INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

SKYWAY DRIVE WELL PROJECT

FAIR OAKS WATER DISTRICT
10326 Fair Oaks Blvd.
Fair Oaks, CA 95628

Prepared with the Technical Assistance of:

Environmental Planning Partners, Inc.
2934 Gold Pan Court, Suite 3
Rancho Cordova, CA 95670

FEBRUARY 2020

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ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project could not have a significant effect on the environment, and a Negative Declaration will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described within the attached Initial Study have been added to the project. A Mitigated Negative Declaration will be prepared. ☒

I find that the proposed project may have a significant effect on the environment, and an Environmental Impact Report is required. ☐

I find that the proposed project may have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An Environmental Impact Report is required, but it must analyze only the effects that remain to be addressed. ☐

The Fair Oaks Water District has determined that the subject project, further defined and discussed in the attached Environmental Checklist/Initial Study will not have any residual significant effects on the environment. As a result thereof, the preparation of an environmental impact report pursuant to the California Environmental Quality Act (Division 13 of the Public Resource Code of the State of California) is not required.

The attached Environmental Checklist/Initial Study has been prepared by the Fair Oaks Water District in support of this Mitigated Negative Declaration. Further information including the project file and supporting reports and studies may be reviewed at the Fair Oaks Water District, 10326 Fair Oaks Blvd., Fair Oaks, California 95628.

MITIGATION MEASURES: Mitigation measures have been identified for the project.

Tom R. Gray 2-06-2020

Signature Date

FAIR OAKS WATER DISTRICT FAIR OAKS SACRAMENTO COUNTY CALIFORNIA ORGANIZED MARCH 26, 1917

Tom R. Gray, General Manager Fair Oaks Water District

Printed Name For

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INITIAL STUDY AND ENVIRONMENTAL EVALUATION

Project Title:	Fair Oaks Water District Skyway Drive Well Project
Necessary Entitlements:	Obligation of public funds; Construction Contracting
Lead Agency Name and Address:	Fair Oaks Water District 10326 Fair Oaks Blvd. Fair Oaks, California 95628
Contact Person and Phone Number:	Mr. Tom R. Gray, General Manager (916) 967-5723
Land Use Designations:	MDR Medium Density Residential (Sacramento County General Plan) RD-5 Residential (Fair Oaks Community Plan)
Zoning Designation:	RD-5 Residential (Sacramento County)

The project that is the subject of this Initial Study is consistent with the land use and zoning district designations of the Sacramento County General Plan, Fair Oaks Community Plan, and Zoning Code, and local and regional water supply plans adopted by the Fair Oaks Water District (FOWD) or for which the FOWD is signatory. This Initial Study focuses on whether the proposed project may cause significant effects on the environment. In particular, consistent with Section 21083.3 of the Public Resources Code, this Initial Study is intended to assess any effects on the environment, which are peculiar to the proposed project or to the parcel on which the project would be located. The Initial Study is also intended to assess whether any environmental effects of the project are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or by other means [Section 15152(d)(2) of the Guidelines for the California Environmental Quality Act (CEQA)]. If such revisions, conditions or other means are identified, they will be imposed as mitigation measures.

This initial study relies on CEQA Guidelines §§15064 – 15064.7 in its determination of the significance of environmental effects. According to §15064(f), the finding as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an EIR.

1. DESCRIPTION OF PROJECT

The project under evaluation in this Initial Study/Mitigated Negative Declaration is the construction and operation of a new groundwater well within the FOWD service area. As described below, the objectives provide information on the purpose of the project, location refers to the Sacramento County area of the community of Fair Oaks and the site where the Skyway Drive Well would be constructed; the project characteristics are the specific facilities and elements of the proposed Skyway Drive Well; project phasing refers to the schedule for project construction and operation; and project approvals refer to actions that must be taken by the FOWD in order to approve the Skyway Drive Well project. (FOWD 2019)

OBJECTIVES

The proposed project consists of the construction and operation of a municipal water supply well and well pump within the service area of the FOWD. The FOWD's goal is to provide a more balanced water supply system between the surface water supply source provided by San Juan Water District (SJWD) and the FOWD ground water supply wells. Having a more balanced, conjunctive water supply system will allow FOWD to better serve their customers, especially during drought periods. Currently, the SJWD provides up to 90 percent of the FOWD's water demands. The Skyway Drive well would provide a ground water supply option for the FOWD's highest elevation zone.

The proposed Skyway Drive Well is intended to provide the FOWD directly, and the region indirectly, with additional water resources for typical municipal and industrial uses, or other purposes as determined by the FOWD to:

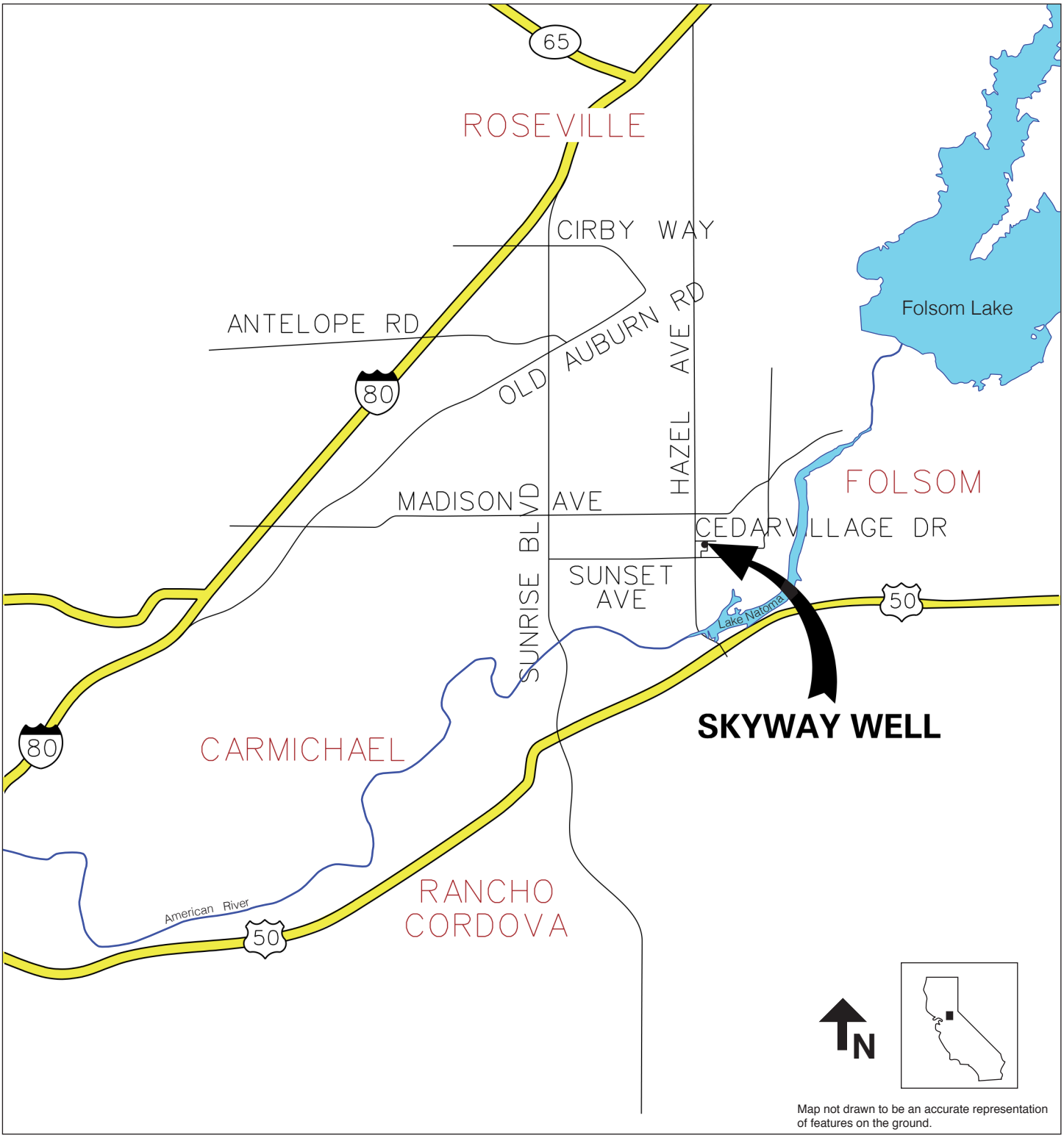
- Supplement surface water entitlements in the event of a long- or short-term drought or surface water curtailment.
- Operate and maintain the underlying groundwater basin consistent with regional conjunctive use programs.
- Enhance the reliability and redundancy of water supplies that are available to serve the FOWD's customers.
- Serve as a source of water supply in the event of a water infrastructure or water supply emergency.
- Serve as source of water supply to help meet the FOWD's maximum day and peak hour water supply needs.
- Provide additional resources for fire flow requirements.

POLICY FRAMEWORK

The proposed project is consistent with and implements the FOWD's responsibilities and obligations under the Sacramento Water Forum Agreement as a San Juan Water District consortium member (April 2000, updated October 2015), the Regional Water Authority's (RWA) American River Basin Integrated Regional Water Management Plan (June 2006, updated 2018), and the Sacramento Groundwater Authority's (SGA) Groundwater Management Plan (December 2008, revised December 2014). The facilities constructed under the proposed project would directly serve to operate and maintain the groundwater basin for use in drought years through conjunctive use, and water efficiency/conservation programs as provided by the regional water plans cited above.

LOCATION

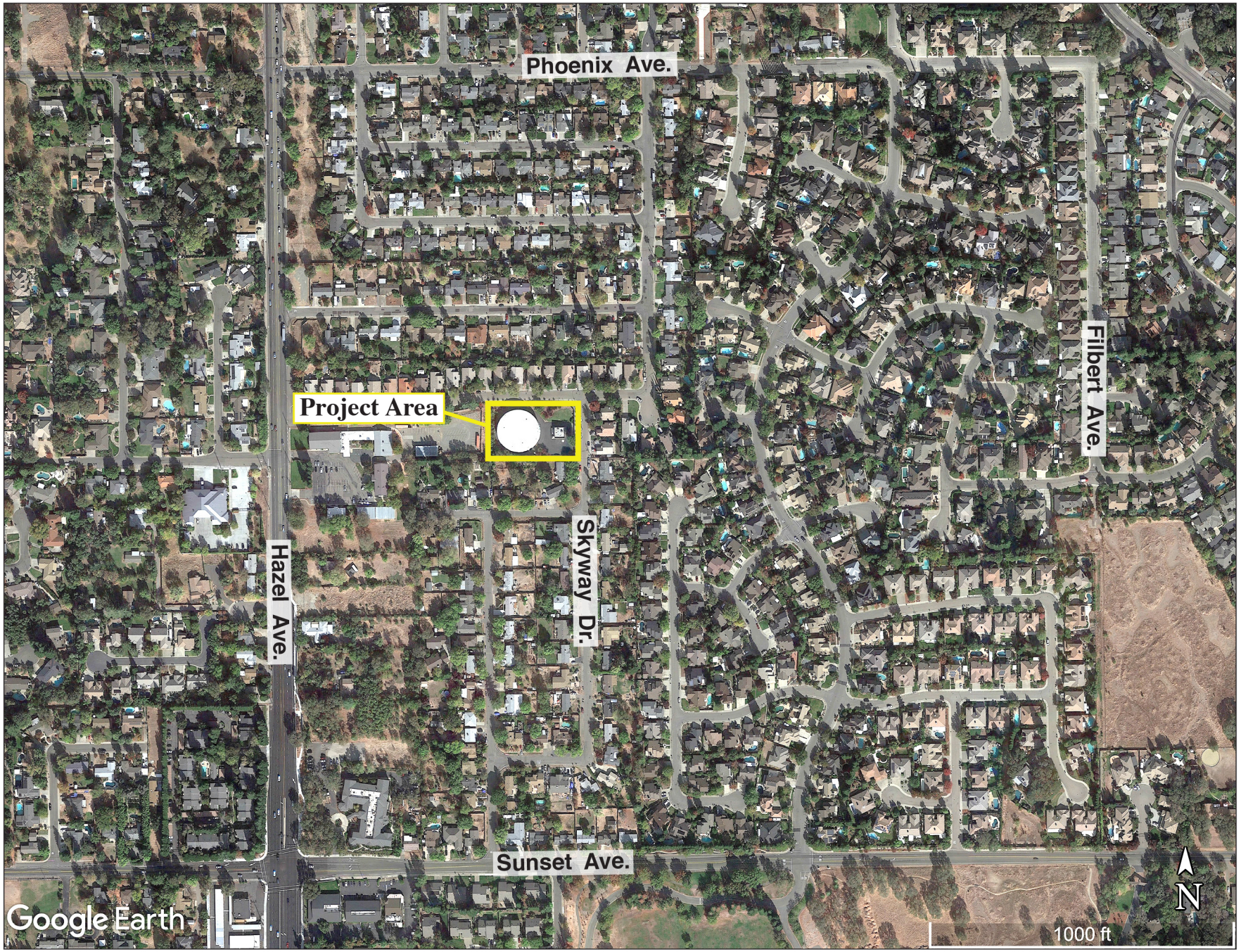
The proposed project would be constructed within a 1.27-acre parcel, Sacramento County Assessor's Parcel Number (APN) 235-0214-002. The parcel is located at 5005 Skyway Drive in the Sacramento County unincorporated community of Fair Oaks (see Figures 1 and 2), at the intersection of Skyway Drive and Cedarvillage Drive. Because the parcel is in a land grant, it was not subject to a General Land Office Survey. Township, range, and section information is therefore not available. The project site is located at 38°39' 25.55"N, 121°13'21.58"W. The elevation is 262 feet (ft.) above mean sea level (msl) in the southeast corner, sloping to 252 ft. msl in the northwest corner of the parcel. (Google Earth Pro 2019)



FOWD Skyway Drive Well Project

SOURCE: KASL Engineering 2019; Planning Partners 2019

Figure 1
Regional Location



FOWD Skyway Drive Well Project

SOURCE: Google Earth Pro 2019, Planning Partners 2019

Figure 2
Project Vicinity

EXISTING CONDITIONS

The project site is currently developed with a 3.0 million gallon (MG) water storage tank, and a booster pump station enclosed within a block wall building. Privacy fencing surrounds the perimeter, and several native and ornamental trees are located within the project site. The property is bounded on the north, east, and south by existing single-family residential development. The Grace Bible Church lies to the west of the project site. Access to the parcel is via a driveway on Skyway Drive. Utility connections existing on the parcel include water mains, electrical service, sewer (although the proposed project is not anticipated to need sewer service), and storm drainage.

The proposed project parcel is designated for Medium Density Residential use in the Sacramento County General Plan. The Medium Density Residential designation provides for areas of attached units, including apartments and condominiums, along transit corridors and throughout the urban area (Sacramento County 2011). In the Fair Oaks Community Plan, the parcel is designated for RD-5 Residential use (Sacramento County 2004). This use designation provides for typical urban subdivision development of predominately single-family dwellings (Sacramento County 1975). The Sacramento County Zoning Code designates the parcel as RD-5 Residential (Sacramento County 2019). This land use is the most widely used single-family residential zoning district where public water supply and public sewage facilities are both in use (Sacramento County 2015). According to the Zoning Code, water wells are considered to be a Minor Public Service Facility Use that is permitted in an RD-5 zone by right (Sacramento County 2015a).

PROPOSED PROJECT

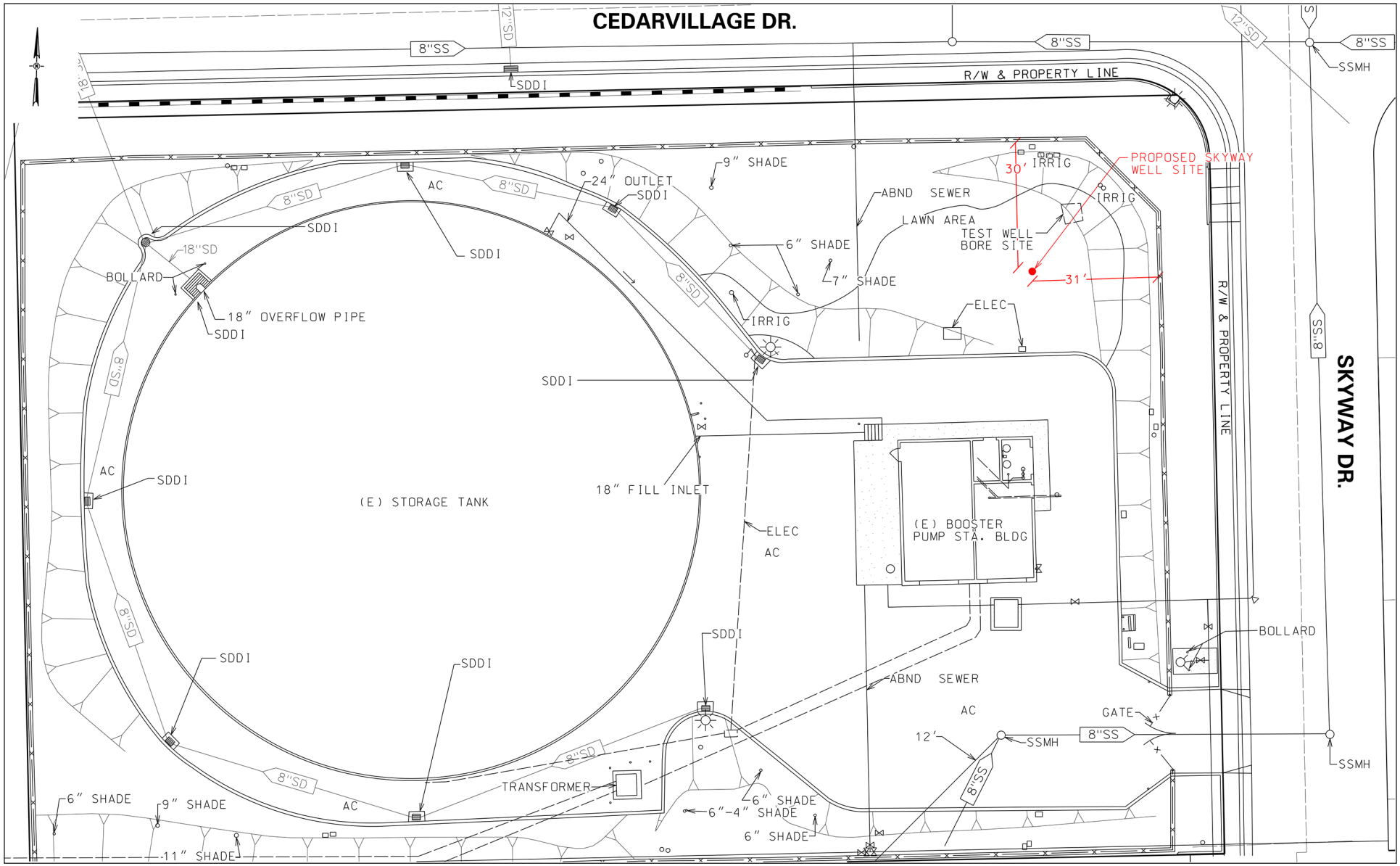
SITE PLAN

Proposed new facilities would consist of a municipal water well equipped with a submersible or vertical turbine driven pump. Other new above-ground facilities would include well head piping and valves, and pump-to-waste valves and piping. The new well head would be located within a 3-foot by 3-foot concrete pad (see Figure 3). Above-ground well head piping and valve would be limited to a ± 20-foot x 25-foot area. The new well would be located in the northeast quadrant of the site, approximately 50 feet from the intersection of Skyway Drive and Cedarvillage Drive.

