . . that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

. . .

### **FEDERAL**

#### **HAZARDOUS MATERIALS TRANSPORTATION ACT**

The Hazardous Materials Transportation Act was passed in 1975 to provide adequate protection against the risks to life and property associated with the transportation of hazardous material by creating a regulatory framework to address potential threats to health, welfare, and safety. A hazardous material, as defined by the Secretary of Transportation, is any “particular quantity or form” of a material that “may pose an unreasonable risk to health and safety or property” (Occupational Safety and Health Administration).

#### **FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT**

The Federal Insecticide, Fungicide, and Rodenticide Act provides for federal regulation of pesticide distribution, sale, and use. All pesticides distributed or sold in the United States must be registered (licensed) by the Environmental Protection Agency (EPA). Before EPA may register a pesticide under the act, the applicant must show, among other things, that using the pesticide according to specifications “will not generally cause unreasonable adverse effects on the environment.”

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<sup>1</sup> The statute also includes as “hazardous materials” substances listed in specific sections of the Code of Federal Regulations and California Code of Regulations, and California Health and Safety Code as well as substances and products for which a material safety data sheet is required pursuant to the Hazardous Substances Information and Training Act (Chapter 2.5 (commencing with Section 6360) of Part 1 of Division 5 of the Labor Code) or any other applicable federal law or regulation. Additionally, a unified program agency may adopt an ordinance that identifies hazardous materials.

## **OCCUPATIONAL SAFETY AND HEALTH ACT**

The California Occupational Safety and Health Administration (Cal/OSHA) administers the Occupational Safety and Health Act, which requires special training for handlers of hazardous materials, notification to employees who work in the vicinity of hazardous materials, and acquisition of material safety data sheets from the manufacturer. A material safety data sheet describes the proper use of hazardous materials. The act also requires training of employees to remediate any hazardous materials accidental releases.

## **STATE**

### **CORTESE LIST**

The Cortese List (Government Code Section 65962.5(a)) is compiled from the DTSC, the State Department of Health Services, the California State Water Resources Control Board (SWRCB), and CalRecycle, who are required to compile and annually update lists of hazardous waste sites and land designated as hazardous waste property throughout the state. The Secretary for Environmental Protection consolidated the information (also known as the Cortese List) submitted by these agencies.

### **CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT**

In California, under the California Occupational Safety and Health Act, Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. Cal/OSHA hazardous materials regulations include requirements for safety training, availability of safety equipment, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces hazard communication program regulations, which include identifying and labeling hazardous substances, providing employees with material safety data sheets, and describing employee-training programs. Cal/OSHA also has regulations pertaining to other risks in the workplace such as fire hazards, pressurized vessels, electrical, and trip/fall hazards.

### **CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION**

Through a cooperative agreement with EPA, the California Department of Pesticide Regulation is authorized to enforce the Federal Insecticide, Fungicide, and Rodenticide Act through the California EPA. The department's responsibilities include evaluating and registering pesticide products, permitting of pesticide application, conducting enforcement activities, and monitoring residues on agricultural products and in environmental media. The department works with the County Agriculture Commissioners to review site-specific application permits, investigate pesticide-related illnesses and injuries, and implement pesticide use education programs.

## **LOCAL**

### **SACRAMENTO COUNTY CODE**

Title 6 of the Sacramento County Code covers health and sanitation. Specific chapters cover petroleum storage in aboveground tanks, hazardous materials business plans and the California Accidental Release Prevention Program.

Title 17 of the Sacramento County Code covers fire prevention. It details firebreak requirements, hazardous weed removal, and enforcement. The Fire Prevention Ordinance requires a firebreak area of at least thirty feet from all structures, combustible fences, vehicles, and combustible storage.

### **SACRAMENTO COUNTY LOCAL HAZARD MITIGATION PLAN UPDATE**

In collaboration with numerous jurisdictions, Sacramento County prepared a Local Hazard Mitigation Plan pursuant to the Disaster Mitigation Act of 2000 and Sacramento County's implementing regulations. One of the actions listed in the plan is "Wildfire Suppression – Regional Parks and Open Space (urban interface)," and another is "Fuels Reduction on the American River Parkway" (Sacramento County 2016). The County is currently in the process of preparing a Draft Local Hazard Mitigation Plan Report (Sacramento County 2022a).

### **GENERAL PLAN, SAFETY ELEMENT POLICIES**

California Senate Bill 1241 mandates that city and county jurisdictions revise the Safety Element chapter of their General Plan to address wildfires. Specifically, cities and counties must address the risk of fire for land classified as State Responsibility Area (SRA) and land classified as Very High Fire Hazard Severity Zone (FHSZ) within their safety elements (Government Code § 65302(g)(3)). A goal in the Sacramento County General Plan Safety Element is to "[m]inimize the loss of life, injury, and property damage due to fire hazards." The plan policy relevant to the NRMP is Policy SA-24. It states that, "The County shall require, unless it is deemed infeasible to do so, the use of both natural and mechanical vegetation control in lieu of burning or the use of chemicals in areas where hazards from natural cover must be eliminated, such as levees and vacant lots" (Sacramento County 2017).

### **AMERICAN RIVER PARKWAY PLAN**

The Sacramento County American River Parkway Plan 2008 has policies that pertain to wildfire in the Parkway (Sacramento County 2008):

- 7.22.7 Structures shall be of fire resistant construction and designed and located in a manner such that adequate emergency services and facilities can be provided.
- 7.3 Brush clearing, mowing of natural vegetation, firebreaks, or similar activities shall be permitted where necessary to protect the public's health, safety, or for the purposes of habitat restoration.
- 9.8 Barbecue facilities, fire rings and permanent campsites shall only be located where an adequate water supply is available or can be transported to, as determined by the responsible fire agency.
- 9.17 Firebreaks shall be combined with emergency vehicle roads and trails, where practical, to eliminate unnecessary removal of vegetation.
- 9.18 Hanging branches or accumulation of dry materials that pose fire hazards may be trimmed or removed only as necessary as determined by the appropriate



fire agency and/or by qualified staff designated by the County Department of Regional Parks, to maintain effective fire breaks or remove an immediate hazard. Careful consideration should be given to any pruning of vegetation to prevent fires from spreading from ground level into a crown type fire.

### **SACRAMENTO COUNTY CLIMATE ACTION PLAN**

The Sacramento County Climate Action Plan includes measures related to the increased risk of wildfire due to climate change (Sacramento County 2022c). These include:

- FIRE-01 Map and Identify Locations that are Newly at Risk, or at Higher Risk for Fire Hazards Prepare for Increased Risk of Wildfire
- FIRE-02 Coordinate with State and Local Agencies to Establish Ecological Recovery Programs Prepare for Increased Risk of Wildfire
- FIRE-03 Update Tree Planting Guidelines to Select Wildfire Resistant Species Prepare for Increased Risk of Wildfire
- FIRE-04 Coordinate and Improve Emergency Preparedness Systems Prepare for Increased Risk of Wildfire
- FIRE-05 Avoid New Development in Very-High Fire Hazard Severity Zones Prepare for Increased Risk of Wildfire
- FIRE-06 Collaborate with Agencies and Organizations on Programs to Reduce Wildfire Hazards

Measure FIRE-02 requires implementation of ecological restoration strategies in existing burned or potentially future burned areas to encourage the regrowth of natural ecosystems damaged from wildfire, including establishment of native ecological systems and processes that would reduce the potential for high-intensity wildfires and improve ecological resiliency to wildfire events.

