Addendum to the Santa Cruz Water Rights Project Final Environmental Impact Report

Intertie-1 Project

SCH NO. 2018102039

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
Air Basin	North Central Coast Air Basin
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
C-S	Service Commercial zone district and land use designation (City of Scotts Valley)
Cal/OSHA	California Division of Occupational Safety and Health
CALGreen	California Green Building Standards
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CEQA	California Environmental Quality Act
City	City of Santa Cruz
CMU	concrete masonry unit
CO	carbon monoxide
CWD	Central Water District
dBA	A-weighted decibels
DPM	diesel particulate matter
EIR	Environmental Impact Report
ESA	Endangered Species Act
FHSZ	fire hazard severity zone
GHG	greenhouse gas
GSP	Groundwater Sustainability Plan
HCP	habitat conservation plan
HMBP	Hazardous Material Business Plan
HP	horsepower
IPHCP	Interim Programmatic Habitat Conservation Plan (County of Santa Cruz)
ITP	incidental take permit
L_{eq}	equivalent noise level
LED	light-emitting diode
LRA	local responsibility area
MBARD	Monterey Bay Air Resources District
Mgd	million gallons per day
Mgy	million gallons per year
MMRP	mitigation monitoring and reporting program
MT CO_2e	metric tons of carbon dioxide equivalent
MRZ	Mineral Resource Zone
N/A	not applicable
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NO_2	nitrogen dioxide

Acronym/Abbreviation	Definition
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
O&M	operations and maintenance
OPR	Governor's Office of Planning and Research
OS	Open Space zone district and land use designation (City of Scotts Valley)
P	Public/Quasi Public zone district and land use designation (City of Scotts Valley)
PCE	passenger car equivalent
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	fine particulate matter
PM_{10}	coarse particulate matter
PPV	peak particle velocity
R-1	Single-Family Residential zone district (County of Santa Cruz)
R-R	Rural Residential land use designation (County of Santa Cruz)
R-UL	Urban Low Density Residential land use designation (County of Santa Cruz)
R-UVL	Urban Very Low Density Residential land use designation (County of Santa Cruz)
RA	Residential Agricultural zone district (County of Santa Cruz)
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SLF	Sacred Lands File
SLVWD	San Lorenzo Valley Water District
SMCRA	Surface Mining Control and Reclamation Act
SO_2	sulfur dioxide
SO_x	sulfur oxides
SqCWD	Soquel Creek Water District
SRA	state responsibility area
SU	Special Use zone district (County of Santa Cruz)
SVFD	Scotts Valley Fire District
SVWD	Scotts Valley Water District
TAC	toxic air contaminant
VFD	variable frequency drive
VMT	vehicle miles traveled

1 Introduction

1.1 Background

This document constitutes Addendum #1 to the Final Environmental Impact Report (EIR) for the Santa Cruz Water Rights Project (State Clearinghouse No. 2018102039), certified by the City of Santa Cruz (City) in December 2021. The Santa Cruz Water Rights Project EIR evaluated the potential environmental impacts of modifications to the City's existing water rights to allow more options for where and how those water rights can be used, and associated water supply augmentation components and surface water diversion improvements. The petitions to modify the City's water rights are pending approval by the State Water Resources Control Board (SWRCB). If approved, the City will then take steps to implement minimum instream bypass flows and associated infrastructure improvements that would allow for better use of limited water resources.

One of the water supply augmentation components analyzed in the Santa Cruz Water Rights Project EIR was the interconnection of the City's water system with that of the Scotts Valley Water District (SVWD) (Proposed Intertie-1 Project) to facilitate future water transfers and exchanges between the two agencies through a new intertie pipeline, which was evaluated at a programmatic level. This EIR Addendum has been prepared to address minor modifications to the proposed intertie pipeline design since certification of the Santa Cruz Water Rights Project EIR.

1.2 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) and regulations implementing CEQA, known as the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.), serve as the main framework of environmental law and policy in California. CEQA applies to most public agency discretionary actions that have the potential to adversely affect the environment. CEQA requires public agencies to inform decision makers and the public about the potential environmental impacts of proposed projects and to avoid or reduce those environmental impacts to the extent feasible. If significant adverse impacts cannot be avoided, reduced, or mitigated to below a level of significance, the public agency is required to prepare an EIR and balance the project's environmental concerns with other goals and benefits in a statement of overriding considerations.