The new well would be connected to the tank fill pipeline that feeds the existing water storage tank. Well water stored in the tank would be delivered via an existing tank return pipeline and booster pump station to the FOWD distribution system.

A 40-foot by 60-foot area of lawn within the project site would be disturbed during construction to house the drill rig, drill pipe lay down area, drilling fluid capture pond, and an area to store cuttings.

Except for the well head and above ground piping appurtenances, this area would be restored after the completion of construction. In addition to the well and pipeline connection to the existing tank fill pipeline, the project would result in upgrading the existing on-site stormwater drainage system to accommodate well test flows and pump to waste discharges. No new onsite lighting would be provided with the proposed well project.



FOWD Skyway Drive Well Project

SOURCE: KASL Engineering 2019, Planning Partners 2019

Figure 3
Site Plan

The motor control center installed for the new well pump will be placed within the motor control center room of the existing booster pump station building. Existing disinfection facilities located within the booster pump station building will be modified with the addition of the groundwater supply provided by the new well. Standby power facilities may be required but the existing standby power equipment may have adequate capacity to supply emergency power to the new well pump.

PROPOSED OPERATIONS

Water Source

The proposed groundwater well site is located in the southeastern portion of the Sacramento River Valley. The groundwater resources of the area have been extensively investigated as summarized in the California Department of Water Resources (DWR) Bulletin 118-3 (1974). The FOWD service area is underlain by the fresh-water-bearing Fair Oaks, Victor, Laguna, and Mehrten Formations. These formations are typically composed of interbedded sand and gravel with silt and clay. The host rock of the sediments is granite from the Sierra Nevada. Groundwater is found in unconfined and confined aquifer systems. Water bearing sand deposits within the Mehrten Formation are the source of ground water supply in the FOWD. These sands yield groundwater of quality and quantity that is sustainable for municipal use.

A test well was drilled at the proposed Skyway Drive project site by the FOWD during summer/fall 2019. The pilot borehole for the test well was drilled to a depth of 440 feet below ground surface (bgs). Following the completion of geophysical surveys, a temporary well casing and borehole were developed. A pump was installed to a depth of approximately 190 feet; the static water level at the start of pump development was 155 feet bgs. In the summer of 2019 the test hole was pumped for six hours at maximum pump capacity, approximately 75 gallons per minute (gpm). At the conclusion of testing, the test pump and temporary well casing were removed and the test hole was destroyed. Water samples from the test well were tested for quality; it was found that the test hole water sampled met all drinking water standards. No volatile organic compounds were detected.

Water Treatment

Prior to entering the FOWD's offsite distribution system, raw well water stored in the existing water storage tank is disinfected using sodium hypochlorite feed pumps and dosage controls. These existing facilities located within an existing Booster Pump Station building would be modified, as necessary, to properly treat the well water. The FOWD expects that the amount of disinfection required for ground water would be less than currently required for the San Juan Water District (surface water) supply source. No other treatment of the groundwater is required or anticipated at this time. No additional on-site storage is required to meet the requirements of the new well.

Construction Phase 1 - Well Construction and Testing

Construction of the water supply well would consist of installing and sealing both outer temporary and permanent conductor casings. Well construction would begin by drilling a 48-inch hole to a depth of approximately 75 feet. A 14-inch diameter (minimum) borehole will be drilled to a depth of approximately 390 feet. A sanitary seal placed to a depth of 240 feet and constructed in accordance with State and County regulations will be installed. Borehole logging will be used to verify already identified water bearing zones. Water quality testing was previously completed for the test well. All of the groundwater samples met Drinking Water Standards. The borehole would be then be reamed to a diameter of 32 inches, and the well casing installed. The casing assembly would consist of an 18-inch blank stainless steel well casing coupled with stainless-steel well screens within the preferred

sand deposits (water bearing) strata within the borehole. A gravel envelope installed around the well screens would serve to retain any unconsolidated aquifer materials (sand and gravel) and allow sand-free water production from the aquifer system. Post-drilling efforts would include swabbing and airlift development followed by pumping for well development and testing. Short- and long-term pump tests would be used to assess well performance, specific capacity, and the adequacy of the pump design. The duration of this phase of construction activities is expected to be approximately 7 to 10 days.

Water for the well drilling and construction operations would be obtained from the adjacent water storage tank. During development, pump testing of the well, and during routine pump maintenance, all discharge water would be disposed of in such a manner as to cause the least impact to the site and vicinity as discussed below. Clean water produced during well development and testing would be discharged to the municipal storm drain using stormwater drainage piping within the project site. As part of the proposed project, this existing stormwater conveyance pipeline would be upsized to provide adequate capacity for the conveyance of clean water produced during well drilling and testing.

During well development and construction, water containing solids, including sand and silts, would be contained in an on-site settling basin before being discharged to the storm drain. Only "clear water" would be discharged into the storm drain system in compliance with National Pollutant Discharge Elimination System (NPDES) discharge requirements. All other waters would be contained and disposed of offsite at an appropriate facility in compliance with State law. After well development and testing have been completed, solids contained within the settling basin would be collected for disposal, and the settling basin would be filled and reclaimed.

Construction Phase 2 – Well Equipping

The second phase of the project would commence upon completion of the well as described above. The well would be equipped with an electrically driven vertical turbine driven or submersible pump. The upgraded storm drain overflow pipeline would be used to convey pump to waste flows to the existing storm water system in order to prevent and moderate surges into the distribution system and permit routine controlled testing and rehabilitation of the well. An electrical service, including underground primary and secondary conduits and conductors from the transformer pad to the motor control center, would be installed to provide power for the pump. Intermittent construction activity during this phase could occur over a period estimated at 20 to 30 weeks.

Standby Power

The FOWD currently maintains a standby generator onsite to operate the pump station during power outages. The generator is located within the existing Booster Pump Station building. This existing generator may be sufficient to power the new well pump, but the amount of power needed will not be known until construction of the new well is completed and the design pumping flow has been determined. A new generator, if required, would be installed near the proposed well within a waterproof and noise mitigating enclosure. Typically, emergency generators of this type are tested monthly for periods lasting 30 minutes to one hour. Implementation of the proposed well project would not lead to changes in the schedule or duration of testing.

Construction

In coordination with Sacramento County all construction activities would implement stormwater pollution prevention Best Management Practices (BMPs) designed to reduce potential impacts to water quality during construction of the project and in accordance with the guidelines of the Sacramento Stormwater Management Program as follows:

- Complying with the requirements of the "General Permit for Stormwater Discharges Associated with Construction Activity",
- Preserving all existing vegetation onsite where possible,
- Scheduling as much project work as possible during the dry season,
- Stabilizing the construction access route,
- Protecting storm drain inlets,
- Using other Best Management Practices as necessary, including applying rainy season erosion controls, managing stockpiles, disposing of well development water properly, and correctly managing and disposing of construction wastes,
- Maintaining all Best Management Practices, and
- Stabilizing the site after construction is complete.

All work would be performed between the hours of 8 a.m. and 7 p.m. Monday through Friday. The only exception to the designated work hours would be made for the purpose of drilling the well. For this operation, continuous work (up to 24 hours per day) would be necessary in order to protect the integrity of the well structure. It is expected that this phase of work would take three to six days to complete. Temporary sound walls and appropriate muffler devices (for diesel powered drilling equipment) or an electrically powered drilling rig would be used to mitigate the noise impacts of the drilling operation on the surrounding residential area. In addition, the use of impact wrenches would be prohibited between the hours of 7 p.m. and 8 a.m. The FOWD may provide alternate nighttime accommodations to nearby residents, if needed, to mitigate noise impacts during drilling.

PROJECT PHASING

The project would be constructed in two phases. Phase 1 would consist of the drilling, construction, development, testing, and completion of the water supply well. Phase 1, including all temporary site work to accommodate the drilling operations, would required approximately 50 calendar days, with construction beginning as early as April 2020.

Phase 2 would include installation of a submersible or vertical turbine pump, controls, and connection to the FOWD water system. Construction of the facilities under Phase 2 would require approximately six months to complete; it is scheduled to begin in late spring or early summer 2020.

2. REQUIRED APPROVALS

Fair Oaks Water District

Certification of the Environmental Document. The Fair Oaks Water District would act as the Lead Agency as defined by CEQA, and would have authority to determine if the Initial Study is adequate under CEQA.

Project Approval. The Board of Directors of the Fair Oaks Water District would approve the project and direct staff to request bids for completion of the project.

3. ENVIRONMENTAL SETTING AND EVALUATION OF POTENTIAL IMPACTS

PURPOSE AND LEGAL BASIS FOR THE INITIAL STUDY

As a public disclosure document, this Initial Study provides local decision makers and the public with information regarding the environmental impacts associated with the proposed project. According to Section 15063 of the CEQA Guidelines, the purpose of an Initial Study is to:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required by:
    a. Focusing the EIR on the effects determined to be significant,
    b. Identifying the effects determined not to be significant,
    c. Explaining the reasons for determining that potentially significant effects would not be significant, and
    d. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

INITIAL ENVIRONMENTAL CHECKLIST

Following each major category in the Initial Study, there are four determinations by which to judge the project's impact. These categories and their meanings are shown below:

"No Impact" means that it is anticipated that the project will not affect the physical environment on or around the project area. It therefore does not warrant mitigation measures.

"Less-than-Significant Impact" means the project is anticipated to affect the physical environment on and around the project area, however to a less-than-significant degree, and therefore not warranting mitigation measures.

"Less than Significant with Mitigation Incorporated" applies to impacts where the incorporation of mitigation measures into a project has reduced an effect from "Potentially Significant" to "Less Than Significant". In such cases, and with such projects, mitigation measures will be provided including a brief explanation of how they reduce the effect to a less-than-significant level.

"Potentially Significant Impact" means there is substantial evidence that an effect is significant, and no mitigation is possible.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, including several impacts that are "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

Aesthetics	Agriculture and Forestry Resources	✗ Air Quality
Biological Resources	✗ Cultural Resources	Geology / Soils
Greenhouse Gas Emissions	Hazards & Hazardous Materials	Hydrology / Water Quality
Land Use / Planning	Mineral Resources	✗ Noise
Population and Housing	Public Services	Recreation
Transportation / Traffic	Tribal Cultural Resources	✗ Utilities / Service Systems

✗ Mandatory Findings of Significance

EVALUATION OF POTENTIAL IMPACTS

Responses to the following questions and related discussion indicate if the proposed project would have or would potentially have a significant adverse impact on the environment, either directly or indirectly, or individually or cumulatively with other projects. All phases of project planning, implementation, and operation are considered. Mandatory Findings of Significance are located in Section XXI below.

I. AESTHETICS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			**X**	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			**X**	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

The proposed Skyway Drive Well project is located in the Sacramento County unincorporated community of Fair Oaks at the southwest corner of the intersection of Skyway Drive and Cedarvillage Drive. The project site is situated in an existing neighborhood characterized by single-family development. Access to the parcel is via a driveway on Skyway Drive.

The proposed well project would be constructed within the existing 1.27 FOWD Skyway Parcel. The project site is currently developed with a 3.0 million gallon (MG) water storage tank and a booster pump station motor control center enclosed within a block wall building. Privacy fencing surrounds the perimeter, and several ornamental trees are located within the project site. The property is bounded on the north, east, and south by existing single-family residential development. The Grace Bible Church and Summit Christian School lie to the west of the project site (see Figure 2). Planned surrounding land uses would continue to be residential in nature.

The project site and surrounding region are situated in gently rolling terrain, with little variation in topography. Planned facilities would include the well head, well head pump and potentially an emergency generator, in a weatherproof and noise attenuating housing if a second generator is deemed necessary. Because the parcel is surrounded by privacy fencing, views to and from the site beyond existing fences are limited to the short-range. Medium- and long-range views are blocked by intervening vegetation and developed uses.

No designated scenic resources or scenic highways are located in the project vicinity, nor are such resources visible to or from the site (Caltrans 2019; Sacramento County 2011).

ENVIRONMENTAL ANALYSIS

Questions (a) and (c) Scenic vista/Visual character: Less-than-significant Impact. Implementation of the proposed Skyway Drive Well project would not result in a substantial change to any scenic vista, nor would it alter the visual character of the project site or surrounding area. Because no scenic vistas are within the viewshed of the project, and the existing privacy screened fencing would block the view of any infrastructure developed on the site, implementation of the

proposed project would not interfere with scenic vistas nor adversely effect visual character or quality. This would be a less-than-significant impact, and no mitigation would be required.

Question (b) Scenic resources: No Impact. There are no state or locally designated scenic highways in the vicinity of the proposed project. Thus, implementation of the project would not adversely affect scenic resources within a designated scenic highway. There would be no impact, and no mitigation would be required.

Question (d) Light and glare: Less-than-significant Impact. Currently, urban residential levels of night lighting occur in the vicinity of the site. The proposed project does not include the construction of any new permanent source of night lighting on the project site. Lighting proposed for the project would include temporary lights employed during the continuous work associated with well drilling. The temporary lighting would include hazard lights and a lighted drilling platform. The brightest lighting would be confined to a period of several days during the drilling of the well.

Therefore, lighting associated with the project would not introduce a substantial, permanent change from the urban light levels already experienced in the area. Temporary sound walls would be employed during the period of continuous well drilling, and these walls would serve to attenuate impacts from the lights employed, as well as the noise generated during this period. This would be a less-than-significant impact; no mitigation would be required.

II. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined in Public Resources Code section 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

The proposed project site is located in a low-density residential neighborhood within the urbanized community of Fair Oaks. The Department of Conservation (DOC) Farmland Mapping and Monitoring Program designates the project site as Urban and Built-Up Land (DOC 2016). No portion of the project site is identified as prime farmland, unique farmland, or farmlands of statewide importance. The proposed project is not protected by a Williamson Act contract (Sacramento County 2011). The site of the proposed project is not in an area zoned for agricultural activities or as forest land or timberland production (CDFW 2015, Sacramento County 2019).

ENVIRONMENTAL ANALYSIS

Questions (a) and (b) Convert farmland to non-agricultural use/Conflict with zoning for agricultural use: No Impact. The project site is designated as Urban and Built-Up Land, and is not subject to a Williamson Act contract. Because the proposed project would not convert designated farmland to a non-agricultural use, and because it would not conflict with agricultural zoning or a Williamson Act contract, there would be no impact. No mitigation would be required.

Questions (c) through (e): Conflict with zoning for, or loss of farmland, forest land, or timber land: No Impact. The proposed project site is not zoned for forest lands or timberland production, and no such lands exist on the project site or in the vicinity. Because the proposed project would not conflict with any existing forest land or timberland production zoning, and no changes associated with the project are proposed that would result in the conversion of existing forest land or timber lands, no impact would occur. No mitigation would be required.

III. AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		**X**		
c) Expose sensitive receptors to substantial pollutant concentrations?		**X**		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

ENVIRONMENTAL SETTING

The U.S. Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards (NAAQS) for ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, respirable particulate matter (PM_{10}), and airborne lead. Similarly, the California Air Resources Board (CARB) has established State Ambient Air Quality Standards (SAAQS) to protect public health and welfare. The ARB is responsible for control program oversight activities, while regional Air Pollution Control Districts and Air Quality Management Districts are responsible for air quality planning and enforcement. The ARB is also responsible for assigning air basin attainment and non-attainment designations for state criteria pollutants.

The Skyway Drive Well site lies within the Sacramento Valley Air Basin (SVAB) in northeastern Sacramento County. The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for implementing emissions standards and other requirements of federal and state laws in the project area.

Ambient air quality is described in terms of compliance with state and national standards, and the levels of air pollutant concentrations considered safe to protect the public health and welfare. These standards are designed to protect people most sensitive to respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. The EPA established NAAQS in 1971 for six air pollution constituents. States have the option to add other pollutants, to require more stringent compliance, or to include different exposure periods. California ambient air quality standards (CAAQS) and NAAQS are listed in Table 1.