In support of Measure FIRE-06, collaboration for the NRMP includes:

- Collaborate with the Sacramento County Department of Regional Parks, Sacramento Metropolitan Fire District, and other Sacramento County-based fire districts to continue to reduce wildfire hazards, including, but not limited to, enforcing defensible space guidelines for existing and new development, restoring wildfire-resilient conditions by thinning and removing live or dead vegetation and implementing wildfire fuel reduction action plans, and retaining healthy native trees.
- Collaborate with the U.S. Bureau of Land Management, the U.S. Fish and Wildlife Service, CRCRC, the American River Parkway Foundation, the Sacramento County Regional Parks Department, the Sacramento River Watershed Program, and other local stakeholders in developing Resource Management Plans for the Sacramento, Cosumnes, and American Rivers.

As drought conditions have persisted and the number of annual fires continues to be high, Regional Parks partnered with the American River Parkway Foundation and a number of other agencies to form the American River Parkway Fire Safe Council in July 2021. The American River Parkway Fire Safe Council consists of numerous Sacramento area

agencies, including fire protection services, utilities, water, wastewater, and flood protection agencies, conservation organizations, and other infrastructure owners, operators and area nonprofits. The founding goals are to develop wildfire risk reduction plans for each Area Plan within the Parkway, protect the infrastructure that exists on the Parkway, address the safety concerns of Parkway users, develop a prescribed wildland fire hazard reduction plan, identify other high fire risk issues, and engage the public in support of fire management activities.

## **SIGNIFICANCE CRITERIA**

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A proposed project would have a significant impact related to hazards and hazardous materials if it were to result in the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- Result in a safety hazard or excessive noise for people residing or working in the project area for a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.
- Impair implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan.

A proposed project would have a significant impact related to wildfire if it were to result in the following:

- Expose people or structures, either directly or indirectly, to significant risk of loss, injury, or death involving wildland fires
- In or near a state responsibility area or lands classified as very high fire hazard severity zones:
  - Substantially impair an adopted emergency response plan or emergency evacuation plan.

- As a result of slope, prevailing winds, or other factors, exacerbate risks of and exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- Install or maintain project-associated infrastructure (e.g., roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment.
- Expose people or structures to significant risks such as downslope or downstream flooding or landslide as a result of runoff, post-fire slope instability, or drainage changes.

## **METHODOLOGY**

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Hazards and wildfire information presented in this chapter and used for the subsequent analysis was drawn primarily from the following sources.

- Phase I Environmental Site Assessment, American River Common Features General Reevaluation Report (GRR), US Army Corps of Engineers (August 2012)
- GeoTracker and EnviroStor Database Queries (2022)
- California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone Maps
- Public Review Draft American River Parkway (ARP) Natural Resources Management Plan (NRMP) (2021)

The consideration of hazards and hazardous materials impacts is based on previous contamination identified in the Phase I for the GRR, updated information obtained from GeoTracker and EnviroStor databases, and the general types of activities that may occur in the Parkway as part of implementation of the NRMP. All known hazardous materials sites in or immediately adjacent to the Parkway are closed. As a result, it is not expected that there is existing known contamination at these sites that could be disturbed, and impacts related to known hazardous materials sites are not discussed further. As previously described, the Parkway is not within an airport land use plan area. The NRMP does not involve any changes to the environment that would affect the safe operations of airport or the exposure to airport-related noise. There would be no impact related to airport safety and noise exposure, and this impact is not discussed further.

The consideration of wildfire is based on existing risk and hazards as characterized above, as well as considerations of activities undertaken under the NRMP. The Parkway

is not in or adjacent to a state responsibility area or an area designated as a very high fire hazard severity zone; therefore, those impacts are not discussed further.

## **IMPACTS AND ANALYSIS**

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**IMPACT: CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS OR THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT.**

### **HAZARDOUS MATERIALS SITES**

The study area for the American River Watershed Common Features GRR Phase I Environmental Site Assessment included the American River North and South Levees, and the Environmental Data Resources records search included a one-mile buffer around the levee. The following site is located adjacent to the Parkway (USACE 2012):

- Robertson/Harbor Sand & Gravel: noted issue is levee encroachment, and the site is an asphalt concrete recycling company. A release occurred in 1994. This area is also described as the Sacramento City Landfill and is currently Sutter's Landing Regional Park. The levee is the landfill cap, and there are landfill gas extraction wells on or adjacent to the levee. There is also a buried petroleum pipeline.

A review of the State Water Resources Control Board's GeoTracker database identified the following hazardous materials sites in the Parkway (SWRCB 2022):

- Union Pacific American River Trestle Fire Site: A fire on a wooden trestle in 2007 left debris, soil, and ash, which was removed in 2007. Additional material was removed in 2011, and the case was closed as of March 22, 2022.
- American River Fish Hatchery: This was the site of a leaking diesel storage tank that was discovered in 1997. The tank was closed and removed. The site was closed in 2005.
- Harbor Sand and Gravel: This site had been used to treat contaminated soil from elsewhere and it was later found that there had been breaches in the bioremediation pad that led to soil contamination on the site. The soil was removed in 1993 and the site was closed in 1994.

No sites were listed in EnviroStor (DTSC 2022).

### **HISTORICAL USES**

The region was subject to the impacts of gold mining and agricultural use, with materials dredged from rivers for levee construction. As a result, there is the potential for chemicals such as arsenic, mercury, pesticides, and herbicides to be present in the levee material (USACE 2012). There is also a potential for lead and hydrocarbon deposits to be present

on levee crowns where vehicles traveled, and lead-based paint may be present on bridges (USACE 2012). According to Sacramento County Environmental Management Department (EMD) staff, this is more of a concern for in-water work projects within the American River Parkway (Von Aspern, Personal Communication, May 2022).

### **EVACUATION AND EMERGENCY ROUTES**

The Sacramento County Evacuation Plan notes that decisions about evacuation will need to be made based on the specific scenario of the evacuation as it is happening (Sacramento County OES 2018). Elements that should be considered include length of the route, roadway capacity, and presence of potential bottlenecks (Sacramento County OES 2018).

### **SCHOOLS**

There are numerous schools within 0.25 mile of the Parkway, including the Smythe Academy Middle School; Caleb Greenwood Elementary School; Little Garden Preschool; and California State University, Sacramento.

### **AIRPORTS**

The Parkway is near several airports with Airport Land Use Plans (ALUP), including Mather Airport, Sacramento Executive Airport, and McClellan Air Force Base. The Parkway is not, however, within any of the ALUPs for these airports (SACOG 2022)

### **HAZARDOUS SITES PROJECT IMPACTS**

Some activities associated with implementation of the NRMP have the potential to introduce hazardous materials into the Parkway. For example, herbicide would be used as part of routine operation and maintenance for preservation activities. Additionally, naturalization activities would include heavy equipment use for substantial earthwork and grading to restore natural features such as contours in previously mined areas. All herbicide use will be conducted in accordance with applicable regulations, standards, and labels, which include requirements related to training, notification, personal protective equipment, and other factors that are protective of health and safety. Use of heavy equipment would also involve use of common hazardous materials like fuels, oils and lubricants, solvents, and cleaners. Use, transport, and disposal of these materials will comply with applicable federal, state, and local laws and regulations. Compliance with laws and regulations would substantially reduce the potential for an accidental spill or other route of exposure.

Some soils also have the potential to contain elevated levels of contaminants such as pesticides, mercury, or other materials that could be disturbed during activities that require interaction with the soil substrate. Activities that could cause ground disturbance include redesign and relocation of facilities as part of conservation efforts, earthwork to restore hydrology and site features as part of naturalization, material removal as part of naturalization, and minor surface grading as part of rehabilitation. According to County Environmental Management Department (EMD) Staff, this is more of a concern for American River Parkway projects with in-water work.