Once an EIR or other CEQA document has been certified for a project, Sections 15162-15164 of the CEQA Guidelines define the standards for determining the appropriate level of subsequent environmental review and Section 15164 addresses the specific circumstances requiring the preparation of an addendum to an EIR. If new significant impacts or a substantial increase in the severity of previously identified impacts would result, then preparation and circulation of a subsequent or supplemental EIR for additional public review is required. However, when it can be determined that neither the proposed changes to the project, changed circumstances, or new information result in the identification of new significant impacts, or the substantial increase in the severity of significant impacts identified in the certified EIR, an addendum to the EIR may be prepared. Public review of an addendum is not required under CEQA. This Addendum will be included in or attached to the Santa Cruz Water Rights Project EIR and considered during the City's consideration of project approval.

Pursuant to Section 15164(a) of the CEQA Guidelines, the lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Under CEQA Guidelines Section 15162, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
  - The project will have one or more significant effects not discussed in the previous EIR;
  - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The City has determined that an Addendum to the certified Santa Cruz Water Rights Project EIR is the appropriate environmental documentation for the Proposed Intertie-1 Project. The certified Santa Cruz Water Rights Project EIR evaluated the construction of an intertie pipeline between the City and SVWD at a programmatic level. Since the certification of the EIR, an additional segment of pipeline is now proposed and more detailed design plans are available. Overall, the type, location, and nature of the intertie currently proposed is consistent with the overall City/SVWD intertie described in the Santa Cruz Water Rights Project EIR. Some changes have been made to the project design, including a new pipeline segment. However, changes in the project description would not warrant a subsequent CEQA document, such as an EIR or negative declaration (per Section 15162 of the CEQA Guidelines) as explained in this Addendum. In addition, there are no changes in the project circumstances, or any substantial new information, that would warrant preparation of such a subsequent CEQA document (per Section 15162 of the CEQA Guidelines). The environmental analysis in this Addendum examines whether the revisions to the description of the project would result in any new significant impacts that were not previously identified in the prior EIR or would result in any substantial increases in the severity of previously identified effects. The information contained within this Addendum is provided as a disclosure document, consistent with Section 15164 of the CEQA Guidelines and will provide a basis for the City to make an administrative determination that the prior EIR and environmental determinations fully address the Proposed Intertie-1 Project.

2 Project Description

This chapter provides a description of the Proposed Intertie-1 Project, and includes information about the project location and setting; background and previously evaluated project; project modifications including project components, construction, and operations and maintenance; and project approvals that would be required. The chapter is supported by the Basis of Design Technical Memorandum prepared by the City's consulting design engineer, as well as information from the Santa Cruz Water Rights Project EIR, which analyzed the Proposed Intertie-1 Project at a program level (Kennedy Jenks 2023; City of Santa Cruz 2021).