Table 1 Federal and California Ambient Air Quality Standards and Attainment Status

Pollutant	Averaging Time	California Standards Concentration	Federal Primary Standards Concentration
Ozone (O_3)	8-hour	0.07 ppm (137 μg/m^3)	0.07 ppm (137 μg/m^3)
	1-hour	0.09 ppm (180 μg/m^3)	---
Respirable Particulate Matter (PM_{10})	24-hour	50 μg/m^3	150 μg/m^3
	Annual Arithmetic Mean	20 μg/m^3	---
Fine Particulate Matter ($PM_{2.5}$)	24-hour	---	35 μg/m^3
	Annual Average	12 μg/m^3	12 μg/m^3
Carbon Monoxide	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
Nitrogen Dioxide	Annual Average	0.03 ppm (57 μg/m^3)	0.053 ppm (100 μg/m^3)
	1-hour	0.18 ppm (339 μg/m^3)	0.100 ppm (188 μg/m^3)
Lead	30 day Average	1.5 μg/m^3	---
	Rolling 3-Month Average	---	0.15 μg/m^3
	Quarterly Average	---	1.5 μg/m^3
Sulfur Dioxide	24-hour	0.04 ppm (105 μg/m^3)	0.14 ppm (for certain areas)
	3-hour	---	---
	1-hour	0.25 ppm (655 μg/m^3)	0.075 ppm (196 μg/m^3)
Sulfates	24-hour	25 μg/m^3	No Federal Standard
Hydrogen Sulfide	1-hour	0.03 ppm (42 μg/m^3)	No Federal Standard
Vinyl Chloride	24-hour	0.01 ppm (26 μg/m^3)	No Federal Standard

Notes: ppm = parts per million; mg/m^3 = milligrams per cubic meter; μg/m ^{3}= micrograms per cubic meter
Shaded areas indicate that Sacramento County is in non-attainment for that air pollutant standard

Source: EPA 2019, EPA 2019b, SMAQMD 2019, ARB 2016.

State and national air quality standards consist of two parts: an allowable concentration of a pollutant, and an averaging time over which the concentration is to be measured. Allowable concentrations are based on the results of studies on the effects of the pollutants on human health, crops and vegetation, and, in some cases, damage to paint and other materials. The averaging times are based on whether the damage caused by the pollutant is more likely to occur during exposures to a high concentration for a short time (i.e., one hour), or to a relatively lower average concentration over a longer period (i.e., eight hours, 24 hours, or one month). For some pollutants, there is more than one air quality standard, reflecting both its short-term and long-term effects.

The ARB is required to designate areas of the state as attainment, non-attainment, or unclassified for any state standard. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data does not support either an attainment or non-attainment status. An area where the standard for a pollutant is exceeded is considered in non-attainment and is subject to planning and pollution control requirements that are more stringent than normal requirements. The California Clean Air Act (CCAA) divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category. Of the criteria pollutants in Sacramento County, the project area is in non-attainment for federal and state ozone, state PM_{10}, and federal $PM_{2.5}$ standards (ARB 2019).

Ozone is not emitted directly into the environment, but is generated from complex chemical reactions between ROG, or non-methane hydrocarbons, and NO_X that occur in the presence of sunlight. ROG and NO_X generators in Sacramento County include motor vehicles, recreational boats, other transportation sources, and industrial processes.

PM_{10}, or inhalable particulate matter, is a complex mixture of primary or directly emitted particles, and secondary particles or aerosol droplets formed in the atmosphere by precursor chemicals. The main sources of fugitive dust are unpaved roads, paved roads, and construction. Additional sources of PM_{10} include fires, industrial processes, mobile sources, fuel combustion, agriculture, miscellaneous sources, and solvents.

$PM_{2.5}$ is atmospheric particulate matter having a particle size less than 2.5 microns (μm) in diameter. These particles are so small they can be detected only with an electron microscope. Sources of fine particles include all types of combustion, including motor vehicles, power plants, residential wood burning, wildland fires, agricultural burning, and some industrial processes.

The SMAQMD's air quality monitoring network provides information on ambient concentrations of air pollutants. The SMAQMD operates several monitoring stations in the SVAB where the air quality data for ozone, $PM_{2.5}$, and PM_{10} were obtained. Table 2 compares a five-year summary of the highest annual criteria air pollutant emissions collected at two area monitoring stations with applicable CAAQS, which are more stringent than the corresponding NAAQS. Due to the regional nature of these pollutants, ozone, $PM_{2.5}$, and PM_{10} are expected to be fairly representative of the project site. As indicated in Table 2, the ozone, $PM_{2.5}$ and PM_{10} standards have been exceeded in Sacramento County over the past five years.

Table 2 Annual Air Quality Data for Sacramento County Air Quality Monitoring Stations

Pollutant	2014	2015	2016	2017	2018**
Ozone (O_3) 1-hour: *Monitoring location: Folsom – Natoma Street*					
Maximum Concentration (ppm)	0.100	0.114	0.111	0.107	0.105
Days Exceeding State Standard (1-hr avg. > 0.09 ppm)	7	3	6	4	5
Ozone (O_3) 8-hour: *Monitoring location: Folsom – Natoma Street*					
Maximum Concentration (ppm)	0.085	0.093	0.095	0.087	0.094
Days Exceeding State and Federal Standard (8-hr avg. > 0.070 ppm)	35	11	24	19	19
PM_{10}: *Monitoring location: Sacramento – Branch Center Road 2*					
Est. Days Exceeding State Standard (Daily Standard 50 μg/m³)	0.0	0.0	0.0	18.4	24.1
Maximum State 24-Hour Concentration (μg/m³)	46.0	45.0	44.0	81.0	212.0
Days Exceeding Federal Standard (Daily Standard 150 μg/m³)	0.0	0.0	0.0	0.0	6.1
Maximum Federal 24-Hour Concentration (μg/m³)	45.0	44.0	45.0	79.0	200.0
$PM_{2.5}$: *Monitoring location: Folsom – Natoma Street*					
Est. Days Exceeding National 2006 Standard (Daily Standard 35 μg/m³)	1.0	1.1	0.0	0.0	9.0
Maximum National 24-Hour Concentration (μg/m³)	52.0	38.1	25.7	33.2	104.5

Notes: Underlined Values in excess of applicable standard; ppm = parts per million; μg/m³ = micrograms per cubic meter; Est. = Estimated

*Insufficient data to determine the value

**2018 is the latest year of data available as of preparation of this section (December 2019).

Source: California Air Resources Board, 2019. Air Quality Trend Summaries. Accessed at <www.arb.ca.gov/adam>.

SMAQMD Rules and Regulations

All construction activities and development projects within Sacramento County are subject to SMAQMD rules in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916.874.4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

- Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the SMAQMD early to determine if a permit is required, and to begin the permit application process. Other general types of uses that require a permit include, but are not limited to, dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

  Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower is required to have a SMAQMD permit or a California Air Resources Board portable equipment registration (PERP) (see Other Regulations below).
- Rule 402: Nuisance. The developer or contractor is required to prevent dust or any emissions from onsite activities from causing injury, nuisance, or annoyance to the public.
- Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.
- Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.
- Rule 453: Cutback and Emulsified Asphalt Paving Materials. This rule prohibits the use of certain types of cut back or emulsified asphalt for paving, road construction or road maintenance activities.
- Rule 460: Adhesives and Sealants. The developer or contractor is required to use adhesives and sealants that comply with the volatile organic compound content limits specified in the rule.

Other Regulations (California Code of Regulations (CCR))

- 17 CCR, Division 3, Chapter 1, Subchapter 7.5, §93105 Naturally Occurring Asbestos: The developer or contractor is required to notify SMAQMD of earth moving projects, greater than 1 acre in size in areas "Moderately Likely to Contain Asbestos" within eastern Sacramento County. The developer or contractor is required to comply with specific requirements for surveying, notification, and handling soil that contains naturally occurring asbestos.
- 13 CCR, Division 3, Chapter 9, Article 5, Portable Equipment Registration Program: The developer or contractor is required to comply with all registration and operational requirements of the portable equipment registration program such as recordkeeping and notification.
- 13 CCR, Division 3, Chapter 9, Article 4.8, §2449(d)(2) and 13 CCR, Division 3, Chapter 10, Article 1, §2485 regarding Anti-Idling: Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes. These apply to diesel powered off-road equipment and on- road vehicles, respectively.

Significance Thresholds

The SMAQMD has published thresholds of significance for new projects in its *Guide to Air Quality Assessment in Sacramento County* (CEQA Guide) (originally published in 2009 with some sections most recently updated in July 2019 (as of December 2019)) (SMAQMD 2019a). These thresholds are used to determine whether the potential air quality impacts of a proposed project are significant. The SMAQMD procedure is to quantify pollutant emissions from a project and compare the results to the significance threshold. The following emission levels have been established as the significance thresholds for those air quality impacts quantitatively assessed:

	Construction Phase	**Operational Phase**
Reactive Organic Gases (ROG):	None	65 pounds per day (lbs/day)
Oxides of Nitrogen (NO_X):	85 lbs/day	65 lbs/day
Particulate Matter (PM_{10}):	**Zero (0).** If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year	
Particulate Matter ($PM_{2.5}$):	**Zero (0).** If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year	

Additionally, the SMAQMD requires that emissions concentrations from all phases of project activities not exceed the applicable CAAQS. A project is considered to contribute substantially to an existing or projected violation of a CAAQS if it emits pollutants at a level equal to or greater than five percent of the applicable CAAQS.

ENVIRONMENTAL ANALYSIS

Potential air quality impacts are assessed for both construction and operational phases of the Skyway Drive Well project:

- Construction – well drilling, temporary site excavation and backfill, and drainage pipe installation
- Operations – no increase in operational emissions

Questions (a) and (c) Conflict with air quality plan / Expose sensitive receptors to substantial pollutant concentrations: Less-than-significant Impact. The SMAQMD has developed a screening process to assist in determining if NO_x emissions from constructing a project in Sacramento County would exceed the District's construction significance threshold for NO_X. Construction of a project that does not exceed the screening level and meets all the screening parameters will be considered to have a less-than-significant impact on air quality. However, all construction projects, regardless of the screening level, are required to implement the District's Basic Construction Emission Control Practices (Guide section updated April 2019). (SMAQMD 2019a)

Projects that are 35 acres or less in size generally will not exceed the District's construction NO_X threshold of significance. This screening level was developed using default construction inputs in the CalEEMod air emissions model. This screening level cannot be used to determine a project's construction emissions will have a less-than significant impact on air quality unless all of the following parameters are met. The project *does not*:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include major trenching activities;

- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); and
- Require import or export of soil materials that will require a considerable amount of haul truck activity. (SMAQMD 2019a) (Guide section updated April 2019)

In the case of the proposed project, the area to be disturbed for the proposed well is approximately 2,400 square feet (0.055 acres). Because of the small size of the site, minimal amount of excavation and backfill, and low number of associated truck trips required, the project would meet SMAQMD screening criteria. Thus, implementation of the project would not result in construction NOx emissions in excess of SMAQMD significance criteria. This would be a less-than-significant impact.

Questions (b) and (c) Net increase of criteria pollutant / Expose sensitive receptors to substantial pollutant concentrations: Less-than-significant Impact with Mitigation. During typical construction projects, the majority of particulate matter emissions (i.e., PM_{10} and $PM_{2.5}$) are generated in the form of fugitive dust during ground disturbance activities, most of which are generated during the grading phase. PM emissions are also generated in the form of equipment exhaust and re-entrained road dust from vehicle travel on paved and unpaved surfaces.

The SMAQMD uses the same screening level as the NOx emission screening level to assist a lead agency in determining if PM emissions from constructing a project in Sacramento County will exceed the District's construction significance thresholds for PM_{10} and $PM_{2.5}$. Construction of a project that does not exceed the screening level, meets all the screening parameters, and implements the SMAQMD's Basic Construction Emission Control Practices (also known as BMPs) would be considered to have a less-than-significant impact on air quality. (SMAQMD 2019) (Guide section updated April 2019)

In the case of the proposed Skyway Drive Well, the project meets the SMAQMD screening parameters as set forth above. However, to meet SMAQMD requirements, FOWD must implement all of the District's Basic Construction Emission Control Practices. Implementation of the following mitigation measure would ensure that SMAQMD Practices would be implemented during project construction, and this impact would be less than significant after mitigation.

Mitigation Measure 1

All projects are subject to SMAQMD rules in effect at the time of construction. Control of fugitive dust is required by District Rule 403 and enforced by SMAQMD staff. FOWD shall implement, or require its contractors to implement, all of the following measures as identified by SMAQMD:

Basic Construction Emission Control Practices (Guide Updated July 2019)

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Questions (a) through (c) Net increase of criteria pollutant / Expose sensitive receptors to substantial pollutant concentrations: Less-than-significant Impact.

The District has developed screening levels to help lead agencies analyze operational ROG and NO_X and PM_{10} and $PM_{2.5}$ emissions from projects in Sacramento County (SMAQMD Guide section updated July 2019). As set forth by the District, the screening levels shall not be used to evaluate operational emissions from projects that have one or more of the following characteristics:

- The project will include wood stoves or wood-burning appliances;
- The project does not include BMPs for PM emissions;
- Project trip generation rates are expected to be greater than the default trip rates in CalEEMod. The default trip rates in CalEEMod, which can be viewed in the Operational-Mobile Vehicle Trips tab, are based on standard rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual;
- The vehicle fleet mix for the project is expected to be substantially different from the average vehicle fleet mix for Sacramento County. For example, the fleet mix associated with an industrial land use project will likely consist of a high portion of heavy-duty trucks;
- The project will include mixed-use development; or
- The project will include any industrial land use types (possibly including stationary sources of emissions).

The Skyway Drive Well project would not include any of the disqualifying characteristics cited above. While the vehicle fleet mix for existing maintenance employees would be substantially different from the average fleet mix for Sacramento County, since larger trucks would be used by employees, the proposed Skyway Drive Well would not generate an increase in employee or maintenance trips, and the pump would be powered by electricity. Thus, implementation of the project would not result in operational emissions in excess of SMAQMD significance criteria. This would be a less-than-significant impact, and no mitigation would be required.

In order to support the use of the SMAQMD's non-zero thresholds of significance for operational PM emissions, the SMAQMD provides guidance on Best Management Practices (BMP) to reduce operational PM emissions from land use development projects. Since there would be no increase in operational emissions from employees or employee trips, none of the operational BMPs would apply.

Question (d) Other emissions: Less-than-significant Impact. Criteria air pollutants (CAP) and precursors of primary concern from operational activities in Sacramento County include emissions of reactive organic gases (ROG or VOC) and NOx, PM_{10}, and $PM_{2.5}$. Other pollutants such as carbon monoxide (CO), sulfur dioxide and lead are of less concern because operational activities are not likely to generate substantial quantities of these CAPs and the Sacramento Valley Air basin has been in attainment for these CAPs for multiple years.

Emergency power would be provided by an existing standby diesel generator, should it be determined adequate. Typically, standby generators are "exercised" for approximately 30 minutes, once per week. If a new generator is required, it would be installed near the well and similarly "exercised." Actual testing may occur less frequently than once weekly; however, a weekly cycle is being used in order to capture the worst case air emissions. There would be no overall increase in generator use.

Diesel particulate matter (PM) was identified by the ARB as a toxic air contaminant in 1998. To reduce public exposure to diesel PM, the ARB adopted control measures to reduce diesel PM. Airborne Toxic Control Measures (ATCM) have been adopted to reduce emissions of diesel PM from numerous sources, including portable diesel engines, such as the project's backup generator. However, ARB permits portable engines used for emergency purposes only, including appropriate maintenance and testing, to meet reduced permitting and reporting standards. Such engines are required to meet stringent emissions standards, including limitations on permitted fuels, allowable types of equipment based on emissions, and retirement of non-compliant engines (ARB 2018).

Engines meeting the definition of portable equipment may choose to participate in ARB's Portable Equipment Registration Program rather than obtaining permits from local air pollution control agencies throughout the state. A portable engine operating in Sacramento County must be registered pursuant to ARB's Portable Equipment Registration Program or have a valid Permit to Operate from the SMAQMD (SMAQMD 2017).

Implementation of the proposed project would include the intermittent use of a standby diesel backup generator in the event of an emergency or sustained power outage. Since the diesel backup generator is considered to be a source of toxic air contaminants, FOWD will be required to comply with SMAQMD regulations, ARB's Diesel ATCM regulations, and State Health and Safety codes. These regulations would require the use of low-emissions engines, and would dictate the frequency of operations. Because emergency generators would be consistent with regulation requirements, this would be a less-than significant impact, and no mitigation would be required.

Naturally Occurring Asbestos

Naturally occurring asbestos is not a potential concern in the project area. For more information and analysis, see Section IX, *Hazards and Hazardous Materials*.

Question (d) Odors: Less-than-significant Impact. During operation, the project would consist of the operation of an electrically powered pump. No odors would be generated by this use. Potential odor effects would be less than significant, and no mitigation would be required.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?			**X**	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?			**X**	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	
d) 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 site?			**X**	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			**X**	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**

REGULATORY FRAMEWORK

Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over projects that may result in take of a species listed as threatened or endangered under the federal Endangered Species Act (ESA). Under the ESA (Title 16 of U.S. Code, Section 153 et seq. [16 USC 153 et seq.]), the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703–711) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the U.S. Secretary of the Interior. Most native bird species fall under the jurisdiction of this act.

Section 404 of the Clean Water Act

Section 404 of the Clean Water Act (33 USC 1252–1376) requires a project applicant to obtain a permit before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters

of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050 et seq.) is the state policy to conserve, protect, restore, and enhance endangered or threatened species and their habitats. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of endangered or threatened species if reasonable and prudent alternatives are available that would avoid jeopardy. Definitions of endangered and threatened species in the CESA parallel those defined in the ESA. Take authorizations from California Department of Fish and Wildlife (CDFW) are required for any unavoidable impact on state-listed species resulting from proposed projects.

Native Plant Protection Act

California's Native Plant Protection Act (Fish and Game Code Sections 1900–1913) requires all state agencies to establish criteria for determining whether a species, subspecies, or variety of native plant is endangered or rare. Provisions of this act prohibit the taking of listed plants from the wild and require that CDFW be notified at least 10 days in advance about any change in land use that would adversely affect listed plants. This requirement allows CDFW to salvage listed plant species that would otherwise be destroyed.

Protection of Bird Nests and Raptors

The California Fish and Game Code (Section 3503) states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. The Code specifically mentions that it is unlawful to take, possess, or destroy any raptors (i.e., hawks, owls, eagles, and falcons), including their nests or eggs. Examples of code violations include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction.