Specific NRMP projects would be implemented based on an evaluation by Regional Parks according to considerations such as need, effects, durability, demonstrated cost versus benefits, and alternative sites. Impacts of specific projects, particularly those necessitating in-water work, may be subject to further evaluation under CEQA when they are identified. Mitigation Measure HZ-1 would require investigation of soils for in-water projects. This mitigation measure would also require appropriate investigation and, if needed, treatment of contaminated soils prior to the start of work in these areas. With this mitigation, impacts are *less than significant*.

## **MITIGATION MEASURE:**

### **HZ-1: CONDUCT SOIL INVESTIGATIONS AS NEEDED FOR IN-WATER WORK PROJECTS**

Specific sites identified for soil-disturbing activities under the NRMP related to in-water work projects shall be evaluated for their potential to contain contaminated soil from factors such as their location, previous disturbance, and previous uses. If the site has potential for soil contamination by substances such as arsenic, mercury, pesticides, and herbicides, lead, or hydrocarbons (e.g., if it is designated as intentionally altered or unintentionally altered in the NRMP in the case of mining or mining upstream, respectively), then soil testing for contaminants shall be completed prior to soil-disturbing activities if not previously conducted. Contaminated material, if found, shall be handled, treated, or otherwise disposed of in accordance with federal, state, and local laws and regulations.

### **IMPACT: EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL.**

While there are numerous schools within 0.25 mile of the Parkway, the NRMP would not result in hazardous emissions or handling of hazardous materials close enough to schools to result in impacts at schools. For example, handling of hazardous materials such as oils and fuels would occur at local worksites and not at schools. Even in the case of a spill, impacts would be localized so that they would not affect nearby schools. Some transportation routes may pass by schools, but all hazardous materials would be handled in accordance with applicable federal, state, and local regulations. Impacts would be *less than significant*, and no mitigation is required.

### **IMPACT: IMPAIR IMPLEMENTATION OF OR PHYSICAL INTERFERENCE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN.**

The NRMP would be implemented entirely within the Parkway and would not adversely affect roadways potentially used for emergency response or evacuation outside of the Parkway. The NRMP also identifies goals for improving access. For example, one site-specific potential resource management action is to suppress fire in mature vegetation stands, which includes identifying and designating access routes for fire suppression

activities. The NRMP is also prioritizing maintaining access for safety along transmission corridors. Therefore, there would be no adverse impact to emergency access, and emergency access may be improved under the NRMP.

**IMPACT: EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRES, INCLUDING WHERE WILDLANDS ARE ADJACENT TO OR INTERMIXED WITH URBANIZED AREAS**

**CAL FIRE FIRE HAZARD SEVERITY ZONES**

CAL FIRE creates FHSZ maps for areas within the SRA and prepares recommended FHSZ maps for areas within the Local Responsibility Area (LRA) for local agencies. The SRA is the area in which the state is financially responsible for the prevention and suppression of wildfires; it does not include lands within city boundaries or in federal ownership. Alternatively, the LRA is the area in which local governments or fire districts, rather than the State, are responsible for fire prevention and suppression. Hazard ratings are Moderate, High, and Very High and are based on a multitude of factors, including “fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area” (OSFM 2022). Plate HZ-1 shows that areas within the Parkway with a CALFIRE FHSZ classification are all classified as Moderate, while much of the Parkway is unclassified.

**WILDFIRE CONDITIONS**

***WILDLAND URBAN INTERFACE***

The U.S. Department of Agriculture and U.S. Department of the Interior define the wildland urban interface (WUI) as the area where humans and their development meet or intermix with wildland fuel (66 FR 753 2001). When structures are located within or adjacent to natural vegetation that could potentially serve as fuels for fire, two problems arise. First, the likelihood of wildfire due to human ignitions rises exponentially. Second, structures and lives are put at greatest risk, because of their proximity to flammable vegetation (Radeloff et al. 2018). CAL FIRE combines several data sets to generate the spatial extent of the WUI by county. CAL FIRE WUI definitions vary slightly from the federal definitions:<sup>2</sup>

- Wildland Urban Interface: dense housing adjacent to vegetation that can burn in wildfire and must meet these criteria: Housing density class 2, 3, or 4 in moderate, high, or very high FHSZs; not dominated by wildland vegetation
- Wildland Urban Intermix: housing development interspersed in an area dominated by wildland vegetation subject to wildfire and must meet these criteria: Not

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<sup>2</sup> For housing density classes, class 1 is less than one house per 20 acres, class 2 is one house per 20 acres to one house per 5 acres, class 3 is more than one house per 5 acres to one house per acre, and class 4 is more than one house per acre.

interface; housing density class 2, 3, or 4; in moderate, high, or very high FHSZs; improved parcels only

- Wildfire Influence Zone: wildfire susceptible vegetation up to 1.5 miles from Interface or Intermix