Tree Preservation and Protection Ordinance

Title 19: Trees, Section 12: Tr*ee Preservation and Protection* of the Sacramento County Code provides regulations for the preservation and protection of significant historical heritage values of trees in the county. The code also seeks to enhance the beauty of the County and to complement and strengthen zoning, subdivision, and land use standards and regulations. Sacramento County Zoning Code Section 5.2.4, Tree Preservation, discusses preservation of existing mature and native trees and shrubs, and requires that tree removal must be done in compliance with the Tree Preservation and Protection Ordinance. (Sacramento County 2019a, Sacramento County 2015b)

No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan has been approved for the project site or its vicinity within the community of Fair Oaks.

ENVIRONMENTAL SETTING

The project site is bounded on the north, east, and south by existing single-family residential development. The Grace Bible Church and Summit Christian School lie west of the project site.

The project site is currently developed with a 3.0 MG water storage tank, and a booster pump station enclosed within a block wall building. A number of ornamental trees are located within the site, in addition to a concrete driveway and maintained turf area. Privacy fencing surrounds the perimeter, and the north and east fencelines of the project site are landscaped with live oak trees. No surface water features are located within the boundary of the project site. (Planning Partners 2019)

ENVIRONMENTAL ANALYSIS

Research completed to determine the biological resources associated with the proposed project included: (1) a query of the California Natural Diversity Database (CNDDB) to identify occurrences of special-status species within the Folsom 7.5-Minute Topographic Quadrangle (CNDDB 2019); (2) a query of federally listed Threatened and Endangered species from the U.S. Fish and Wildlife Service (USFWS) and the California Native Plant Society's (CNPS) Electronic Inventory; and (3) a review of the USFWS National Wetland Inventory (NWI) map to identify the presence of wetlands within the project area. The results of the database search and location analysis were used to determine if any sensitive resources had been previously reported within or in the immediate local vicinity of the project site.

This special-status species evaluation considers those species identified as having relative scarcity and/or declining populations by the USFWS or CDFW. Special-status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as species of special concern by CDFW. Also included are those plant species considered to be rare, threatened, or endangered in California by the CNPS, and those plant and animal taxa meeting the criteria for listing under Section 15380 of the State CEQA Guidelines.

According to the USFWS records search, two amphibians, one fish, one insect, three crustacean species, and one flowering plant have been documented in the vicinity of the project site. Most of these species are associated with water features such as vernal pools, ponds, marshes, and streams. No riparian habitat, vernal pool habitat, or other appropriate water features are present on or adjacent to the project site. The USFWS search identified seventeen migratory bird species potentially occurring in the vicinity of the proposed project. Sensitive natural communities are those that are considered rare within the region, support sensitive plant or wildlife species, or function as corridors for wildlife movement. No sensitive natural communities were identified for the proposed project area. (USFWS 2019)

The results of the CNDDB records search show that no sensitive biological resources have been identified on or adjacent to the project site. Northern Hardpan Vernal Pool habitat has been recorded in the vicinity of the project. Given the ongoing disturbance of the project site, its location within a fully developed urban area, and the lack of water features on or adjacent to the site, it is unlikely that Northern Hardpan Vernal Pool habitat would be found on the project site. (CNDDB 2019)

A review of the USFWS National Wetland Inventory Map was completed to identify the presence of wetlands within the vicinity of the project. No potentially jurisdictional wetlands or wetlands of the United States were identified on or near the project site, and the site would not support jurisdictional wetlands or wetlands of the United States. (USFWS 2019a)

Question (a) Adverse effect on special-status species: Less-than-significant Impact. The biological habitat on the site of the proposed well has been disturbed historically by previous grading and construction, and mowing, and is fully developed. According to the USFWS records search, most of the species with the potential for occurrence in the project vicinity are associated with water features such as vernal pools, ponds, marshes, and streams. No vernal pool habitat or other appropriate water features are present on or adjacent to the project site. The project as proposed would avoid all trees present on the site, and construction disturbance would occur only in an area that is currently vegetated with introduced grasses. No construction or paving would occur within the dripline of any existing tree. Because the site is fully developed, no important biological resources exist on the project site, and site construction would disturb only non-native grasses, implementation of the Skyway Drive Well project would have less-than-significant impact on sensitive biological resources. No mitigation would be required.

Question (b) and (c) Adverse Effect on riparian habitat, sensitive natural communities, or wetlands: Less-than-significant Impact. Implementation of the proposed project would not have an adverse affect on any riparian habitat or other sensitive natural community, since no such resources are located within the project area. There would be no substantial adverse effect on wetlands, as no wetlands occur on the project site. Because no riparian habitat, sensitive natural communities, or wetlands exist on site, impacts to riparian habitat, sensitive natural communities, and wetlands would be considered less than significant with implementation of the proposed project, and no mitigation would be required.

Question (d) Interfere with species movement, wildlife corridors, or native wildlife nursery sites: Less-than-significant Impact. The proposed project site is fully developed, and lies within an urban area surrounded by low-density residential uses. It does not provide connection to any migratory wildlife corridor, nor does it feature any native wildlife nursery site. Implementation of the proposed project would result in the installation of a new water well; no feature of the proposed project would inhibit the movement of any migratory species. This would be a less-than-significant impact; no mitigation would be required.

Question (e) Conflict with policies or ordinances protecting biological resources: Less-than-significant Impact. Sacramento County has established a Tree Preservation and Protection Ordinance (Chapter 19.12 of the Sacramento County Code). There are several ornamental trees within the fenced area of the proposed project site. However, the proposed site of well installation is within an area of maintained turf, and not within the dripline of any tree. Because there are no trees in the area that is designated for installation of the proposed well, and because implementation of the proposed project would not impact trees in the vicinity of the project site, this would be a less-than-significant impact. No mitigation would be required.

Question (f) Conflict with existing conservation plans: No Impact. No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan has been approved for the project site or its vicinity within the community of Fair Oaks. There would be no impact, and no mitigation would be required.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?		**X**		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		**X**		
c) Disturb any human remains, including those interred outside of formal cemeteries?		**X**		

Records of the known cultural resources found in Sacramento County are included in the files of the Office of Historic Preservation, California Historical Resources Information System. The Northern California Information Center (NCIC), housed at California State University, Sacramento, locally administers these records. A cultural resources records search was conducted at the NCIC for the project site and surrounding area to determine its historic and cultural sensitivity (NCIC 2020). Non-privileged portions of the records search may be inspected at the Fair Oaks Water District, 10326 Fair Oaks Blvd., Fair Oaks, California, Monday through Friday during standard business hours.

REGULATORY FRAMEWORK

State and Federal legislation requires the protection of historical and cultural resources. In 1971, the President's Executive Order No. 11593 required that all federal agencies initiate procedures to preserve and maintain cultural resources by nomination and inclusion on the National Register of Historic Places. In 1980, the Governor's Executive Order No. B-64-80 required that State agencies inventory all "significant historic and cultural site, structures, and objects under their jurisdiction which are over 50 years of age and which may qualify for listing on the National Register of Historic Places." Likewise, Section 15064.5(b) of the CEQA Guidelines specifies that "projects that cause the physical demolition, destruction, relocation, or alteration of a historical resource or its immediate surroundings such that the significance of the historic resource would be materially impaired" shall be found to have a significant impact on the environment.

According to agency definitions, implementation of the proposed Skyway Drive Well project would constitute an "undertaking." CEQA requires the evaluation of the potential effects to cultural resources (i.e., historic and archaeological) that may be caused by a particular "undertaking."

ENVIRONMENTAL SETTING

The NCIC Records Search reported that the specific project area has not been subject to previous cultural resources investigations; two investigations have been completed within a ¼ mile radius of the site. Results of the records search show no prehistoric or historic archaeological resources on the project site that have been reported to the NCIC. There are seven recorded historic buildings within a ¼ mile radius of the site, consisting primarily of single-family residences that are 45 years in age; those residences are considered as historical resources in California. The location of the proposed project site is deemed to be potentially sensitive for cultural resources.

According to the USGS National Geologic Map Database, near surface geology in the vicinity of the Skyway well is composed of sedimentary rocks of the Turlock Lake and Laguna formations (CA DMG 1981). The project site is not located in an area of known paleontological resources.

ENVIRONMENTAL ANALYSIS

Questions (a), (b), and (c) Significance of historical and/or archaeological resources, and human remains: Less-than-significant Impact with Mitigation. Results of the records search conducted by the NCIC show no recorded prehistoric or historic archaeological resources on the project site. There are seven recorded historic buildings within a ¼ mile radius of the site, consisting primarily of single-family residences that are 45 years in age, that are considered as historical resources in California. There have been two investigations within a ¼ mile radius of the site, but no investigations within the project area itself.

The proposed Skyway Drive Well project would have no impact on the identified historical resources. However, project construction could result in the destruction or degradation of unknown cultural or historic resources, including unknown human remains. This would be a potentially significant impact.

The following existing regulatory requirements acting as a mitigation measure would facilitate actions to reduce potential impacts to unknown prehistoric and historic resources to a less-than-significant level.

Mitigation Measure 2

> Prior to initiation of construction on the project site, FOWD shall require that any construction or improvement plans contain a notation requiring that if any archaeological, cultural, historical resources, artifacts or other features are discovered during the course of construction anywhere on the project site, work shall be suspended in that location until a qualified professional archaeologist assesses the significance of the discovery and provides consultation with FOWD staff. Appropriate mitigation for curation or protection of the resources, as recommended by the archaeologist, shall be implemented upon approval by FOWD. Further grading or site work within the area of discovery shall not be allowed until the preceding steps have been taken.
>
> In addition, pursuant to §5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of any 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.

Thus, with implementation of the above mitigation measure, no additional effects to cultural resources are expected to occur, and no additional mitigation would be required.

VI. ENERGY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			**X**	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			**X**	

ENVIRONMENTAL SETTING

STATE AND LOCAL ENERGY PLANS

California Long-Term Energy Efficiency Strategic Plan

California's first Long Term Energy Efficiency Strategic Plan presents a single roadmap to achieve maximum energy savings across all major groups and sectors in California. This comprehensive Plan for 2009 to 2020 is the state's first integrated framework of goals and strategies for saving energy, covering government, utility, and private sector actions, and holds energy efficiency to its role as the highest priority resource in meeting California's energy needs. The Plan identifies the need and opportunity to increase energy efficiency in groundwater pumping, though it does not specifically address these elements.

ENVIRONMENTAL ANALYSIS

Question (a) Wasteful consumption of energy resources: Less-than-significant Impact. Development of the proposed well project would entail energy consumption that includes both direct and indirect expenditures of energy. Indirect energy would be consumed by the use of construction materials for the project (e.g., energy resource exploration, power generation, mining and refining of raw materials into construction materials used, including placement). Direct energy impacts would result from the total fuel consumed in vehicle propulsion (e.g., construction vehicles, heavy equipment, and other vehicles using the facility). No unusual materials, or those in short supply, are required in the construction of the project.

While the proposed well pump would be powered by electricity, the pump would meet current energy efficiency standards. While implementation of the project would represent an increase in energy use during construction and operation, over the life of the project, energy would not be consumed in a wasteful or inefficient manner. This would be a less-than-significant impact, and no mitigation would be required.

Question (b) Conflict with state or local energy efficiency plans: Less-than-significant Impact. The proposed project would not result in wasteful or inefficient consumption of energy. Because the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, this would be a less-than-significant impact, and no mitigation would be required.

VII. GEOLOGY AND SOILS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?			**X**	
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				**X**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				**X**

The Skyway Drive Well project site is located in an area of gently rolling topography, with the highest elevations to the east of the project. The project site itself is situated on a nearly level parcel on fill created by previous grading and the construction of a water storage tank and pump station. The northern side of the improved project area is approximately six feet higher than the adjacent street.

Near surface geology in the vicinity of the Skyway well is composed of sedimentary rocks of the Turlock Lake and Laguna formations (CA DMG 1981). Beneath these rock layers, the FOWD is underlain by the fresh-water-bearing Fair Oaks, Victor, Laguna, and Mehrten Formations. These formations contain the production aquifers used by most wells in the area. (GEI 2019)

The Fair Oaks, Victor, and Laguna Formations are typically composed of interbedded sand and gravel with silt and clay. The sediments are typically noted in well logs as having a brown color. The host rock of the sediments is granite from the Sierra Nevada. At the Skyway well site, these sediments have been found between the ground surface and 125 feet below the ground surface. The sediments consist of sands, gravels, and interbedded clays and are unsaturated. (GEI 2019)

Soils on the site of the proposed project are classified by the United States Department of Agriculture, Natural Resources Conservation Service Web Soil Survey as Xerathents-Urban Land-San Joaquin complex, 0 to 5 percent slopes (NRCS 2020). This soil type is rated as slight for erosion hazards, and low to high for shrink-swell potential (NRCS 1993).

No active earthquake faults are located in the vicinity of the project. The only "active" fault in the greater Sacramento area is the Dunnigan Hills fault, located northwest of Woodland. The Foothills fault system is located approximately fifteen miles northeast of the project site. The USGS and CGS classify this fault as Late Quaternary. (California Geological Survey [CGS] 2020).

ENVIRONMENTAL ANALYSIS

Questions (a) and (c) Direct/indirect seismic hazards, Unstable soils: Less-than-significant Impact. The Skyway Drive Well project is located at the eastern margin of the Sacramento Valley in an area with low seismic activity. The primary site hazard associated with seismic activity would involve minor ground shaking from more distant faults. The proposed project would employ standard construction practices and comply with FOWD and Sacramento County well standards. Standard design, construction, and safety procedures would limit seismic hazards to levels deemed acceptable in the state and region. This would be a less-than-significant impact and no additional mitigation is required beyond compliance with adopted standards.

Soil liquefaction is a phenomenon in which saturated soil loses shear strength and deforms from ground shaking during an earthquake. The project site would not be located in an area with soil or saturation conditions subject to liquefaction as they generally do not exist in the project area. The project site and vicinity have nearly level to gently rolling topography that would not be subject to landslide hazards. A less-than-significant impact would occur, and no mitigation would be required.

Subsidence is the settling or sinking of parts of the earth's surface layer due to removal of subsurface support. Given the proper subsurface geology, the excessive pumping of groundwater could result in subsidence. The eastern portion of the North American Sub-basin (the local groundwater basin) extends roughly east of San Juan Avenue to the American River, which is the eastern edge of the basin. Two long-term hydrographs within this area indicate that groundwater elevations have not varied greatly over time, although groundwater elevations within the area can be highly varied because they tend to mimic ground elevations in this area of rolling topography. Groundwater elevations measured in the far eastern area of the North American Sub-basin have varied by no more than two feet from October 1998 through 2012. (SGA 2014) Given the subsurface geology of this area of northern Sacramento County, the proposed well project would not result in a substantial increase in groundwater withdrawal that could result in localized subsidence in the project area. Thus, potential impacts from subsidence would be less than significant, and no mitigation would be required. (For additional information regarding groundwater, see Section X, *Hydrology and Water Quality*, of this Initial Study.

Question (b) Erosion or loss of topsoil: Less-than-significant Impact. Construction of the proposed Skyway Drive Well project would disturb less than one acre of relatively level topography. Limited on-site grading would be completed during well installation and expansion of the existing stormwater drainage system serving the project. On-site soils, Xerathents-Urban Land-San Joaquin complex, 0 to 5 percent slopes, exhibit slight hazards of water erosion.

In coordination with Sacramento County, all construction activities would implement stormwater pollution prevention Best Management Practices (BMP) designed to reduce potential impacts to water quality during construction of the project, and in accordance with the guidelines of the Sacramento Stormwater Management Program as follows:

- Complying with the requirements of the State Water Resources Control Board's "General Permit for Stormwater Discharges Associated with Construction Activity"[1],
- Preserving all existing vegetation on site where possible,
- Scheduling as much project work as possible during the dry season,
- Maintaining the stabilized existing construction access route,
- Protecting storm drain inlets,
- Using other Best Management Practices as necessary, including applying rainy season erosion controls, managing stockpiles, disposing of well development water properly, and correctly managing and disposing of construction wastes,
- Maintaining all Best Management Practices, and
- Stabilizing the site after construction is complete.

Due to the relatively flat topography, construction techniques (including the BMPs cited above), finished final surfaces, and engineered drainage systems, the project would not result in impacts to soil erosion or loss of topsoil. This would be a less-than-significant impact and no mitigation would be required.

Question (d) Expansive soils: Less-than-significant Impact. Shrink/swell potential refers to the soil's ability to expand and contract. Shrinking and swelling of soil can damage roads, dams, building foundations, and other structures. The soil on the project site is identified as Xerathents-Urban Land-San Joaquin complex, 0 to 5 percent slopes, which exhibits low to high shrink/swell characteristics. Typically, common engineering solutions can remedy potential shrink/swell hazards. For the Skyway Drive Well project, no building structures intended for human use or occupancy would be constructed, and no unusual pad engineering conditions would be expected to affect performance or safety. This would be a less-than-significant impact and no mitigation would be required.

Question (e) Septic systems: No Impact. Operation of facilities would not require on-site wastewater treatment or disposal. No impacts from or to soil and groundwater from septic systems would occur.

Question (f) Paleontological resources or unique geologic formations: No Impact. The project site itself is situated on a nearly level parcel, on fill created by previous grading and the construction of existing facilities. Due to previous grading and filling of the project parcel, no paleontological resources or geologic formations currently exist on the project site. There would be no impact on these resources.

[1] Because the area to be disturbed totals 2,400 square feet, the FOWD would be exempt from Submitting a Notice of Intent to the State Water Resources Control Board to comply with the General Permit for Stormwater Discharges Associated with Construction Activity due to the small size of the project. Nonetheless, the FOWD has voluntarily agreed to comply with the substantive requirements of the General Permit.

VIII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Global Warming is a public health and environmental concern around the world. As global concentrations of atmospheric greenhouse gases increase, global temperatures, weather extremes, and air pollution concentrations all increase. Global warming and climate change has been observed to contribute to poor air quality, rising sea levels, melting glaciers, stronger storms, more intense and longer droughts, more frequent heat waves, increases in the number of wildfires and their intensity, and other threats to human health (IPCC 2013). The average global temperature during 2018 was 1.42 degrees F above the 20th-century average. This marks the 42nd consecutive year (since 1977) with an above-average global temperature. Nine of the 10 warmest years have occurred since 2005, with the last five years comprising the five hottest, with 2016 ranking as the warmest year on record (NOAA 2019). Hotter days facilitate the formation of ozone, increases in smog emissions, and increases in public health impacts (e.g., premature deaths, hospital admissions, asthma attacks, and respiratory conditions) (EPA 2017). Averaged global combined land and ocean surface temperatures have risen by roughly 0.85ºC from 1880 to 2012 (IPCC 2013). Because oceans tend to warm and cool more slowly than land areas, continents have warmed the most. If greenhouse gas emissions continue to increase, climate models predict that the average temperature at the Earth's surface is likely to increase by over 1.5ºC by the year 2100 relative to the period from 1850 to 1900 (IPCC 2013).

The Greenhouse Effect (Natural and Anthropogenic)

The Earth naturally absorbs and reflects incoming solar radiation and emits longer wavelength terrestrial (thermal) radiation back into space. On average, the absorbed solar radiation is balanced by the outgoing terrestrial radiation emitted to space. A portion of this terrestrial radiation, though, is itself absorbed by gases in the atmosphere. The energy from this absorbed terrestrial radiation warms the Earth's surface and atmosphere, creating what is known as the "natural greenhouse effect." Without the natural heat-trapping properties of these atmospheric gases, the average surface temperature of the Earth would be below the freezing point of water (IPCC 2007). Although the Earth's atmosphere consists mainly of oxygen and nitrogen, neither plays a significant role in this greenhouse effect because both are essentially transparent to terrestrial radiation. The greenhouse effect is primarily a function of the concentration of water vapor, carbon dioxide, methane, nitrous oxide, ozone, and other trace gases in the atmosphere that absorb the terrestrial radiation leaving the surface of the Earth (IPCC 2007). Changes in the atmospheric concentrations of these greenhouse gases can alter the balance of energy transfers between the atmosphere, space, land, and the oceans. Radiative forcing is a simple measure for both quantifying and ranking the many different influences on climate change; it provides a limited measure of climate change as it does not attempt to represent the overall climate response (IPCC 2007). Holding everything else constant, increases in

greenhouse gas concentrations in the atmosphere will likely contribute to an increase in global average temperature and related climate changes (EPA 2017).

Greenhouse Gases

Naturally occurring greenhouse gases include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, emitted solely by human activities. There are also several gases that, although they do not have a direct radiative forcing effect, do influence the formation and destruction of ozone, which does have such a terrestrial radiation absorbing effect. These gases, referred to here as ozone precursors, include carbon monoxide (CO), oxides of nitrogen (NO_X), and non-methane volatile organic compounds (NMVOC). Aerosols (extremely small particles or liquid droplets emitted directly or produced as a result of atmospheric reactions) can also affect the absorptive characteristics of the atmosphere.

Carbon is stored in nature within the atmosphere, soil organic matter, ocean, marine sediments and sedimentary rocks, terrestrial plants, and fossil fuel deposits. Carbon is constantly changing form on the planet through the a number of processes referred to as the carbon cycle, which includes but is not limited to degradation and burning, photosynthesis and respiration, decay, and dissolution. When the carbon cycle transfers more carbon to the atmosphere this can lead to global warming. Over the last 300 years atmospheric levels of carbon have increased by more than 30 percent, of which approximately 65 percent is attributable to fossil fuel combustions and 35 percent is attributed to deforestation and the conversion of natural ecosystems to agricultural use (Pidwirny 2006). Carbon stored in plants and rocks is referred to as being sequestered. Within the United States, forest sequestration of carbon offsets approximately 13 percent of the fossil fuel GHG emissions in 2011, and from 10 to 20 percent of U.S. emissions each year (USDA 2019).

REGULATORY FRAMEWORK

The U. S. EPA is the federal agency responsible for implementing the CAA. The U.S. Supreme Court ruled on April 2, 2007 that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. However, there are no federal regulations or policies regarding GHG emissions thresholds applicable to the proposed project at the time of this Initial Study.

The ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California, and for implementing the CCAA. Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long-term. Because every nation emits GHGs, and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

In September 2006, then-Governor Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that

statewide GHG emissions be reduced to 1990 levels by 2020. In 2011, the ARB adopted the cap-and-trade regulation. The cap-and-trade program covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The cap-and-trade program includes an enforceable emissions cap that will decline over time. The State will distribute allowances, which are tradable permits, equal to the emissions allowed under the cap.

The initial main strategies and roadmap for meeting the 1990 emission level reductions are outlined in a Scoping Plan approved in December 2008 and updated every five years (the Scoping Plan was most recently updated in 2014 and finalized in 2017). The Scoping Plan includes regulations and alternative compliance mechanisms, such as monetary and non-monetary incentives, voluntary actions, and market-based mechanisms, such as a cap-and-trade program. The Climate Change Scoping Plan also includes a breakdown of the amount of GHG reductions the ARB recommends for each emissions sector of the state's GHG inventory. In January 2017, ARB issued the proposed 2017 Climate Change Scoping Plan Update to reflect the 2030 target set by Executive Order B-30-15.

As the sequel to AB 32, Senate Bill (SB) 32 was approved by the Governor on September 8, 2016. SB 32 would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by former Governor Schwarzenegger in 2005 with Executive Order S-3-05.

Sacramento County Climate Action Plan. The Sacramento County Board of Supervisors adopted Phase 1 of the Climate Action Plan (CAP) in November 2011, which presented a framework for reducing GHG emissions and an overall strategy to address climate change. Additionally, it provided direction for developing the second phase of the CAP. Phase 2 of the CAP, the Government Operations CAP, was adopted in September of 2012 and identified the GHG emissions from the County's operations (i.e. County-owned facilities, vehicles, and equipment) and measures to reduce these GHG emissions.

The County began working on the Climate Action Plan – Communitywide Greenhouse Gas Reduction and Climate Change Adaptation (Communitywide CAP) project in 2016. This project is intended to complete the second phase of the County's multi-phase CAP process. The Communitywide CAP will (1) update the unincorporated County's GHG inventory and forecasts, (2) determine the GHG reduction targets which are required, and (3) propose measures to achieve the required GHG reductions for the entire County. (Sacramento County 2019)

Since the Skyway Drive Well project is not a County operations project, there are not yet any adopted measures in the CAP applicable to the proposed project.

Question (a) Generation of GHG Emissions: Less-than-significant Impact. Greenhouse gas emissions would be generated from the proposed Skyway Drive Well during construction and operation. Temporary GHG emissions would occur during construction activities, predominantly from vehicle and equipment exhaust. Because minimal construction (disturbance of ~0.055 acres, construction of a well) is associated with the proposed project, construction related GHG emissions would be minimal, and a less-than-significant impact would result. Operational GHG emissions would occur from continued maintenance vehicles accessing the site and from secondary emissions associated with the well pump's electrical use. In accordance with adopted regional water management plans, the well would be used to:

- Supplement surface water entitlements in the event of a long- or short-term drought or surface water curtailment.
- Operate and maintain the underlying groundwater basin under a regional conjunctive use program.
- Enhance the reliability and redundancy of water supplies that are available to serve the FOWD's customers.
- Serve as a source of water supply in the event of a water infrastructure or water supply emergency.
- Serve as source of water supply to help meet the FOWD's maximum day and peak hour water supply needs.
- Provide additional resources for fire flow requirements.

Because of the low-level of electricity use and the low-level of traffic associated with the project (infrequent maintenance trips), greenhouse gas emissions would not be expected to be significant, and the project would not be expected to make a substantial contribution to the cumulatively significant impact of global warming. No significant impact would result and no mitigation would be required.

Question (b) Conflict with GHG emissions reduction plans: Less-than-significant Impact. The ARB's Climate Change Scoping Plan represents the primary plan to reduce GHG emissions throughout California. The proposed project would be consistent with the GHG reduction measures contained in the Scoping Plan, specifically regarding securing the water supply and protection from drought. The objective of the proposed project is to build resiliency into the water supply and water banking infrastructure. Further, all electricity generated and imported into California is subject to Cap-and-Trade regulations under the AB 32 Scoping Plan. GHG emissions increases that are covered under ARB's Cap-and-Trade regulation would not constitute significant increases under the California Environmental Quality Act. Therefore, the proposed project would comply with an approved GHG emission reduction plan under ARB's AB 32 regulations to reduce GHG emissions, and no significant adverse effects would occur.

IX. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) 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?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	
d) 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, would it create a significant hazard to the public or the environment?				**X**
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				**X**

Construction of the proposed project could include the use of oil, diesel fuel, solvents, and other hazardous materials. Water delivered from the San Juan Water District (SJWD) to the project site is disinfected with sodium hypochlorite, which is stored on site in the pump station building. Well water would be treated using the same process and equipment with modifications to disinfect the groundwater supply. After treatment, water sourced from either the SJWD or the proposed Skyway Drive Well would be pumped into the FOWD distribution system for delivery to customers.

Queries of the State Water Resources Control Board Geotracker and California Department of Toxic Substances Control Envirostor hazardous materials sites indicate that the proposed project is not located on a known hazardous materials site (CA SWRCB 2019; CA DTSC 2019). An environmental database search was completed during the feasibility analysis of the Skyway Drive Well project to assess whether releases of contaminants to the environment could affect groundwater quality in the vicinity of the proposed well. The well site is surrounded by urban land uses, primarily residential and institutional (church/school). Within a one-mile radius of the proposed well site, nine locations of potential contamination were identified by the data base search. These locations, primarily located at the intersection of Hazel and Madison Avenues, were associated with underground fuel storage tanks. (GEI 2019)

Of the nine identified sites, only six have had historical contamination impacts to soil or groundwater. Site investigations and cleanups have been completed and case files closed by regulatory agencies for all sites but one. At this site, located 0.5 miles from the proposed Skyway Drive well, tetrachloroethylene (PCE) was released. Cleanup of the spill has been initiated and is ongoing. None of the six potential contamination locations are upgradient of the proposed Skyway well. Because the sites are located cross-gradient to the proposed well, underlain by multiple clay layers, and with a depth to groundwater of 150± feet bgs, the potential for these sites to adversely affect groundwater quality at the well is considered to be low. The results of water quality testing of the test well drilled on the project site during summer 2019 indicate that no volatile organic compounds, including PCE, were detected. (GEI 2019)

Naturally occurring asbestos has been discovered in the eastern area of Sacramento County; however, this project site is not in an area identified by the California Geological Survey as having soils that are likely to contain naturally occurring asbestos (CGS 2006).

The only school within one-quarter mile of the proposed project is the Summit Christian School. This school is located adjacent to the west boundary of the proposed project site; the nearest instructional building is located 0.1 mile from the proposed well site. (Google Earth 2019)

The proposed project is not located within an Airport Land Use Plan (SACOG 1997). The nearest public use airport, Mather Airport, is located over seven miles southwest of the site. No private airfields are located within two miles of the project site. (Google Earth 2019)

Emergency evacuation traffic routes in Sacramento County include major interstates, highways, and major roadways. In the project vicinity, these routes include Hazel Avenue, Madison Avenue, and Sunset Avenue. (Sacramento County OES 2008)

Because the area surrounding the well project site is urbanized, the threat of wildfire hazard has been determined to be unlikely. Should such a hazard occur, the magnitude and severity are determined to be negligible (Sacramento County 2016).

ENVIRONMENTAL ANALYSIS

Question (a) Routine use, transport, or handling of hazardous materials: Less-than-significant Impact. Water treatment at the site will consist of disinfection of the well water using sodium hypochlorite. Disinfection chemicals and facilities are stored and secured within the existing pump house building. The existing building is constructed of concrete masonry block and metal roofing, and secured with perimeter fencing. Both the building and the fence are locked, except during access by FOWD maintenance or operations personnel.

Based on water quality data developed during analysis of water produced by the test well, FOWD believes that the current disinfection system would be adequate. The Skyway Well groundwater supply will require lower dosages of disinfection than the surface water furnished by SJWD. No new facilities or disinfection chemicals would be needed, nor would additional amounts of chemicals be stored on the project site.

Although implementation of the proposed Skyway Drive Well project will result in the storage and use of sodium hypochlorite, its presence would not result in a hazard under normal operating conditions. The potential adverse effects of sodium hypochlorite are limited to skin and eye

exposure during contact with the product. Because the product is, and would be, secured in a fenced and locked building, inadvertent contact would be highly unlikely. Therefore, this would be a less-than-significant impact, and no mitigation would be required.

As noted above, on-site soils do not harbor naturally occurring asbestos. Therefore, no naturally occurring asbestos is expected that might be disturbed during construction. This impact would be less than significant, and no mitigation would be required.

Question (b) Upset and accident conditions: Less-than-significant Impact. Standard construction techniques would be used to construct the proposed groundwater production well. During construction, oil, diesel fuel, solvents, and other hazardous materials could be used at the site. If spilled, these substances could pose a localized risk to the environment and to human health. However, all construction activities must comply with the California OSHA regulations that would protect construction workers and the environment from potential spills or releases.

Existing and proposed operations include the storage and use of sodium hypochlorite, which would be stored in existing the pump building. This use is also regulated by CalOSHA. Additonally, if the FOWD stores more than 55 gallons or 500 pounds of sodium hypochlorite at the Skyway Drive Well site, the FOWD would be required to prepare a Hazardous Materials Business Plan for approval by the Sacramento County Environmental Management Department. Approval of this plan would serve as the FOWD's permit, and the FOWD would be required to comply with the requirements of the permit to avoid and control potential hazards. (Sacramento County EMD 2019).

Compliance with CalOSHA and County requirements would reduce the risk of hazards related to the routine transport, use, or disposal of hazardous materials to a less-than-significant level. The risk of hazards to the public or to environmental conditions related to accident conditions would also be reduced to a less-than-significant level. No migration would be required.

Question (c) Hazardous emissions or discharges near a school: Less-than-significant Impact. The FOWD currently maintains a standby generator on site to operate the booster pump station during power outages. The generator is located within the existing Booster Pump Station building. This existing generator may be sufficient to power the new well pump as well, but the amount of power needed will not be known until construction of the new well is completed and the design pumping flow have been determined. A new generator, if required, would be installed near the proposed well within a waterproof and noise mitigating enclosure. Typically, emergency generators of this type are tested weekly to monthly for periods lasting 30 minutes to one hour. Implementation of the proposed well project would not lead to changes in the schedule or duration of testing.

The existing and potential new generator(s) would continue to be a source of diesel particulate matter (PM), which is identified by the ARB as a toxic air contaminant. Although the Summit Christian School property boundary is located immediately adjacent to the proposed well site western boundary, the nearest area that would be occupied by students would be located 0.1 miles from the existing well pump station building. The existing and proposed generator(s) would operate infrequently for testing and irregularly for operation during power outages. Because implementation of the proposed project would not meaningfully change existing and potential future operations, this would be a less-than-significant impact. No mitigation would be required.

As noted above, implementation of the proposed Skyway Drive Well project would result in the storage and use of sodium hypochlorite. Under normal operating conditions, its presence would not result in a hazard. The potential adverse effects of sodium hypochlorite are limited to skin and eye exposure during contact with the product. Because the product is secured in a fenced and locked building, inadvertent contact would be highly unlikely. Because of the measures to be taken to securely store sodium hypochlorite, this would be less-than-significant impact. No mitigation would be required.

Question (d) Included on list of hazardous materials sites: No Impact. According to queries of the GeoTracker and Envirostor Data Management Systems, the project would not be located on a site identified on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5. As a result, implementation of the project would not create a significant hazard to the public or the environment. No impact would result, and no mitigation would be required.

Question (e) Project located near an airport: No Impact. There are no existing airports within two miles of the proposed project site. The site facility may experience infrequent over-flights from airplanes traveling to or from regional airports; however, the project does not require or attract people to the site and does not include facilities or processes that create hazards to aircraft. Project facilities and personnel would not be exposed to or contribute to safety hazards. No impact would occur and no mitigation would be required.

Question (f) Adversely affect emergency evacuation routes: No Impact. The project would have no effect on any roadway. Additionally, the proposed well would be unstaffed except for infrequent visits by maintenance or operations personnel. Thus, the project would not result in the modification or blockage of any evacuation route, or result in an increased concentration of large numbers of persons in an at-risk location. The facility would not interfere with emergency response or evacuation plans. No impact would result, and no mitigation would be required.

Question (g) Hazards due to wildland fire: No Impact. The project site is located in an existing medium-density residential neighborhood within the unincorporated community of Fair Oaks. The threat of wildland fire at this location was determined to be unlikely (Sacramento County 2016). The proposed project site would not be located in a critical fire danger zone or adjacent to wildlands subject to wildfires. Urban levels of fire protection would be provided to the project area. The construction and operation of the project would not increase the risk of or hazards from wildland fire as no wildlands exist in the project vicinity. No impact would occur and no mitigation would be required.

X. HYDROLOGY AND WATER RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	
b) Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			**X**	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;			**X**	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			**X**	
(iii) 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?			**X**	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				**X**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				**X**

ENVIRONMENTAL SETTING

As proposed, the project site is a 1.27-acre parcel developed with a 3.0 MG water storage tank, and a booster pump station enclosed within a block wall building. Much of the remainder of the site is paved. A stormwater collection and conveyance system on the project site discharges to the community storm drainage system located in Cedarvillage Drive. The section of Skyway Drive that lies adjacent to the proposed project site is also developed with a community storm drainage system.

The area of the site to be developed with the proposed well consists of a 40-foot by 60-foot turfed area. This area would be disturbed during construction to house the drill rig, drill pipe lay down area, drilling fluid capture pond, and an area to store cuttings. Except for the well head, this area would be restored to its pervious surface after the completion of construction.

No natural channels or water features are located on or adjacent to the project site.