**Plate HZ-1: Parkway CAL FIRE FHSZ Classification**

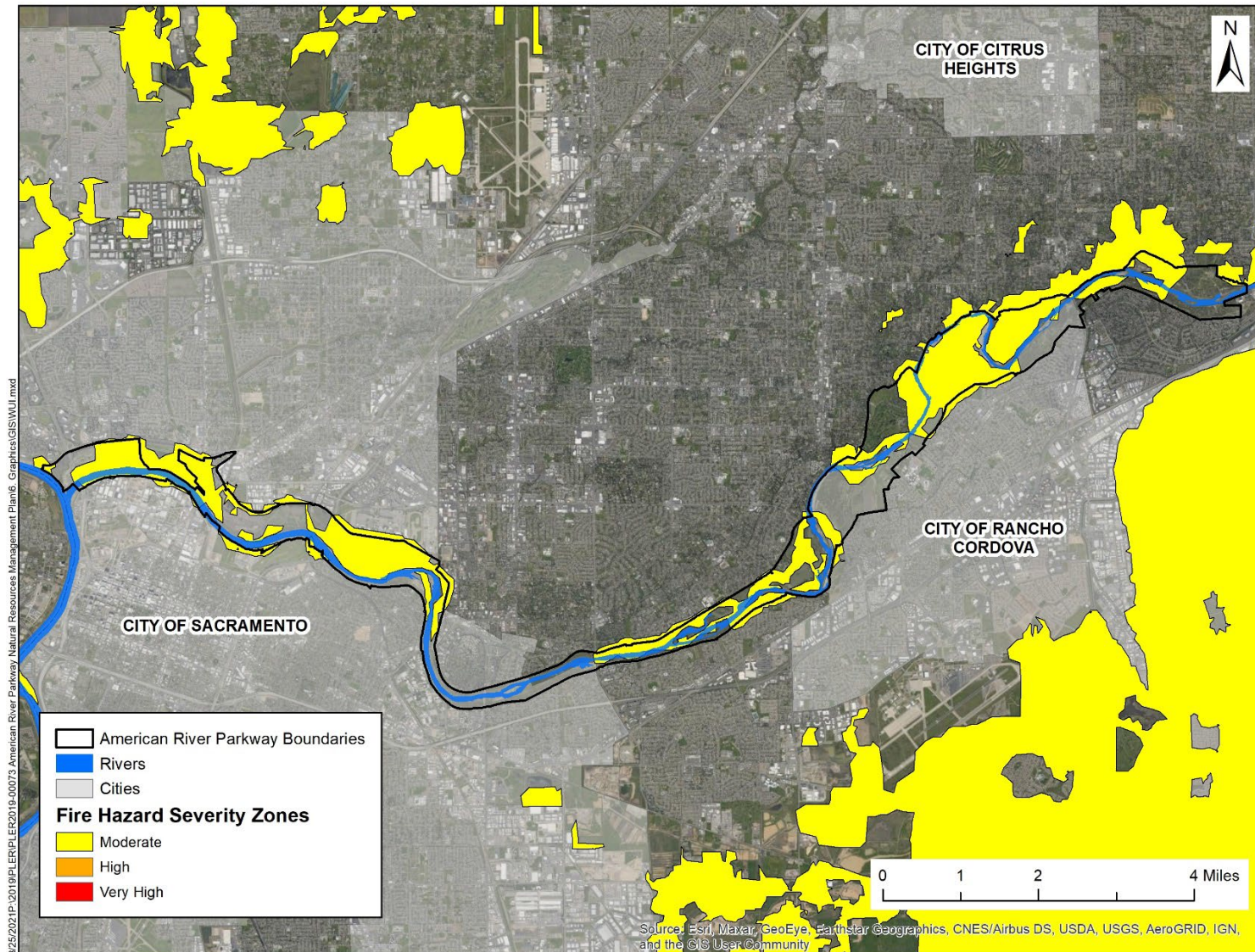
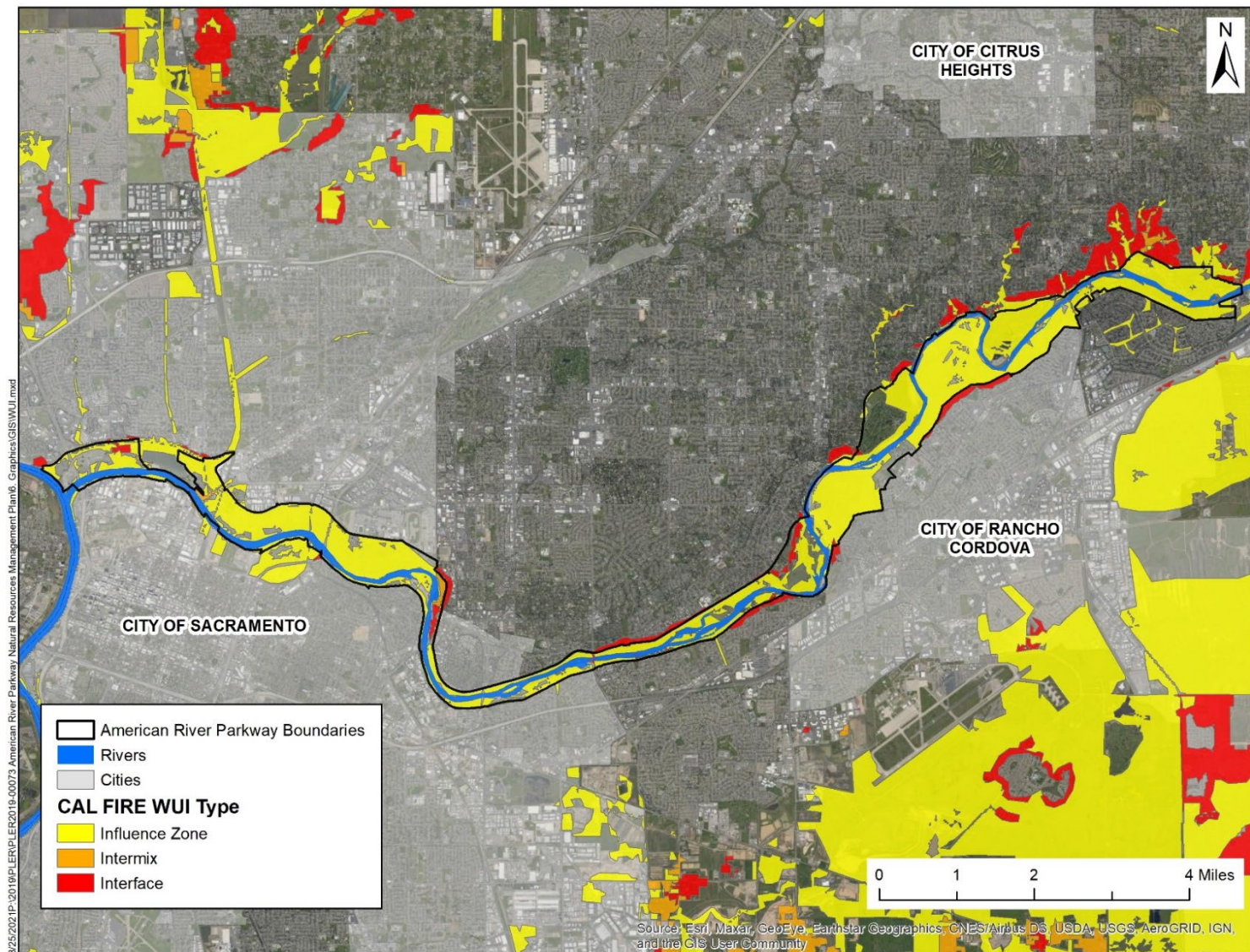


Plate HZ-2 displays the spatial extent of the WUI in and adjacent to the Parkway by type, indicating that a majority of the Parkway is considered a WUI under the CAL FIRE criteria. As expected, the majority of the Interface area is located on the outer boundaries of the Parkway, because of the few structures within its boundaries; however, certain areas that potentially meet CAL FIRE's criteria for being included in the Interface have been excluded. For example, areas of Arden Arcade north of the Parkway are within the Interface, but contiguous residential areas, directly east of the Interface and located next to the same vegetation types and similar vegetation densities, are not included. Similarly, residential areas of Rancho Cordova, south of the Parkway are not classified as Interface, despite being located adjacent to dense woodlands. The overwhelming majority of the Parkway is classified as an Influence Zone because of the presence of wildland vegetation throughout its extent. While the CAL FIRE WUI data is helpful for displaying wildland fuel locations and their proximity to residential structures, the dataset has limitations.

Fire response and fire-related vegetation management activities are split between two agencies, the City of Sacramento Fire Department (Sac Fire) and Sacramento Metropolitan Fire District (Metro Fire). Over the last decade, Regional Parks has enlisted outside expertise to identify wildfire hazard conditions and recommend methods and locations to reduce these hazards. This has been conducted at a broad scale and focused, site-specific locations in the Parkway. Resulting actions emphasize prevention (e.g., signage, education, enforcement), fuel management (e.g., trimming, grazing, fire break maintenance), and preparedness/response. Examples of earlier efforts include a *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2014), which provides recommendations for projects to complete to improve fire safety; a *Review of Sheep Grazing on Sacramento County Parks Department Lands* (Rice 2015a) which provides recommendations for future grazing for fire hazard reduction; and a *Report of Wildfire Hazard Conditions and Recommendations for Wildland Fire Hazard Reduction in the Sacramento County Regional Park System* (Rice 2015b), which provides recommendations for projects to complete to improve fire safety and is updated to discuss accomplishments from 2014. Regional Parks relies on Sac Fire & Metro Fire to not only extinguish fires in the Parkway, but also partners with them to reduce fuels, create and maintain firebreaks, rehabilitate burn areas, and conduct prescribed burns. Sac Fire is responsible for fire response and fire-related vegetation management activities in the Parkway from the confluence of the Sacramento River and American River to Watt Avenue. Sac Fire does not use a Community Wildfire Protection Plan (CWPP). Metro Fire is responsible for the area from Watt Avenue to the eastern boundary of the Parkway. Metro Fire's CWPP identifies planned fuel reduction and risk reduction areas, prescribed burn areas, rehabilitation areas, and firebreak management. It also maps the WUI within Metro Fire's jurisdictional area. The CWPP's WUI map places most of the Parkway (within District boundaries) and adjacent communities within a District-designated WUI (Figure 4-8 Wildfire).



Plate HZ-2: CAL FIRE WUI



## ***FUELS***

The Parkway contains a variety of vegetation types that would serve as fuel for wildland fires. Foothill and valley grasslands, elderberry savannas, riparian forests and woodlands, riparian scrub and chaparral, and oak woodlands all contain vegetative communities with potential fuels for fire. In addition, several invasive plant species increase wildland risk during the dry season. Giant reed, a grass that can grow up to 30 feet tall, is distributed along forested riparian areas in the Parkway. Pampas grass is a large grass species that can reach 6 to 13 feet in height and invades the Parkway's inland riparian and floodplain areas. Giant reed and pampas grass produce significant quantities of dry biomass that increase fuel loads in native vegetation communities. Spanish broom, French broom, and Scotch broom are large shrubs that grow in dense stands. Spanish broom grows 10 to 15 feet in height in riparian areas and sandbars. French broom grows up to 10 feet high and has been observed in the Rossmoor Bar, Sacramento Bar, and Lower Sunrise Areas. Scotch broom grows 6 to 10 feet, and is observed in patches throughout the Parkway. These species ignite readily and may act as ladder fuels, facilitating the spread of surface fires into ladder fuels, and subsequently to the tree crowns.

The Parkway contains a variety of potential fuels. The Discovery Park, Woodlake, Cal Expo, Rossmoor Bar, and Sailor Bar Areas contain contiguous patches of valley and foothill grassland and elderberry savanna with ample herbaceous fine fuels, such as grasses and small shrubs, which dry and ignite quickly. Riparian forest, woodland and oak forest, and woodland vegetation communities that occur throughout the Parkway contain fine understory fuels, mid-story semi-woody and woody fuels, and large, woody trees in the overstory. Chaparral and riparian scrub vegetation communities are found interspersed with riparian forest and woodlands in the Discovery Park, Cal Expo, River Bend Park, Lower Sunrise, and Upper Sunrise Areas, as well as on gravel bars in the Rossmoor Bar, Ancil Hoffman County Park, River Bend Park, and Sacramento Bar Areas. These areas contain semi-woody vegetation in the form of shrubs, with small trees intermixed.

Regional Parks works to minimize potential impacts of wildland fire in the Parkway through collaborative fuel reduction projects. Regional Parks' 2021 Fire Fuel Reduction Action Plan includes prescribed burns in partnership with both Metro Fire and Sacramento City Fire (Sacramento County 2022b). Actions listed in that plan include range management burns in partnership with Sac Metro Fire and Sac City Fire, grazing, discing firebreaks, mowing and treating firebreaks with herbicide, hand removal of ladder fuels, and planting fire-resistant understory (Sacramento County 2022d). Other previously identified recommendations for wildland fire hazard reduction in the regional park system included general park wide practices as well as specific practices at areas such as Rossmoor Bar, Lower Sunrise, the equestrian trail between Bannister Park and Sacramento Bar, Cal Expo, Woodlake, and Dry Creek (Rice 2014, Rice 2015b). Additionally, roads in the Parkway serve as fire breaks by dividing vegetated areas, and vegetation has been cleared around transmission lines to reduce fire risk.

## ***IGNITION SOURCES***

A wildland fire is classified as a non-structure fire that originates in an area of wildland vegetation, excluding prescribed burns for management purposes. Wildland fires can be caused by human activities (fireworks, campfires, sparks from vehicles or equipment, arson, etc.) as well as natural phenomena like lightning or volcanic activity. An average 95 percent of all wildfires within the state are human-caused (BLM 2020). A 2007 study by Syphard et al., entitled *Human Influence on California Fire Regimes*, found that the WUI is where people most often ignite wildfire (Radeloff et al. 2018). In the Parkway, numerous fires occur annually. There is a potential for natural fires, but there is also a potential for wildland fires to occur because of campfires or barbeques in unregulated locations. Additionally, homeless encampments may increase the incidence of wildland fire. Campfires that may be left unattended for extended periods of time and improperly disposed of cigarettes have the potential to start fires, particularly when campfires burn in areas with dry, dead vegetation.

Most wildland fires in the Parkway can be attributed to human activity, though the type of human activity is not always known. Human activity known to have caused wildland fires in the Parkway includes accidental fires started by campfires, arson, and embers travelling from other fires in the Sacramento area.

### **WILDFIRE RISK PROJECT IMPACTS**

The NRMP would have numerous beneficial impacts related to wildfire reduction risk in the Parkway. As explained in the NRMP, the high priority projects are those that assist in NRMP implementation. In terms of wildfire risk and hazard reduction, high priority projects include development of a tracking system for wildfires in the Parkway; development and implementation of a plan for wildfire prevention, response, and recovery with fire departments and agencies and adjacent landowners; mapping and evaluating all areas damaged or degraded by wildfire annually; and invasive species surveys and production of an Invasive Species Management Plan Update. These actions together would aid in wildfire prevention, response, and recovery efforts in the Parkway.

The NRMP also includes a number of management actions directly linked to wildfire prevention and response. Preservation actions include vegetation management for fire prevention as well as management of illegal camping sites. These actions will address vegetation as a fuel load and help address ignition sources that may be associated with illegal camping sites. In the Rehabilitation Overlay, the NRMP includes large-scale invasive plant removal, post-fire cleanup, and debris removal. There are also site-specific actions that directly address wildfire risk. For example, actions specific to Discovery Park include establishing low-growing native vegetation under power lines to provide fuel breaks to protect adjacent valuable wildlife habitat, increase tall tree overstory in the burned area to ensure timely response for minimizing undesirable wildfire impacts, and identify and designate appropriate fuel breaks for fire suppression activities. The NRMP identifies similar actions in other Parkway areas. Both the planning activities and physical activities the NRMP contemplates in the Parkway would help to reduce wildfire risk in the Parkway, which should also reduce the potential for wildfire to spread beyond the Parkway into adjacent developed areas.

Although wildfire management activities of the NRMP would have an overall beneficial reduction in wildfire risk, there are certain recommended resource management actions that have the potential for a temporary risk of wildfire during construction. For example, the use of mechanized equipment for vegetation removal has the potential to result in incidental sparks that could cause a wildland fire. Maintenance vehicles, heavy equipment like excavators, and gas-powered equipment such as hedge trimmers and chainsaws, all can start fires, a risk that is increased in particularly dry conditions and areas with substantial vegetation. Mitigation Measure HZ-2 states that all construction equipment use will be conducted in accordance with applicable regulations, standards, and labels, which include requirements related to training and other factors that are protective for wildfire safety. Use and transport of this equipment will comply with applicable federal, state, and local laws and regulations. Compliance with laws and regulations will substantially reduce the potential risk for a wildland fire during construction. Adherence with HZ-2 will ensure that impacts are ***less than significant***.

The NRMP goals include mapping and evaluation all areas damaged or degraded by wildfire or encampments, and development of a tracking system for wildfires in the Parkway. The plan also encourages the development and implementation of a plan for wildfire prevention, response, and recovery. Rather than Regional Parks, Metro Fire and Sac Fire are manage prescribed burns conducted in the Parkway. A separate plan document, the Regional Parks' Fire Fuel Reduction Plans for 2021 includes prescribed burns in partnership with Sac Fire and Metro Fire (Sacramento County 2022b). Risks and impacts of prescribed burns are, therefore, part of a separate ongoing effort and are not evaluated in this document.