The project site is not located within 100-year or 500-year flood plains as identified by the Federal Emergency Management Agency (FEMA). According to FEMA, the project site is located in an area of "minimal flood hazard." (FEMA 2012) As documented in the Sacramento County Hazard Mitigation Plan Update, inundation of the project site as a result of a dam failure would be unlikely, and of low significance (Sacramento County 2016).

The FOWD obtains, treats and disinfects water to serve its customers from both surface water and groundwater resources. The FOWD typically receives approximately 90 percent of its water supply from treated surface water from the American River though its wholesale supplier, the SJWD. In addition, six groundwater wells supplement the surface water supply to meet conjunctive use objectives, peak demands, and for emergency supply. Groundwater also meets the remaining 10 percent of the FOWD's water demands. (FOWD 2016)

Within the FOWD, groundwater is produced from six operating wells that vary in design capacity from 500 gallons per minute (gpm) to 2,700 gpm. The wells are located primarily in the central portion of the FOWD's water system and are used to meet short-term water supply needs or maintain the FOWD's water system pressure. The FOWD groundwater wells currently have a total capacity of 12,743 acre-feet per year (AFY) and a firm normal year capacity of 8,388 AFY. The actual volumes of groundwater delivered from 2011 to 2015 ranged from 2,329 AFY to 873 AFY. According to the FOWD Urban Water Master Plan, there are no projected impacts to groundwater supply due to water quality issues. (FOWD 2016)

The FOWD plans to construct two additional wells (including the current Skyway Drive Well project) through 2022, to provide additional supplies. Although FOWD has no plans to increase groundwater withdrawals above those necessary to meet the FOWD's surface water/groundwater ratio (90%/10%), production could increase up to the full well capacity in successive dry year scenarios to supplement available surface water supplies consistent with the FOWD's responsibilities under the Water Forum Agreement and other regional water management plans. (FOWD 2016)

The groundwater basin underlying the FOWD is the North American sub-basin, part of the larger Sacramento Valley groundwater basin. Water bearing formations beneath the FOWD occur in two major strata. The upper water-bearing units include the geologic formations of the Victor, Fair Oaks, and Laguna Formations and are typically unconfined. The lower water-bearing unit consists primarily of the Mehrten Formation, which exhibits confined conditions. The Mehrten Formation is the most productive fresh water- bearing unit in the eastern Sacramento Valley, though some of the permeable layers of the Fair Oaks Formation produce moderate amounts of water. Much of the recharge of these aquifer systems comes from the Sacramento and American Rivers and their tributaries where gravel deposits exist. To a lesser extent, aquifer recharge also occurs where the Mehrten Formation reaches the surface in the foothills in eastern Sacramento and western El Dorado County. Supply wells in the Sacramento region draw water primarily from the Mehrten and Fair Oaks formations and typically produce 500-1,500 gpm of good to excellent quality water. (FOWD 2016)

The eastern portion of the North American Sub-basin extends roughly east of San Juan Avenue to the American River, which is the eastern edge of the basin. Historically, this area has relied primarily on surface water. Groundwater levels within the eastern portion of the sub-basin range from 10 feet below to 140 feet above msl from west to east. Two long-term hydrographs within this area indicate that groundwater elevations have not varied greatly over time, although groundwater elevations within the area can be highly varied because they tend to mimic ground elevations in this area of rolling topography. Groundwater elevations measured in the far eastern area of the North American Sub-basin have varied by no more than two feet from October 1998 through 2012. (SGA 2014)

The North American Subbasin is not adjudicated, and based on the California Department of Water Resources' (DWR) official departmental bulletins (California's Groundwater Bulletin 118 Update

2003 and Bulletin 160, and the California Water Plan Update 2013), the North American Subbasin is not specifically identified as a basin in a critically overdraft condition. The DWR Bulletin 118 individual basin description for the North American Subbasin (February 2004) suggests that annual pumping exceeds the amount of water annually recharged; however, a detailed groundwater budget is not provided. The Sacramento Groundwater Authority does not classify the subbasin as overdrafted; however, it recognizes that groundwater levels fluctuate over time and that historic groundwater extractions have resulted in a net depletion of groundwater stored in the subbasin. (FOWD 2016).

According to the FOWD, the FOWD's wells are of excellent water quality. Each of the FOWD's groundwater wells is regularly sampled and confirmed to comply with State and federal drinking water regulations (FOWD 2016).

The regional groundwater basin in the vicinity of the FOWD contains a significant major groundwater contamination area adjacent to the FOWD's service area. A groundwater contamination plume attributed to Aerojet's historic operations was first detected in groundwater south of the American River in 1979. The primary contaminants of concern are trichloroethene (TCE) and perchlorate. The TCE component of the plume extends from the Aerojet property near Rancho Cordova to north of the American River into the southern end of the FOWD's service area. (FOWD 2016).

Since the plume's discovery, Aerojet has installed a groundwater remedy that includes extraction and treatment of the contaminated groundwater. The remedy is designed specifically to intercept and capture the contaminant plume before it reaches the FOWD's supply wells. A network of monitoring wells is also in place, and the wells are closely monitored by Aerojet and the FOWD to ensure the installed remedy continues to protect the FOWD's supply wells. Should the FOWD's wells become contaminated in the future, provisions are in place to secure and provide replacement water supplies to offset the FOWD's lost capacity. (FOWD 2016)

Water quality testing at the Skyway well site was completed in summer 2019 with the drilling of a test well. According to water quality testing completed at that time, concentrations of the groundwater constituents analyzed met current drinking water standards at the well depth to be used for the proposed project. (GEI 2019)

REGULATORY FRAMEWORK

Construction

Construction Stormwater Control: Sacramento County is a signatory to the Sacramento County-wide NPDES permit for the control of pollutants in urban stormwater. Since 1990, Sacramento County, along with the Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, and Roseville, has been a partner in the Sacramento Stormwater Quality Partnership (SSQP). These agencies are implementing a comprehensive program involving public outreach, construction and industrial control BMPS, water quality monitoring, and other activities designed to protect area creeks and rivers. If approved, the proposed project would be required to implement all appropriate program requirements, as specified in the Stormwater Quality Manual for the Sacramento Region (SSQP 2019).

Well Permitting and Construction: The Sacramento County Environmental Management department is responsible for oversight of the construction, modification, repair, inactivation and destruction of

wells in Sacramento County, through the Department's Wells Program pursuant to Chapter 6.28 of the Sacramento County Code and Section 13801 of the California Water Code. The Wells Program regulates Water Supply Wells, Monitoring Wells, Exploratory Soil Borings, Geothermal Heat Exchange Wells, Cathodic Protection Wells, and other special use wells. Any well constructed in Sacramento County must have a permit from the Environmental Management Department prior to the start of construction unless it is specifically exempted in the Code.

Operation

Water Forum: The FOWD is a member of the Water Forum Agreement (WFA), a regional agreement between government agencies, water purveyors, the business community, and environmental groups with the co-equal objectives of 1) providing a reliable water supply for planned development to the year 2030, and 2) preserving the lower American River. The WFA provides the following seven major elements that guide water resources management:

1. Increased surface water diversions.
2. Actions to meet customers needs while reducing diversion impacts in drier years.
3. An improved pattern of fishery flow releases from Folsom Reservoir.
4. Lower American River Habitat Management Element, which also addresses recreation on the lower American River.
5. Water conservation.
6. Groundwater management.
7. Water Forum Successor Effort (WFSE).

The FOWD is a signatory to the WFA and participates in the WFSE and conjunctive use planning efforts through the Regional Water Authority (RWA) and the Sacramento Groundwater Authority (SGA) in efforts to implement the seven major elements of the WFA. The FOWD's agreement with WFA contains requirements for implementing water conservation programs. The FOWD continues to implement the required programs and files annual progress reports to the Water Forum.

Regional Water Authority - American River Basin Integrated Regional Water Management Plan (IRWMP): The FOWD is a member and an active participant in the Regional Water Authority. The RWA consists of most of the region's water agencies and focuses efforts on regional supply planning and representation efforts regarding statewide water issues. The proposed Skyway Drive Well project would be consistent with the 2013 IRWMP's goal of increased groundwater production capacity as outlined in its *Strategy WR2*.

Sacramento Groundwater Authority: The FOWD is a member and an active participant in the Sacramento Groundwater Authority. The SGA focuses primarily on the area's groundwater basin and helps support proactive management and monitoring of the basin to maintain sustainability. SGA's core management responsibilities include:

- To maintain the long-term sustainable yield of the North American Sub-basin, which was estimated to be 131,000 acre-feet in the WFA.
- To manage the use of groundwater in the North American sub-basin and facilitate implementation of an appropriate conjunctive use program by water purveyors.
- To devise and implement strategies to safeguard groundwater quality.

ENVIRONMENTAL ANALYSIS

Question (a) Violation of Water Quality Standards: Less-than-significant Impact. Potential impacts to groundwater and surface water quality could occur both during the construction phase of well development and during operation.

Temporary increases in the erosion of exposed soils during construction of the facility could result in minor on- or off-site water quality impacts, particularly if rainfall events occur during an active construction phase. Additionally, chemicals used in construction (fuels, lubricants, paints, coatings) could be released to the environment if spilled. However, the FOWD has identified a number of requirements and stormwater management practices that would be instituted during the construction phase, as identified in the Project Description set forth in Section 2 of this Initial Study. The FOWD would implement the following standards and requirements.

In coordination with Sacramento County, all construction activities would implement stormwater pollution prevention BMPs designed to reduce potential impacts to water quality during construction of the project and in accordance with the guidelines of the Sacramento Stormwater Management Program as follows:

- Complying with the requirements of the State Water Resources Control Board's "General Permit for Stormwater Discharges Associated with Construction Activity"[2],
- Protecting adjacent properties and storm drainage facilities from the discharge of sediment or other contaminants from the construction site,
- Scheduling as much project work as possible during the dry season,
- Protecting storm drain inlets,
- Using other Best Management Practices as necessary, including applying rainy season erosion controls, managing stockpiles, disposing of well development water properly, and correctly managing and disposing of construction wastes,
- Maintaining all Best Management Practices, and
- Stabilizing the site after construction is complete, including revegetating landscaped areas disturbed by construction.

During construction and operation of the proposed Skyway Drive Well, there would be occasions when untreated (non-chlorinated) water would be discharged to an adjacent storm drain: 1) during construction, with the discharge of water used in the well construction process and during development of the water well; and 2) pump to waste discharge on an intermittent basis to maintain the well. During development, pump testing of the well, and routine pump maintenance, all discharge water would be disposed of in such a manner as to cause the least impact to the site and vicinity as discussed below.

Clean water produced during well development and testing would be discharged to a municipal storm drain located in Cedarvillage Drive. Development water containing solids, including sand and silts, would be contained in a settling basin or by other means on site before being discharged into the storm drain. Only "clear water" would be discharged into the storm drain system in compliance

[2] Because the project disturbance area totals less than one acre, the FOWD would be exempt from Submitting a Notice of Intent to the State Water Resources Control Board to comply with the General Permit for Stormwater Discharges Associated with Construction Activity due to the small size of the project. Nonetheless, the FOWD has voluntarily agreed to comply with the substantive requirements of the General Permit.

with National Pollutant Discharge Elimination System (NPDES) MS-4 discharge requirements. All other waters would be contained and disposed of off site at an appropriate facility in compliance with State law.

With respect to construction period water quality, due to the gentle site topography, the planned drainage system, the implementation of BMPs and construction requirements as set forth above, NPDES permit requirements, and County and State well construction requirements, this would be a less than significant impact. No additional mitigation would be necessary beyond required well construction standards, identified BMPs, and NPDES requirements.

During operation, implementation of the project could adversely affect groundwater or surface water. Effects to groundwater could occur if the well represented a preferred pathway for pollutant migration to groundwater. Wells that do not meet current well standards of construction may act as conduits for pollutant migration to the subsurface. However, construction and operation of the proposed well would be consistent with legally adopted standards and programs to protect the quality of groundwater in the subterranean aquifers underlying the site, as well as surface waters that may be impacted by the well facility discharges. The Skyway Drive Well project would consist of groundwater extracted at the project site, and the use of a sodium hypochlorite disinfection system to treat the raw groundwater. After disinfection, treated water would be pumped into an existing water main located on Skyway Drive.

In summary, construction and operation of the Skyway Drive Well as a source of drinking water would not violate any water quality standards or discharge requirements. This impact would be less than significant, and no additional mitigation would be required.

Question (b) Decrease groundwater supplies or interfere with recharge: Less-than-significant Impact. The majority of water used in the FOWD comes from surface water through a contract with the San Juan Water District. The FOWD Urban Water Master Plan states that during drought years, water demand will need to be met through a conjunctive approach utilizing both surface and groundwater supplies. The Skyway Drive Well would extract untreated groundwater, which would then be disinfected on site and pumped into the FOWD's existing distribution system to augment existing surface water allotments, and to provide for water emergency and fire flow purposes.

The proposed Skyway Drive Well project would be consistent with and implement the FOWD's responsibilities and obligations under the Sacramento Water Forum Agreement as a San Juan Water District consortium member (April 2000, updated October 2015), the RWA's Integrated Regional Water Management Plan (2018), and the Sacramento Groundwater Authority's Groundwater Management Plan (December 2014). The facilities constructed under the proposed project would directly serve to operate and maintain the groundwater basin for use in drought years through conjunctive use and water efficiency/conservation programs as provided by the regional water plans cited above.

The Skyway Drive Well project site is located on the east side of the Sacramento River Valley, north of the American River within the North American sub-basin, part of the larger Sacramento Valley groundwater basin. Water bearing formations beneath the FOWD occur in two major strata. The upper water-bearing units include the geologic formations of the Victor, Fair Oaks, and Laguna Formations and are typically unconfined. The lower water-bearing unit consists primarily of the Mehrten Formation, which exhibits confined conditions. The Mehrten Formation is the most

productive fresh water- bearing unit in the eastern Sacramento Valley, though some of the permeable layers of the Fair Oaks Formation produce moderate amounts of water. Much of the recharge of these aquifer systems comes from the Sacramento and American Rivers and their tributaries where gravel deposits exist. To a lesser extent, aquifer recharge also occurs where the Mehrten Formation reaches the surface in the foothills in eastern Sacramento and western El Dorado County. Supply wells in the Sacramento Region draw water primarily from the Mehrten and Fair Oaks formations and typically produce 500-1,500 gpm of good to excellent quality water. (FOWD 2016)

The eastern portion of the North American Sub-basin extends roughly east of San Juan Avenue to the American River, which is the eastern edge of the basin. Historically, this area has relied primarily on surface water. Groundwater levels within the eastern portion of the sub-basin range from 10 feet below to 140 feet above mean sea level (msl) from west to east. Two long-term hydrographs within this area indicate that groundwater elevations have not varied greatly over time, although groundwater elevations within the area can be highly varied because they tend to mimic ground elevations in this area of rolling topography. Groundwater elevations measured in the far eastern area of the North American Sub-basin have varied by no more than two feet from October 1998 through 2012. (SGA 2014)

Within the FOWD, groundwater is produced from 6 operating wells that vary in design capacity from 500 gallons per minute (gpm) to 2,700 gpm. The wells are located primarily in the central portion of the FOWD's water system and are used to meet short-term water supply or maintain the FOWD's water system pressure. The FOWD groundwater wells currently have a total capacity of 12,743 acre-feet per year (AFY) and a firm normal year capacity of 8,388 AFY. The actual volumes of groundwater delivered from 2011 to 2015 ranged from 2,329 AFY to 873 AFY. (FOWD 2016)

Although FOWD has no plans to increase groundwater withdrawals beyond the average, production could increase up to the full well capacities in successive dry year scenarios to supplement available surface water supplies, consistent with the dry-year conjunctive use standards of the SGA, RGA, and Water Forum Agreement.

Groundwater extraction from the eastern portion of the North American sub-basin under a conjunctive use program as proposed by the FOWD is not expected to adversely affect local groundwater supplies. Because of the small area of new impervious surface and the location of the project site distant from important areas of aquifer recharge, development of the Skyway Drive Well site would not adversely affect groundwater recharge to the production aquifers. The Skyway Drive Well project would facilitate implementation of the approved FOWD Urban Water Master Plan (2016) and the regional groundwater management plans cited above. Implementation of the proposed well project would not result in an increase in water demand beyond that anticipated by the Sacramento County General Plan, nor would it provide a significant increase in available water supplies to serve unplanned growth. There would be a less-than-significant impact, and no mitigation would be required.

Question (c) Substantially alter drainage patterns: Less-than-significant Impact. The project site is within a 1.27-acre parcel developed with a 3.0 MG water storage tank, and a booster pump station enclosed within a block wall building. Much of the remainder of the site is paved. A stormwater collection and conveyance system on the project site discharges to the community storm drainage system located in Cedarvillage Drive. Skyway Drive adjacent to the site is also developed with a community storm drainage system. The area of the site to be developed with the proposed

well consists of a 40-foot by 60-foot area of lawn. This area would be disturbed during construction to house the drill rig, drill pipe lay down area, drilling fluid capture pond and an area to store cuttings. Except for the well head, this area would be restored to a pervious surface after the completion of construction.

No natural channels or water features are located on or adjacent to the project site.

No proposed aspect of constructing or operating the Skyway Drive Well project would interfere with an existing channel, result in the erosion of its existing banks, or result in the discharge of sediment laden water into a waterway.

The Skyway Drive Well project would create a nominal amount (~9 square feet) of additional impervious surfaces on the well site. Stormwater generated on site would be collected in existing storm drains for discharge to municipal storm drain facilities present in adjacent streets. The project site drainage facilities, as modified as part of the project, and the existing off-site municipal stormwater drainage system are designed with capacity to accommodate the increase in runoff volumes and peak flows from the project. No uncontrolled runoff would discharge from the site that could result in erosion and siltation along adjacent surface drainageways.

Impervious surfaces added to the Skyway Drive Well site would be nominal and would not noticeably increase the volume and peak flow of runoff generated on-site. The small acreage and the location of the proposed project site would reduce the potential for a substantial influence on flood volumes or routing. In addition, the project site drainage facilities and the existing off-site stormwater drainage system are designed to address existing and anticipated drainage and flooding. Thus, no adverse effects from increased runoff would occur to drainage facilities or capacity, no significant impact would result and no mitigation would be required.