## **MITIGATION MEASURE:**

### **HZ-2: OPERATION AND MAINTENANCE OF CONSTRUCTION EQUIPMENT**

All construction equipment use will be conducted in accordance with applicable regulations, standards, and labels, which include requirements related to training and other factors that are protective for wildfire safety. Use and transport of this equipment will comply with applicable federal, state, and local laws and regulations. Compliance with laws and regulations will substantially reduce the potential risk for a wildland fire during construction.

## **10 PUBLIC SERVICES/UTILITIES**

### **INTRODUCTION**

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The purpose of the Natural Resources Management Plan (NRMP), a supplement to the American River Parkway Plan, is to provide relevant and defensible information for making informed decisions for managing, maintaining, and enhancing American River Parkway (Parkway) resources. The NRMP identifies Potential Resource Management Actions specific to each Area Plan within the Parkway to further this goal. The specific Potential Resource Management Actions recommended are informed by four key indicators within each Area Plan: the level of alteration, inundation, vegetation communities, and land use. The overall goal of the NRMP is to provide a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP identified those Potential Resource Management Actions at the Area Plan level that would contribute to meeting the overall goals of the NRMP. In addition to the Potential Resource Management Actions identified, the plan recognizes planning and technical studies that further assist with the refinement of conservation, restoration, and naturalization efforts moving forward.

NRMP goals related to public services and facilities include the following:

- Maximize environmentally beneficial opportunities within transmission line corridors.
- Coordinate with fire agencies to reduce wildfire fuel and hazards in the Parkway.

The Potential Resource Management Actions are introduced at a conceptual/programmatic level in the NRMP and as each one is further developed and refined, the actions will be subject to more detailed review and environmental analysis at a project-level under CEQA. The ARPPU FEIR analyzed impacts to Public Services and Utilities, which support Parkway land use activities. The analysis below will evaluate and supplement the ARPPU FEIR and determine whether mitigation measures are required to mitigate the impacts of the Potential Resource Management Actions proposed in the NRMP.

The following chapter provides an update to Public Services and Utilities analysis, specifically addressing energy services and sewer services, in response to a letter received on the Notice of Preparation (NOP) from the Sacramento Regional County Sanitation District (Regional San) and the Sacramento Area Sewer District (SASD). Other Public Services and Utilities analyzed in the ARPPU FEIR include fire services, law enforcement, public transit service and water service. Discussions related to these public services and utilities in the ARPPU FEIR remain adequate and applicable to the NRMP and are not discussed further in this chapter.

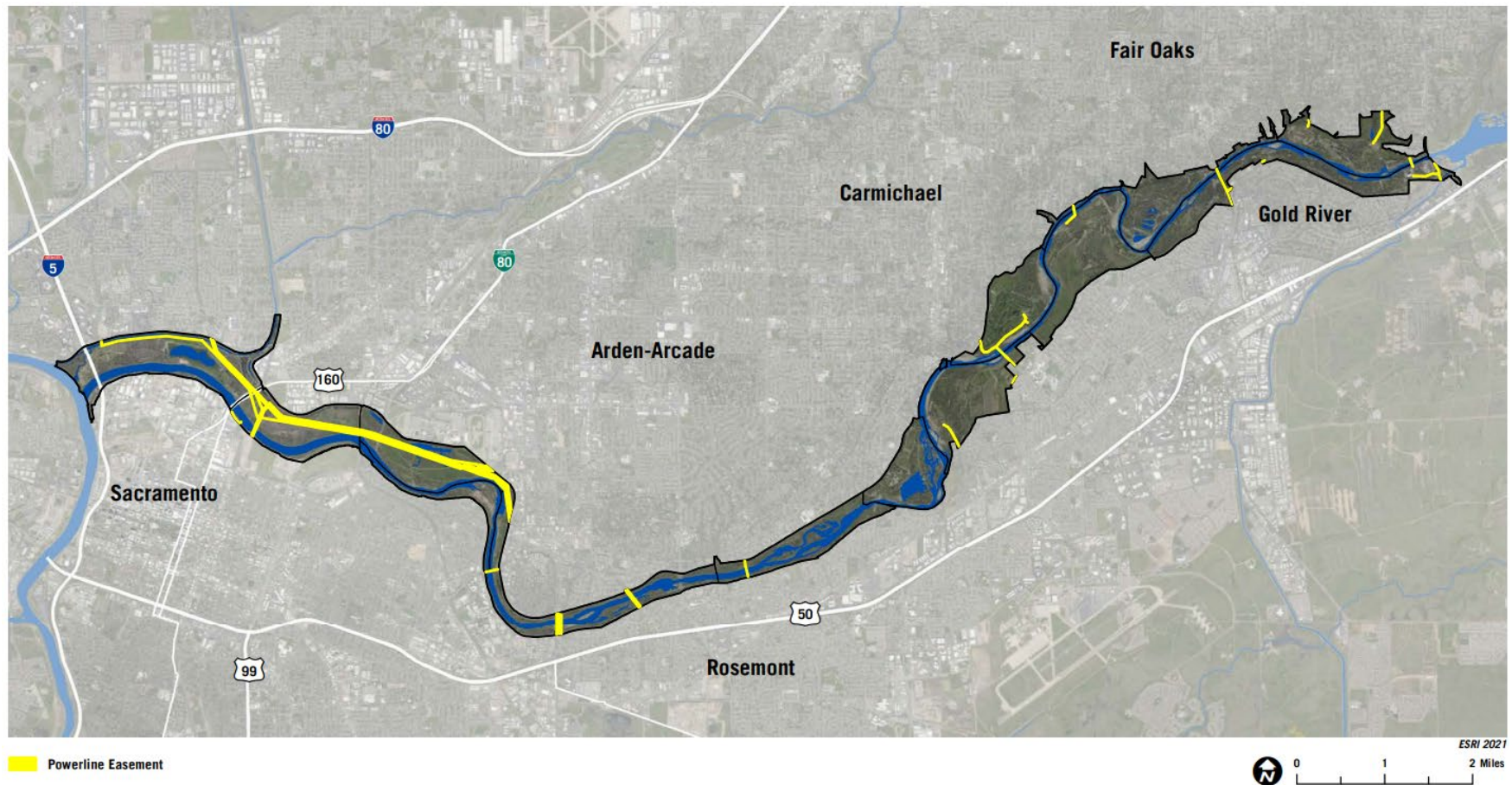
## **ENVIRONMENTAL SETTING**

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The Parkway contain numerous transmission lines, telephone lines, power lines and sewer facilities. There are utility easements associated with each of these facilities that allow the controlling agencies to access the line for maintenance purposes. The electrical transmission lines are operated and maintained by Pacific Gas and Electric Company (PG&E), Sacramento Municipal Utility District (SMUD), and/or the Western Area Power Authority (WAPA). The sewer facilities are owned and operated by Regional San or SASD. An exhibit showing electrical facilities is presented in Plate PS-1 below.



**Plate PS-1: Electrical (Power line) Easements**



## REGULATORY SETTING

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### ENERGY SERVICE

PG&E, SMUD, and/or the WAPA operate and maintain electrical and natural gas lines within or adjacent to the Parkway. These facilities are required to meet the California Public Utilities Commission (CPUC) regulations and Public Resources Code (PRC). Specifically, to promote the safe and reliable maintenance and operation of utility facilities, the following codes and regulations are in place:

CUPC General Order 95, Rule 35 – Requires a minimum of 18-inch clearance between vegetation and energized conductors (wires) carrying more than 750 volts.