Questions (d) Release of pollutants due to inundation: No Impact. The project site is not located within the FEMA designated 100-year or 500-year floodplains. Because the project area is located distant from the sea or any large reservoir, the project would not be located in an area subject to inundation hazards from seiche or tsunami.

Because the project site would not be sited within a floodway, implementation of the proposed well project would not risk the release of pollutants due to project inundation. Thus, no adverse effects from flooding and pollutant release would occur, no impacts would result, and no mitigation would be required.

Questions (e) Conflict with water quality control or groundwater management plans: No Impact. The proposed Skyway Drive Well project would be consistent with and implement the FOWD's responsibilities and obligations under the Sacramento Water Forum Agreement as a San Juan Water District consortium member (April 2000, updated October 2015), the RWA's Integrated Regional Water Management Plan (2018), and the Sacramento Groundwater Authority's Groundwater Management Plan (December 2014). The facilities constructed under the proposed project would directly serve to operate and maintain the groundwater basin for use in drought years through conjunctive use and water efficiency/conservation programs as provided by the regional water plans cited above. Because the proposed project would not conflict with adopted water quality control or groundwater management plans, no impact would occur and no mitigation would be required.

XI. LAND USE AND PLANNING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				**X**
b) 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?			**X**	

The proposed project parcel is designated for Medium Density Residential use in the Sacramento County General Plan. The Medium Density Residential designation provides for areas of attached units, including apartments and condominiums, along transit corridors and throughout the urban area (Sacramento County 2011). In the Fair Oaks Community Plan, the parcel is designated for RD-5 Residential use (Sacramento County 2004). This use designation provides for typical urban subdivision development of predominately single-family dwellings (Sacramento County 1975).

The Sacramento County Zoning Code designates the parcel as RD-5 Residential (Sacramento County 2019). This land use is the most widely used single-family residential zoning district where public water supply and public sewage facilities are both in use (Sacramento County 2015). According to the Zoning Code, water wells are considered to be a Minor Public Service Facility Use that is permitted in an RD-5 zone by right (Sacramento County 2015a).

The proposed project is not protected by a Williamson Act contract (Sacramento County 2011).

ENVIRONMENTAL ANALYSIS

Question (a) Physically divide an established community: No Impact. The proposed Skyway Drive Well project would be located in an existing neighborhood characterized by low-density residential development. The property is bounded on the north, east, and south by existing single-family residential development. The Grace Bible Church and Summit Christian School lie to the west of the project site (see Figure 2). Planned surrounding land uses would continue to be residential in nature.

The proposed project would be constructed within the existing FOWD parcel, and would be of a scale and appearance consistent with its residential environs. Existing privacy fencing surrounding the project parcel would remain in place. The proposed project would not divide an established community. No impact would occur, and no mitigation would be required.

Question (b) Conflict with land use plans or policies: Less-than-significant Impact. The proposed project is consistent with the Sacramento County General Plan. According to the Zoning Code, water wells are considered to be a Minor Public Service Facility Use that is permitted in an RD-5 zone by right.

Because proposed project activities would be consistent with the project site's General Plan land use and Zoning Code designations, a less-than-significant impact would occur and no mitigation would be required.

XII. MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

Sacramento County's primary remaining aggregate deposits are located in the Old American River channel, south of Rancho Cordova (Sacramento County 2011). The Skyway Drive Well project area is not located in a zone of known mineral or aggregate resources. The California Surface Mining and Reclamation Act Mineral Land Classification for the area is Mineral Resource Zone-1, which is defined as "Areas containing mineral deposits the significance of which cannot be evaluated from available data… the likelihood for occurrence of significant mineral deposits is nil or slight." (DOC CGS 2018)

ENVIRONMENTAL ANALYSIS

Questions (a) and (b) Loss of mineral resources of value and/or mineral resources that have been delineated on land use plans: No Impact. No active mining operations are present in, or near, the project area. Implementation of the proposed project would not interfere with the extraction of any known mineral resource. Because the project site is developed with urban uses and there are no active mining operations in the vicinity of the proposed project, no significant impacts would result, and no mitigation would be required.

XIII. NOISE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		**X**		
b) Generation of excessive ground-borne vibration or ground-borne noise levels?		**X**		
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**

ENVIRONMENTAL SETTING

The Skyway Drive Well project would be located in an area that currently experiences urban sources and levels of noise. One major roadway, Hazel Avenue, is located approximately 0.18 mile from the project site. Other than traffic noise, the predominant noise sources at the proposed project site are characterized as those generated by surrounding low-intensity residential uses.

Land uses within 1,000 feet of the well site consist primarily of single-family residences; a church and associated school are located immediately to the west of the project site. The nearest residence to the proposed well site is located approximately 110 feet to the north. A total of seven residences to the north, east, and south, are located within 150 feet of the proposed well site.

Noise impacts from a project can be categorized as those resulting from either construction or operational activities. Construction noise would have a short-term effect (intermittently for three to five weeks during the well construction phase and for approximately six months during the equipping phase), while minor levels of operational noise would continue periodically throughout the project life. Implementation of the proposed project would temporarily increase noise levels during construction. Operational noise levels would be relatively unchanged with project implementation. Since there are residences adjacent to the proposed well site that may be affected, the following discussion considers these noise sources in more depth.

Environmental noise usually is measured in A-weighted decibels (dBA). An A-weighted decibel is a decibel corrected for the variation in frequency response of the typical human ear at commonly encountered noise levels.

Environmental noise typically fluctuates over time, and different types of noise descriptors are used to account for this variability. Typical noise descriptors include the energy-equivalent noise level (Leq) and the day-night average noise level (Ldn).[3] The Ldn is commonly used in establishing noise exposure guidelines for specific land uses. In areas where noise is dominated by traffic, the Leq during the peak-hour is generally equivalent to the Ldn at that location.

Generally, a three-dBA increase in ambient noise levels represents the threshold at which most people can detect a change in the noise environment; an increase of 10 dBA is perceived as a doubling of loudness. In areas where existing noise levels are dominated by traffic, a doubling in the volume of vehicular traffic would cause ambient noise levels to increase by three dBA.

The noise level experienced at a receptor depends on the distance between the source and the receptor, presence or absence of noise barriers and other shielding devices, and the amount of noise attenuation (lessening) provided by the intervening terrain. For line sources, such as motor or vehicular traffic, noise decreases by about 3.0 to 4.5 dBA for every doubling of the distance from the roadway. For point or stationary noise sources, such as electric motors, a noise reduction of 6.0 to 9.0 dBA is experienced for each doubling of the distance from the source.

Construction noise would have a short-term effect; operational noise, primarily from infrequent backup generator testing, would continue intermittently throughout the lifetime of the project. Because the well pump would be located underground, there would be little to no noise from this source during operations.

REGULATORY SETTING

Environmental noise in the vicinity of the Skyway Drive Well project site is regulated by Sacramento County, both in its 2030 General Plan Noise Element and as set forth in Chapter 6.68 of the Sacramento County Code (Noise Ordinance).

The following policies of the County's 2030 General Plan apply to the proposed Skyway Drive Well project (Sacramento County 2017):

NO-6. Where a project would consist of or include non-transportation noise sources, the noise generation of those sources shall be mitigated so as not exceed the interior and exterior noise level standards of Table 2 at existing noise-sensitive areas in the project vicinity.

[3] Leq, the energy equivalent noise level (or "average" noise level), is the equivalent steady-state continuous noise level which, in a stated period of time, contains the same acoustic energy as the time-varying sound level actually measured during the same period. Ldn, the day-night average noise level, is a weighted 24-hour average noise level. With the Ldn descriptor, noise levels between 10:00 p.m. and 7:00 a.m. are adjusted upward by ten dBA to take into account the greater annoyance of nighttime noise as compared to daytime noise.

Sacramento County Noise Element
Table 2
Non-Transportation Noise Standards

Median (L50)/Maximum (Lmax)[1]

	Outdoor Area[2]		Interior[3]
Receiving Land Use	*Daytime*	*Nighttime*	*Day and Night*
All Residential	55/75	50/70	35/55
Churches, Schools[4]	55/75	---	35/60

Notes:
1. The Table 2 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards of Table 2, then the noise level standards shall be increased at 5 dB increments to encompass the ambient.
2. Sensitive areas are defined acoustic terminology section.
3. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
4. The outdoor activity areas of these uses (if any), are not typically utilized during nighttime hours.

Source: Sacramento County General Plan, Noise Element, as amended through December 13, 2017.

NO-8. Noise associated with construction activities shall adhere to the County Code requirements. Specifically, Section 6.68.090(e) addresses construction noise within the County.

NO-16. The following sources of noise shall be exempt from the provisions of this Noise Element:

a. Emergency warning devices and equipment operated in conjunction with emergency situations, such as sirens and generators which are activated during power outages. The routine testing of such warning devices and equipment shall also be exempt provided such testing occurs during daytime hours.

The following requirements as set forth in the County's Noise Ordinance govern noise on the Skyway Drive Well site and in the vicinity (Sacramento County 2019b):

6.68.070 Exterior Noise Standards.

a. The following noise standards, unless otherwise specifically indicated in this chapter, shall apply to all properties within a designated noise area.

County Zoning Districts	Time Period	Exterior Noise Standard
RD-3 Single Family Residential RD-4 Single Family Residential	7 a.m. – 10 p.m.	55 dBA
RD-5 Single Family Residential RD-20 Multi-Family Residential	10 p.m. - 7 a.m.	50 dBA

6.68.080 Interior Noise Standards.

a. In any apartment, condominium, townhouse, duplex or multiple dwelling unit it is unlawful for any person to create any noise from inside his unit that causes the noise level when measured in a neighboring unit during the periods ten p.m. to seven a.m. to exceed:
   1. Forty-five dBA for a cumulative period of more than 5 minutes in any hour;
   2. Fifty dBA for a cumulative period of more than 1 minute in any hour;
   3. Fifty-five dBA for any period of time.

6.68.090 Exemptions.

The following activities shall be exempted from the provisions of this chapter (Sacramento County Code chapter 6.68 – the Noise Ordinance):

d. Any mechanical device, apparatus or equipment related to or connected with emergency activities or emergency work;

e. Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of eight p.m. and six a.m. on weekdays and Friday commencing at eight p.m. through and including seven a.m. on Saturday; Saturdays commencing at eight p.m. through and including seven a.m. on the next following Sunday and on each Sunday after the hour of eight p.m. Provided, however, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after eight p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner;

Thus, both the construction of the proposed well, and the periodic testing of the backup generator(s) would be exempt from Sacramento County noise requirements.

ENVIRONMENTAL ANALYSIS

Construction Noise

Questions (a) and (b) Increases in noise levels and groundbourne vibration: Less-than-significant Impact with Mitigation. Construction would temporarily increase noise levels in the vicinity of construction activities intermittently over the construction periods that encompass both the well drilling and equipping phases of the project. Currently, there are noise-sensitive land uses (low-density residences, and a church and associated private school) located in the immediate vicinity, which could be subjected to noise from construction activities associated with the proposed project.

Construction activities would be considered an intermittent noise impact throughout the construction of the project, and would vary in their effects on nearby residents and students (sensitive receptors) depending on the presence of intervening barriers or other insulating materials. All work, including impact wrenches, would be performed between the hours of 7 a.m. and 7 p.m. Monday through Friday. No weekend or holiday work is planned.

The only exception to the designated work hours would be made for the purpose of drilling the well. For this operation, continuous work (up to 24 hours per day) would be necessary in order to protect the integrity of the well structure. It is expected that this phase of work would take three to six days to complete. Temporary sound walls up to 20 feet in height, and appropriate muffler devices would be used to mitigate the noise impacts of the drilling operation on the surrounding residential area.

Although construction activities would for the most part occur only during daytime hours, uncontrolled construction noise could still be considered disruptive to local residents adjacent to the proposed project. Typical composite noise levels for construction activities, and distances of various noise contours from construction site, are presented in Table 3.

Table 3 Typical Noise Levels During Construction				
Construction Activity	*Noise Level at 50 feet (dBA, Leq) /a/*	**Approximate Distance (ft.) to Reduce Noise to Given Level (dBA, Leq) /b/**		
		60	*65*	*70*
Ground Clearing	84	790	450	250
Well drilling (driver)	80	430	235	150
Foundations /c/	78	400	220	130
Erection /c/	85	890	500	280
Finishing (exterior) /c/	89	1,400	800	450

/a/ U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, December 1971; U.S. Department of Transportation, Federal Highway Administration, Office of Planning, Environment, and Realty, Roadway Construction Noise Model (RCNM), June 28, 2017.

/b/ Calculations assume a 6 dBA reduction for each doubling of distance from the noise source.

/c/ These construction activities would be completed only in the event that a second generator is needed to power the well during outages.

In order to regulate such noise, Sacramento County has established both General Plan and Noise Ordinance standards for noise levels from activities, including construction. Construction noise levels may be higher than Chapter 6.68.070 of the Sacramento County Code would normally allow (50-55 dBA). However, General Plan policy NO-8 and Chapter 6.68.070 (e) of the Sacramento County Code provide the following exemption from Chapter 6.68.070 for construction activities, such as those necessary to implement all phases of work for the proposed Skyway Drive Well project. In addition to permitting construction activities to specified days and times, the exemption provides that:

> … when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner.

This continuous work exemption would apply to the drilling of the proposed well.

All work necessary to implement the project would be performed between the hours of 8 a.m. and 7 p.m. Monday through Friday, consistent with Sacramento County noise standards. However, consistent with the continuous work exemption for drilling the well, this operation would result in continuous work (up to 24 hours per day) in order to protect the integrity of the well structure. It is expected that this phase of work would take three to six days to complete.

Preliminary engineering of the project site indicates that the well would be located approximately 110 feet from the façade of nearest homes to the north and east. At this distance between the well and the nearest residences, noise levels during drilling would range from 72-78 dB leq. Because well drilling would occur outside of the times permitted by Sacramento County, and noise levels temporarily would exceed those established by General Plan Policy NO-6 and Chapter 6.68.070 of the Sacramento County Code, this would be a significant impact and mitigation would be required.

Mitigation Measure 3

To reduce the effects of construction noise on affected residents, the FOWD shall implement the following measures:

a. Except for drilling and constructing the well, all work necessary to implement the project will be performed between the hours of 8 a.m. and 7 p.m. Monday through Friday
b. Temporary sound walls (minimum 20 feet high) will be installed around the work area to reduce noise impacts during drilling and construction operations.
c. All equipment will be equipped with appropriate muffler devices to reduce the noise impacts of the drilling operations.
d. The use of impact wrenches will be prohibited between the hours of 7 p.m. and 8 a.m.
e. The FOWD may provide alternate nighttime accommodations to adjacent residents if needed to mitigate noise impacts during drilling.

Based on industry standards, installation of temporary sound walls would be expected to reduce sound levels by 15 dB, thereby reducing sound levels during well drilling at the nearest residence to 63 dB leq (based on the distance from the well drilling site). Closed windows and walls of the residence would provide at least 25 dB of additional noise reduction. It is reasonable to assume that nearby residents would close windows during drilling operations. Thus, with windows closed, sound levels within the homes would be less than 40 dB leq.

To add a margin of error to reflect varying sensitivities to noise, this analysis assumes that noise levels within the nearest residence would be less than 45 dB leq at night. Section 6.68.080 of the Sacramento County Code regulates interior noise levels during nighttime hours and establishes an interior noise level of 45 dBA as an acceptable noise level for nighttime noise. Nighttime is defined in this section of the County Code as lasting from 10:00 p.m. to 7:00 a.m. Though technically this section of the County Code pertains to noise generated in a neighboring residential unit, it does establish Sacramento County's standard for appropriate levels of nighttime noise within a residence.

As set forth above, with implementation of Mitigation Measure 3, well drilling and construction operations would meet this standard. Because all work necessary to implement the project would be performed between the hours of 8 a.m. and 7 p.m. Monday through Friday, noise attenuation measures such as temporary walls and mufflers on equipment would be required, and alternate nighttime accommodations could be made available, the project as mitigated would conform to the requirements of Sacramento County's Noise Ordinance. Therefore, no significant construction impacts would occur and no additional mitigation would be required.

Operational Noise

Implementation of the project would only nominally increase the number of vehicle trips to and from the project area. A doubling of traffic volumes would be necessary to increase ambient noise levels by three dBA. However, since traffic generated by the project would be limited to infrequent visits to the well site by FOWD maintenance and operations staff, traffic increases for project operations would not occur at levels that would noticeably affect the ambient noise environment.

On-site facilities and processes that could result in operational noise could include a second backup diesel generator when on site. The FOWD currently operates a backup generator on the site during power outages, and monthly during test operation. Implementation of the well project would not modify operations of this existing backup generator. If an additional backup generator is deemed necessary, it would be enclosed in a masonry block building to attenuate the operational noises. The testing of both the existing generator, as well as a possible additional new generator, would be exempt from Sacrament County noise requirements.

Installation of a submersible well pump and motor is anticipated for operation of the well. A submersible pump and motor facility would not result in increased operation noise. If, during the design of the well equipping phase it becomes necessary to select a vertical turbine driven well pump, a noise attenuating enclosure of the vertical turbine motor will be included in the project. With this enclosure, operation of a vertical turbine well pump would not result in increased operational noise.

Given the distance from sensitive receivers to the well and the nature of this noise source, this would be a less-than-significant impact, and no additional mitigation would be required.

Question (c) Aircraft noise: No Impact. Since the proposed project site would be located more than two miles from the nearest public or private airport, and noise levels from airport operations do not exceed Sacramento County General Plan standards at the project site, workers at the proposed Skyway Drive Well site would not be exposed to adverse levels of aircraft noise. No impact would result and no mitigation would be required.

XIV. POPULATION AND HOUSING

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) 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)?			**X**	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

Question (a) Induce unplanned population growth: Less-than-significant Impact. Because the objective of constructing and operating the well facility is to provide the FOWD with additional water resources to supplement surface water entitlements in the event of a drought or water emergency, and to provide additional resources for fire flow requirements, implementation of the well project would assist in the provision of planned housing and other urban uses. This would be a less-than-significant impact and no mitigation would be required.

The proposed project would not provide any housing units. Implementation of the project would create short-term employment opportunities. While construction employment would be created during the project construction phase, the necessary employees could be expected to be provided by the local labor pool, without the importation of significant amounts of new labor given that there were 23,300 unemployed workers within Sacramento County in November 2019 (EDD 2019). Given the small number of new employees required for the project construction phase, all new employees could be accommodated by the local labor pool.

The proposed project would provide an additional source of potable water for the FOWD's service area. The water provided by the proposed project would be used to augment or supplant existing water entitlements in the event of a drought or water emergency, to operate and maintain the groundwater basin under a regional conjunctive use program, and for those other purposes as noted in the introductory Project Description of this Initial Study. However, since the project is for intermittent use only, and no increased water supply during normal conditions would result, no direct or indirect population growth beyond that currently anticipated by the community of Fair Oaks and Sacramento County is expected to result from project completion. Thus, no significant impacts to population or housing would occur with the implementation of the Skyway Drive Well project, and no mitigation would be required.

Question (b) Displace substantial numbers of people or housing: No Impact. The proposed project would be situated on a parcel approximately 1.27 acres in size. There are no housing units on the project site. Because the site is developed only with utility infrastructure and has no existing housing units, there would be no displacement of housing units or substantial numbers of people; replacement housing would not be required. There would be no impact, and no mitigation would be required.

XV. PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives of any of the public services:				
a) Fire protection?				**X**
b) Police protection?				**X**
c) Schools?				**X**
d) Parks?				**X**
e) Other facilities?				**X**

Public services provided to the project site and vicinity include police, fire, school, library, and park services.

The Sacramento Metropolitan Fire District provides fire protection services in the vicinity of the proposed project. The closest fire station is Metro Fire Station 32, approximately one-quarter mile west of the project site (Sac Metro Fire 2019). The project site is located in the Sacramento County Sheriffs Department North Division; the police facility nearest the project site is the Dewey Community Service Center (SacSheriff.com 2019).

San Juan Unified School District schools in Fair Oaks include three elementary schools, one middle school, and two high schools. Several private schools are also located in the community, including the Summit Christian School associated with the Grace Bible Church, located adjacent to the project site. The Fair Oaks Recreation and Park District has eight park facilities in the Fair Oaks area; Phoenix Park is less than one-half mile to the south of the project site. The Fair Oaks Library is part of the Sacramento Public Library system, and is located adjacent to Fair Oaks Park. (Wikipedia 2019)

ENVIRONMENTAL ANALYSIS

Questions (a) through (e) New or physically altered governmental public service facilities: No Impact. Because the proposed project does not include any housing units, there would be no increase in population or the need for public services that would require the provision of new or physically altered governmental facilities. There would be no impact and no mitigation would be required.

XVI. RECREATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated?				**X**
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**

The Fair Oaks Recreation and Park District (FORPD) serves an estimated 35,000 residents in an area of approximately 11 square miles. In addition to managing eight park facilities, the FORPD also administers programs that include special events, day camps, preschool, adult and youth sports leagues, senior activities, and leisure enrichment programs. Phoenix Park is less than one-half mile to the south of the project site. (FORPD 2019)

ENVIRONMENTAL ANALYSIS

Questions (a) and (b) Increase park use, construct or expand recreational facilities: No Impact. The proposed project does not directly involve construction of housing or facilities that could increase the demand for neighborhood or regional parks, or other recreational facilities. Development of the Skyway Drive Well would not involve the creation of new recreation facilities, or adversely affect existing facilities. Thus, no significant adverse impacts to recreation would occur with implementation of the proposed Skyway Drive Well project and no mitigation would be required.

XVII. TRANSPORTATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b) Would the project conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			**X**	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d) Result in inadequate emergency access?			**X**	

ENVIRONMENTAL SETTING

Roadways in the project vicinity are programmed by the Sacramento County General Plan, and maintained by Sacramento County in order to adequately handle traffic generated by urban uses within the unincorporated community of Fair Oaks, including traffic generated by the Skyway Drive Well project. No transportation improvement projects are currently under construction or planned by Sacramento County in the project vicinity (SACDOT 2019)

Access to the project site would be from Skyway Drive via an existing on-site driveway. Regional access would be provided via State Route 50, Hazel Avenue, Sunset Avenue, and Madison Avenue. Other than pedestrian sidewalks on Skyway Drive, Cedarvillage Drive, and adjacent streets, there are no provisions for other modes of transportation in the project area. A peak-hour weekday bus route operates on Hazel Avenue in the project vicinity. No bikeways or transit routes are located or planned adjacent to or in the area of the Skyway Drive Well project. (SACDOT 2019, SRT 2019)

During the active construction period, up to twenty construction worker trips and deliveries of construction supplies or equipment could occur on weekdays. The actual number of construction trips on any given day would be irregular, and would depend upon the construction phase and the need for project supply or equipment deliveries.

During project operation, there would be no regular on-site employees or deliveries provided to the project site. Under normal operations, approximately six trips per month would be generated with implementation of the proposed project, all entering and exiting the site at Skyway Drive. In a dry year or during monthly testing, the project would generate one to two daily visits when the well is running, depending on the level of production required by the FOWD. No existing or planned off-site transportation facilities would be modified or constructed.

ENVIRONMENTAL ANALYSIS

Question (a) Conflict with local circulation plans: Less-than-significant Impact. Implementation of the project would not modify any existing or planned transportation facilities, or result in the generation of substantial amounts of vehicle, transit, bicycle, or pedestrian traffic. As planned, the project would be consistent with the existing transportation system in the project area and with transportation policies and facilities planned for the project site and vicinity. This would be a less-than-significant impact, and no mitigation would be required.

Question (b) Conflict with CEQA Guidelines regarding analysis of transportation impacts: Less-than-significant Impact. As noted above, up to twenty daily construction trips could occur during the construction phase of the project, although the number of trips on a given weekday would be irregular. Depending upon the construction phase, vehicle trips could be substantially less than twenty. During project operations, there would be no regular on-site employees or deliveries provided to the project site. Under normal operations, approximately six trips per month would be generated with implementation of the proposed project. When the well is running, that number would increase to one to two daily trips. Because of the small amount of traffic generated, there would be no substantial increase in vehicle miles travelled during project construction or operations. The proposed project would not have an adverse effect on vehicle miles travelled. This would be a less than significant impact, and no mitigation would be required.

Question (c) Increase hazards due to geometric design feature: Less-than-significant Impact. Access to the site would be provided by an existing paved driveway from Skyway Drive. Implementation of the proposed project would not result in any changes to the on-site driveway or local roadways. There would be no increase to hazards due to a design feature or incompatible uses. A less-than-significant impact would result, and no mitigation would be required.

Question (d) Inadequate emergency access: Less than significant Impact. No designated emergency access routes are located in the vicinity of the project; thus, no modification of such facilities would occur. As noted above, implementation of the project would not adversely affect any transportation facility. This would be a less-than-significant impact, and no mitigation would be required.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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 cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			**X**	
b) 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

ENVIRONMENTAL SETTING

A Tribal Sacred Lands search request was filed with the Native American Heritage Commission (NAHC). The search was completed with the conclusion that no tribal cultural resources are located on or in the vicinity of the proposed project site (NAHC 2019).

Records of the known cultural resources found in Sacramento County are included in the files of the Office of Historic Preservation, California Historical Resources Information System. The Northern Central Information Center (NCIC), housed at California State University, Sacramento, locally administers these records. A cultural resources records search was conducted at the NCIC for the project site and surrounding area to determine its historic and cultural sensitivity (NCIC 2020). Based on the records search, there are no known prehistoric or historic archaeological resources on the project site that have been reported to the NCIC.

REGULATORY SETTING

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCR), the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Summary of AB 52 Compliance

Section 21080.3.1 (b) of the Public Resources Code states that:

> "… the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed project in the geographic area that is traditionally and culturally affiliated with the tribe…"

The FOWD has received no written requests to be notified of projects in which the FOWD is the Lead Agency under CEQA. Accordingly, the FOWD has no further responsibility in regard to AB 52 consultation.

Should one or more tribes request consultation on the project at some point in the future, the FOWD may engage in discussions with the tribe, but such discussions would not be subject to the requirements of the AB 52 process.

ENVIRONMENTAL ANALYSIS

Questions (a) and (b) Affect CRHR resources, significant California Native American Tribal resource: Less-than-significant Impact. A sacred lands file search was conducted by the NAHC, and no sacred lands were identified for the vicinity of the project site. Additionally, a NCIC Records Search for cultural resources found no prehistoric archaeological resources on the project site or in its vicinity that have been reported to the NCIC. No Native American tribes have requested notification of proposed projects in the project area; accordingly, the requirements of AB 52 have been satisfied. Because no known tribal cultural resources or other prehistoric cultural resources were identified that are listed or eligible for listing in a register of historic resources, and no Native American tribes have requested notification of proposed projects in the area, a less-than-significant impact would result. No mitigation would be required.

XIX. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?		**X**		
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			**X**	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

Water is supplied to the project site by a supply pipeline connected to the San Juan Water District. After treatment and storage the water is then distributed to customers within the FOWD. Stormwater management and drainage in the project area are provided by the Sacramento County Stormwater Utility (Sacramento County Stormwater 2020). There is an on-site drainage system, to which improvements will be made (adequate to receive the well pump test flows – 8 inch diameter). Currently, on-site stormwater travels overland to catch basins that then discharge to the existing community drainage system within Cedarvillage Drive (GEI 2019). Sanitary sewer service is available at the southwest corner of the project site, and is coupled to collection and transmission facilities operated by the Sacramento Area Sewer District. Collected sewerage is treated at a regional wastewater treatment plant operated by the Sacramento Regional County Sanitation District. Electric power is provided by SMUD to operate the booster pump and other facilities on the project site. No natural gas utilities serve the project (Sacramento County 2020). Solid waste collection services in Fair Oaks are provided by Republic Services.

As required by State law and regulations, the FOWD prepared and adopted an Urban Water Management Plan (UWMP) in 2016. In part, the purpose of an UWMP is to demonstrate that a water provider has sufficient water supplies, and treatment and distribution facilities to serve existing and anticipated future customers during normal, dry, and multiple dry years. The UWMP is also intended to document trends in conservation and water use efficiency within the FOWD. As set forth in the UWMP, the FOWD would have sufficient water supplies during normal, dry, and multiple dry years through at least the year 2035. (FOWD 2016)

For additional environmental and regulatory setting information regarding water supply, please refer to Section X, *Hydrology and Water Resources*, of this Initial Study.

ENVIRONMENTAL ANALYSIS

Question (a) Relocate or construct new service system facilities: Less-than-significant Impact with Mitigation. The Skyway Drive Well project would include the construction and operation of a new water well at the project site, and a connection pipelines from the well head to storage, disinfection, pumping and distribution facilities on the site. Proposed improvements include an electric motor-driven pump, and connection to the existing on-site disinfection system and associated facilities to pump, disinfect, and transport water into the FOWD potable water distribution system. Additional on-site facilities associated with the proposed project include upgrading on-site stormwater collection pipelines to accommodate the construction and operational needs of the new well. No new off-site stormwater facilities would be required to implement the proposed well project. No new or modified off-site wastewater, electricity, natural gas, or telecommunications equipment would be required to serve project construction or operation.

The environmental effects of constructing and operating the proposed well projects are set forth in this Initial Study. Significant impacts have been identified for air quality, cultural resources and noise during the construction period. Implementation of Mitigation Measures 1, 2, and 3 would reduce identified environmental effects to a less-than-significant level, and no mitigation beyond that identified would be required. For more information regarding these impacts and identified mitigation, see Section III, *Air Quality*; Section V, *Cultural Resources*; and Section XIII, *Noise*, of this Initial Study.

Question (b) Water supply: Less-than-significant Impact. The majority of water used in the FOWD comes from surface water through a contract with the San Juan Water District. The FOWD Urban Water Master Plan (2016) states that during drought years, water demand will need to be met through a conjunctive approach utilizing both surface and groundwater supplies. The Skyway Drive Well would extract untreated groundwater, which would then be disinfected on site and pumped into the FOWD's existing distribution system to augment surface water allotments, and to provide for water emergency and fire flow purposes.

The proposed Skyway Drive Well project would be consistent with and implement the FOWD's responsibilities and obligations under the Sacramento Water Forum Agreement as a San Juan Water District consortium member (April 2000), the RWA's Integrated Regional Water Management Plan (July 2013), and the Sacramento Groundwater Authority's Groundwater Management Plan (December 2014). The facilities constructed under the proposed project would directly serve to operate and maintain the groundwater basin for use in drought years through conjunctive use and water efficiency/conservation programs as provided by the regional water plans cited above.

Implementation of the project would not result in an increase in water demand beyond that anticipated by the Sacramento County General Plan, nor would it provide a significant increase in available water supplies to serve unplanned growth. Operation of the proposed project would benefit regional water supply planning and operations by providing a source of groundwater to be used during dry and multiple dry years when surface water supplies would be lessened. This would be a less-than-significant impact, and no mitigation would be required. (For additional discussion of water supply, see Section X, *Hydrology and Water Resources*, of this Initial Study.)

Question (c): Wastewater collection and treatment capacity: Less-than-significant Impact. The Skyway Drive Well would include an electric motor-driven pump, and connection to an existing storage tank, disinfection system and associated facilities to pump, disinfect, and transport water into the FOWD potable water distribution system. The proposed project would not generate new wastewater as a result of the groundwater pumping process. No new wastewater collection or treatment plant capacity would be necessary to serve the project. Implementation of the proposed Skyway Drive Well would result in a less-than-significant impact, and no mitigation would be required.

Questions (d) and (e) Solid waste generation and disposal: Less-than-significant Impact. The proposed project consists of the construction and operation of a production water supply well and associated facilities, which are not anticipated to generate substantial amounts of solid waste beyond that currently generated by FOWD operations. No solid waste collection services would be provided to the project site. Solid waste generated during well operations would be transferred to the FOWD's corporation yard for collection as part of the FOWD's standard waste stream. Therefore, no significant impact would occur, and no mitigation would be required.

XX. WILDFIRE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evaluation plan?				**X**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**
c) Require the installation or maintenance of associated infrastructure (such as 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 to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

According to California Fire and Resource Management Program (FRAP), the proposed project area is unzoned within the Unincorporated Local Responsibility Area; the threat of wildfire hazard in the project area is determined unlikely (CalFIRE 2007).

Questions (a) through (d) Wildfire risk in state responsibility areas/very high fire hazard severity zones: No Impact. The project site is located in an existing low-density residential neighborhood, and the threat of wildland fire has been determined to be unlikely (CalFIRE 2007). The proposed project site would not be located in a critical fire danger zone or adjacent to wildlands subject to wildfires. Urban levels of fire protection would be provided to the project area. Because the proposed project is not located in or near a State Responsibility Area, nor on lands classified as very high fire hazard severity zones, no impact would occur and no mitigation would be required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)				**X**
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Question (a) Degrade quality of the environment: Less than significant Impact with Mitigation. As discussed above, the project has the potential to adversely impact air quality (construction dust), undiscovered cultural resources, and noise (construction). With the implementation of mitigation measures identified in this Initial Study (see below), all potential impacts would be reduced to a less-than-significant level. No significant or potentially significant impacts would remain.

Question (b) Cumulatively considerable impacts: No impact. The projects would accommodate FOWD, Sacramento County, regional, and statewide environmental goals to provide for adequate sources of water. While the project would indirectly contribute to cumulative impacts associated with increased urban development in the FOWD service area and Sacramento County, these impacts have previously been evaluated and considered in Sacramento County's approval of the 2005-2030 General Plan. The proposed Skyway Drive Well project would not make a cumulatively considerable contribution to the cumulative effects identified by Sacramento County in its environmental review of the General Plan. Therefore, this would be a less-than-significant impact, and no mitigation would be required.

Question (c) Adversely effect human beings: Less-than-significant Impact. Because of existing regulation and monitoring of many potential environmental impacts, and with the implementation of mitigation measures identified in this report, the project would not have the potential to cause substantial adverse effects on human beings. This would be a less-than-significant impact, and no mitigation would be required.

MITIGATION MEASURES:

Mitigation Measure 1

All projects are subject to SMAQMD rules in effect at the time of construction. Control of fugitive dust is required by District Rule 403 and enforced by SMAQMD staff. FOWD shall implement, or require its contractors to implement, all of the following measures as identified by SMAQMD:

Basic Construction Emission Control Practices (Guide Updated July 2019)

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Mitigation Measure 2

Prior to initiation of construction on the project site, FOWD shall require that any construction or improvement plans contain a notation requiring that if any archaeological, cultural, historical resources, artifacts or other features are discovered during the course of construction anywhere on the project site, work shall be suspended in that location until a qualified professional archaeologist assesses the significance of the discovery and provides consultation with FOWD staff. Appropriate mitigation for curation or protection of the resources, as recommended by the archaeologist, shall be implemented upon approval by FOWD. Further grading or site work within the area of discovery shall not be allowed until the preceding steps have been taken.

In addition, pursuant to §5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of any 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.

Mitigation Measure 3

To reduce the effects of construction noise on affected residents, the FOWD shall implement the following measures:

f. Except for drilling and constructing the well, all work necessary to implement the project will be performed between the hours of 8 a.m. and 7 p.m. Monday through Friday

g. Temporary sound walls (minimum 20 feet high) will be installed around the work area to reduce noise impacts during drilling and construction operations.

h. All equipment will be equipped with appropriate muffler devices to reduce the noise impacts of the drilling operations.

i. The use of impact wrenches will be prohibited between the hours of 7 p.m. and 8 a.m.

j. The FOWD may provide alternate nighttime accommodations to adjacent residents if needed to mitigate noise impacts during drilling.

4. PREPARERS OF THE INITIAL STUDY / NEGATIVE DECLARATION

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