PRC Section 4293 – Requires a minimum clearance of 4 feet between vegetation and energized conductors (wires) carrying more than 750 volts, and mainly covers areas where the California Department of Forestry and Fire Protection (CalFire) is the direct protection agency.

PRC Section 4292 – Requires a cylindrical clearance 10 feet around certain poles and extending 8 feet above ground level in areas where CalFire is the direct protection agency.

Both PG&E and SMUD have diagrams for the various clearance distances, as well as guides for recommended landscaping in and around these areas.

### SEWER SERVICE

#### ***SACRAMENTO AREA SEWER DISTRICT (SASD)***

The SASD provides local wastewater collection and conveyance services and infrastructure throughout the Sacramento region. SASD maintains and provides wastewater collection and conveyance from the local residences and businesses in the urbanized, unincorporated areas of the County, the Cities of Elk Grove, Rancho Cordova, and Citrus Heights, portions of the City of Sacramento, a very small area in the City of Folsom, and the Communities of Courtland and Walnut Grove. The SASD service area covers approximately 270 square miles with a population of over one million people. SASD maintain 4,600 miles of sewer pipe and more than 106 pump stations that connect to the larger regional interceptors maintained by the Sacramento Regional County Sanitation District (also referred to as Regional San).

#### ***SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT (REGIONAL SAN)***

Regional San provides wastewater conveyance and treatment services to about 1.6 million residential, commercial, and industrial customers in portions of unincorporated Sacramento County, the Cities of Citrus Heights, Elk Grove, Folsom, Rancho Cordova, Sacramento, and West Sacramento, and the Communities of Courtland and Walnut Grove. Wastewater travels through a system comprised of 169 miles of interceptor

pipelines, of which 111 miles are gravity pipes and 58 miles are force mains, and 11 pump stations before it reaches the Sacramento Regional Wastewater Treatment Plant (SRWTP). There, it is treated and discharged to the Sacramento River. In normal weather years, Regional San treats an average of approximately 124million gallons of wastewater each day (mgd) (Regional San 2021).

### **SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT**

Wastewater flows collected from Regional San's interceptors are ultimately transported into the SRWTP. The SRWTP is located west of Elk Grove and is owned and managed by Regional San. Currently, the SRWTP has a National Pollutant Discharge Elimination System (NPDES) permit issued by the Central Valley Regional Water Quality Control Board (RWQCB) for discharge of up to 181 mgd average dry-weather flow of treated effluent into the Sacramento River. The SRWTP has the potential for expansion to 218 mgd.

Regional San is upgrading the SRWTP through the EchoWater Project adopted in 2011. The design of the SRWTP and collection system was balanced to have SRWTP facilities accommodate some of the wet-weather flows, while minimizing idle SRWTP facilities during dry weather. Regional San must complete construction of the new treatment facilities to achieve permit and settlement requirements by May 2023 for compliance with pathogen requirements. The upgrade will not result in a net increase in the permitted capacity of the SRWTP (Regional San 2022).

## **PROPOSED PROJECT – NATURAL RESOURCES MANAGEMENT PLAN**

As discussed in the Introduction section, the NRMP is a supplement to the American River Parkway Plan that provides a framework for the conservation, restoration, and naturalization of natural resources within the Parkway. The NRMP acknowledges that various public utilities and facilities are located within the Parkway and that the Parkway provides linkage for almost all critical infrastructure to serve the greater Sacramento region (see Chapter 3 – Parkway Setting, Utilities and Infrastructure of the NRMP).

NRMP goals related to public services and facilities include the following:

- Maximize environmentally beneficial opportunities within transmission line corridors.
- Coordinate with fire agencies to reduce wildfire fuel and hazards in the Parkway.

Given the identified goal to look towards opportunities for Parkway-environmental enhancement within public utility transmission line corridors, the NRMP addresses these opportunities in Chapter 7, Section 7.5 “Use of Utility Rights-of-Way For Vegetation Enhancement.” This section notes that vegetation removal is often required due to State and Federal mandates associated with wildland fire risk management; however, the NRMP notes that some vegetation enhancements along with recreational trails may be best suited within these corridors. Regional Parks shall coordinate with

the various utility providers to ensure any management activities are co-beneficial. Chapter 8 of the NRMP discusses specific Resource Management Action opportunities within transmission line corridors. For example, within the Cal Expo Area Plan, it is noted that transmission line easements are dominated by yellow starthistle and a desired condition would be to restore these areas to grassland habitat. Grassland habitat would not conflict with the transmission line corridors and associated wildfire management mandates; thus, this is an example of a co-benefit to the Parkway and the various utility providers.

## **SIGNIFICANCE CRITERIA**

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The public services analysis considered existing and future plans from the jurisdictions in the project area along with the various environmental analyses conducted for this SEIR to determine whether implementation of the proposed project will result in impacts to public services or utilities.

Impacts to public services or utilities are considered significant if a project would:

1. Result in inefficient, wasteful, and unnecessary consumption of energy.
2. Require the construction of new or the expansion of existing water facilities that could potentially cause significant construction-related environmental effects. Or result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity.
3. Require the construction of new or the expansion of existing wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Or result in a service demand that cannot be met by existing or reasonably foreseeable future service capacity.
4. Result in the need for additional landfill capacity for solid waste disposal.
5. Result in substantial adverse physical impacts associated with the provision of emergency services.
6. Result in substantial adverse physical impacts associated with the provision of law enforcement services.
7. Result in substantial adverse physical impacts associated with the provision of schools, park and recreational services, and libraries.
8. Result in substantial adverse physical impacts associated with the provision of public utilities.

Items 1 through 7 were adequately addressed in the ARPPU FEIR and are not discussed further in this document.

## IMPACTS AND ANALYSIS

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### IMPACT: RESULT IN SUBSTANTIAL ADVERSE PHYSICAL IMPACT ASSOCIATED WITH THE PROVISION OF PUBLIC UTILITIES

As stated above, the Regional San and SASD provided a letter during the NOP comment period noting that the American River Parkway contains existing sewer facilities, easement, and access roads. The letter notes that any project which proposes to raise or lower the existing ground elevation may impart additional loading over existing pipelines or prohibit access to the pipelines. The Districts request continued access to their easements and facilities. A similar letter was sent by PG&E during the NOP comment period for the ARPPU FEIR. That letter detailed in ARPPU FEIR, noted existing facilities and requested continued access to their facilities and easements to maintain existing equipment and lines.

The NRMP Potential Resource Management Actions include revegetation and restoration efforts throughout the American River Parkway (reference Chapter 7, Section 5, and Chapter 8, Section 4 of the NRMP). Some of these revegetation and restoration areas overlap with these utility easements and facilities. Both PG&E and SMUD have specific vegetation requirements including spacing and height, within overhead power line easements. Revegetation and enhancement efforts would need to adhere to these guidelines so that there are fewer conflicts with the overhead lines in the future, reducing maintenance needs, potential fire risk, and future removal of vegetation.

Similar to overhead utilities, the Regional San and SASD have concerns regarding adequate access to, and maintenance of, underground pipes and above ground facilities (pumping stations and treatment plants). If restoration or revegetation occurs within these easements, the ability to quickly access the underground facilities during an emergency may be delayed. This could lead to greater environmental impacts to the American River Parkway through the release of raw sewage near the American River.

### CONCLUSION

The NRMP Potential Resource Management Actions could impede the ability for public utility providers to adequately maintain existing infrastructure within the American River Parkway, which is considered a ***potentially significant*** impact. This impact can be reduced to ***less than significant*** with implementation of mitigation requiring coordination of construction and landscaping plans with utility providers that maintain easements and facilities in the American River Parkway.

### MITIGATION MEASURES

**PS-1.** Prior to construction of new recreational amenities or installation of vegetation associated with revegetation and restoration efforts, Sacramento County Regional Parks shall coordinate proposed projects with the public utility providers (PG&E, SMUD, Western Area Power Authority, Regional San, SASD, etc.) which

hold easements or have existing facilities within the American River Parkway for review and approval.

### **CUMULATIVE IMPACTS**

Implementation of NRMP Management Actions within the Utility easements, approved in concert with associated utility managers, would result in ***less than significant*** cumulative impacts to public services and utilities.

## **11 CUMULATIVE IMPACTS AND OTHER CEQA CONSIDERATIONS**

### **CUMULATIVE IMPACTS**

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The CEQA Guidelines section 15355 defines a cumulative impact as “two or more individual effects which, when considered together, are considerable”. An individual effect need not itself be significant to result in significant cumulative effects; the impact is the result of the incremental effects of the Project combined with the effects of “other closely related past, present, and reasonably foreseeable probable future projects.” CEQA does not define “closely related”, but the Code of Federal Regulations (40 CFR 1508.25) indicates that a “closely related” project is one which is automatically triggered by the Project; one which cannot proceed without the Project first proceeding (mutual dependency); one which requires the Project for justification or is an interdependent part of the same action; or one which is a similar action with common timing, geography, and other features.

The requirements for a cumulative analysis are described in CEQA Guidelines Section 15130. A cumulative analysis “need not provide as great detail as is provided for the effects attributable to the project alone.” The analysis should focus on analyzing the effects of the project to which other projects contribute, to the extent practical and reasonable. These other projects may be identified either through the provision of a list of cumulative projects, or via a summary of projections contained in an adopted General Plan or an adopted EIR.

The significance criteria used for analysis are the same as those used throughout the topical chapters of the EIR. Section 15130(a)(3) states that a Project’s contribution to an impact is “less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures”.

The ARPPU FEIR provided a comprehensive analysis of cumulative impacts associated with updates to the Parkway Plan, a policy document that guides land use decisions affecting the Parkway. The NRMP SEIR is a subsequent document that relies on that analysis where appropriate. The NRMP guides natural resources management within the Parkway Plan. The Parkway Plan calls for development of an integrated vegetation and wildlife management plan for the Parkway. The NRMP supports the goals and policies of the Parkway Plan. The NRMP SEIR cumulative analysis or the cumulative conclusions do not differ from those disclosed in the ARPPU FEIR because the policies and goals of the ARPPU carry through to the NRMP. For example, no land use changes are proposed under the NRMP; the land use policies of the ARPPU remain intact and the associated cumulative analysis already conducted still applies. The topics that required an update to the cumulative analysis are related to those impacts that are effected by or change as a result of the potential NRMP resource management actions. These impacts or changes are associated with hydrology, cultural resources, tribal cultural resources and public

services and utilities. Therefore, the prior cumulative analysis in the prior environmental document is applicable and incorporated by reference and is adequate with the supplemental information provided in this environmental document. As discussed previously, the ARPPU FEIR can be viewed at: 827 7<sup>th</sup> Street, Room 225, Sacramento, CA 95814 or online at: <http://www.per.saccounty.net/EnvironmentalDocuments/Pages/SearchDocuments.aspx>.

See the Hydrology & Water Quality, Cultural Resources, and Tribal Cultural Resources chapters for supplemental cumulative discussions.

## **OTHER CEQA CONSIDERATIONS**

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### **IRREVERSIBLE ENVIRONMENTAL CHANGES**

CEQA Guidelines Section 15126.2 requires the evaluation of significant irreversible environmental changes, stating, “uses of nonrenewable resources during the initial and continued phases of a proposed project may be irreversible since a large commitment of these resources makes removal or nonuse thereafter unlikely.” This section of the EIR evaluates whether the project would result in the irretrievable commitment of resources, or would cause irreversible changes in the environment.

Construction of various project elements will require irretrievable commitments of a variety of finite resources, including aggregate, petrochemicals, and metals. These commitments will occur both as direct and indirect impacts of the project. Direct impacts include the consumption of fuel by the construction fleet and equipment, the consumption of fuel as part of the vehicle and equipment usage during project operation, and the use of metals and aggregates in the construction of the buildings. Indirect impacts include the consumption of fuel and other resources to produce the materials used in construction.

### **GROWTH INDUCING IMPACTS**

The CEQA Guidelines identify several ways in which a project could have growth-inducing impacts. In addition to the characteristics described above, projects that remove obstacles to population growth and projects that encourage and facilitate other activities that are beyond those proposed as part of the project and that could affect the environment are considered growth-inducing (CEQA Guidelines Section 15126.2[d]). Potential inducements to population growth include the availability of adequate water supplies, the availability of sewage treatment facilities, the availability of developable land and local government growth policies contained in general plans and zoning ordinances.

Growth inducement may not be considered necessarily detrimental, beneficial, or of significance under CEQA. Induced growth is considered a significant impact only if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth, in some other way, significantly affects



the environment, e.g., that it requires constructing facilities that would adversely affect the environment.

The ARPPU FEIR concluded that the Parkway Plan would not result in significant growth inducing impacts. None of the NRMP potential resource management actions themselves would result in a new growth inducing impact. Growth inducing impacts remain less than significant.

### **MITIGATION MONITORING AND REPORTING PROGRAM**

It shall be the responsibility of the project applicant to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure. The Environmental Coordinator will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). It shall be the responsibility of the project applicant to reimburse Planning and Environmental Review for all expenses incurred in the implementation of the MMRP, including any necessary enforcement actions. Any non-compliance will be reported to the project applicant, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant/owner in accordance with Chapter 20.02 of the Sacramento County Code.

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## APPENDICES

The subject of this Draft Supplemental Environmental Impact Report (DSEIR) is a project known as the Natural Resources Management Plan (NRMP).

1 - Introduction	IN-1: Notice of Preparation of a Draft Supplemental Environmental Impact Report for American River Parkway Natural Resources Management Plan (PLER2019-00073) prepared by County of Sacramento Office of Planning and Environmental Review dated April 8, 2021
1 - Introduction	IN-2: Notice of Preparation Comment Letters from the Native American Heritage Commission dated April 12, 2021 and from Sacramento Regional County Sanitation District (RegionalSan) dated May 21, 2021
2 – Project Description	PD-1: American River Parkway Natural Resources Management Plan (NRMP) prepared by MIG for Sacramento County and Sacramento County Regional Parks dated September 2022
2 – Project Description	PD-2: Table of Relevant ARPP Policies in relation to NRMP Goals, Objectives, and Performance Measures prepared by County of Sacramento Planning and Environmental Review
2 – Project Description	PD-3: NRMP Area Plan Maps and Potential Resource Management Actions prepared by MIG for Sacramento County and Sacramento County Regional Parks
2 – Project Description	PD-4: Table of ARPPU Area Plans Land Use Designations and Potential Resource Management Actions for the American River Parkway Natural Resources Management Plan (NRMP) prepared by Sacramento County Regional Parks

5-Hydrology	HY-1: A Hydrology Report titled <i>Natural Resource Management Plan Modeling Support Project: Cumulative Hydraulic Impact Assessment</i> (Hydrology Report) was prepared by cbec eco engineering dated October 29, 2021
5-Hydrology	HY-2: NRMP Management Actions incorporated into the hydraulic modeling by Area Plan