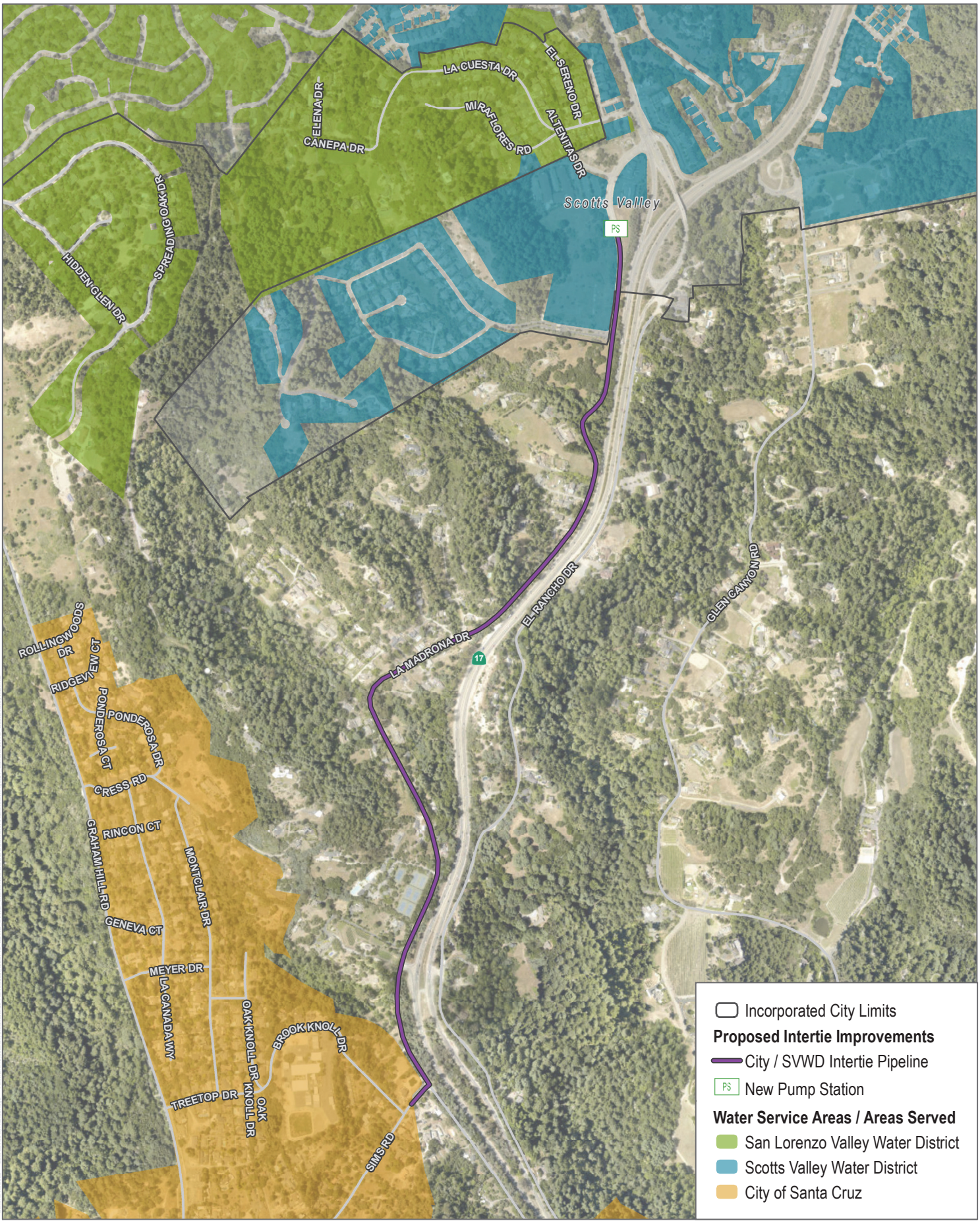
2.1 Project Location and Setting

The project site is a linear site extending south to north from the northern end of the City's water distribution system at the Pasatiempo (Kite Hill) water storage tanks, which are located along the northern end of Kite Hill Road near the terminus of Firehouse Lane, along Firehouse Lane, Sims Road, and La Madrona Drive in unincorporated Santa Cruz County, to the southern end of the SVWD's water distribution system along La Madrona Drive between Silverwood Drive and Altenitas Drive in the City of Scotts Valley. Firehouse Lane is a privately owned roadway and Sims Road and La Madrona Drive are public roadways owned and maintained by the County of Santa Cruz. The only exception is that the City of Scotts Valley owns and maintains approximately 300 to 400 linear feet of La Madrona Drive at the northern end of the proposed alignment. The proposed pump station site is a portion of an undeveloped parcel owned by the Scotts Valley Fire District (SVFD) at 6000 La Madrona Drive (Assessor's Parcel Number [APN] 021-141-20), consisting primarily of grass cover with shrubs and trees lining the site on the east. Highway 17 runs to the east of the pump station site, as well as the majority of the proposed pipeline alignment.

The proposed alignment is primarily located in a rural residential area within unincorporated Santa Cruz County, while the northern end enters a more developed commercial area of the City of Scotts Valley, as shown on Figure 1. Residential uses are located immediately adjacent to the proposed alignment along Firehouse Lane, Sims Road, and La Madrona Drive. Commercial uses in the City of Scotts Valley (e.g., business, restaurant, and hotel uses) are located adjacent to the proposed pump station site and staging area to the north and across La Madrona Drive to the northwest. The proposed alignment traverses lands designated Urban Very Low Density Residential (R-UVL), Urban Low Density Residential (R-UL), and Rural Residential (R-R) and zoned Residential Agricultural (RA), Special Use (SU), and Single-Family Residential (R-1) in unincorporated Santa Cruz County, before entering the City of Scotts Valley where it traverses lands designated and zoned Service Commercial (C-S) and Public/Quasi Public (P). The proposed pump station site is designated and zoned P, and is bordered by lands designated and zoned C-S to the north and across La Madrona Drive to the east, with lands designated and zoned Open Space (OS) located across La Madrona Drive to the northwest.

2.2 Proposed Intertie-1 Project

The Proposed Intertie-1 Project consists of a new intertie pipeline and associated pump station to connect the water distribution systems of the City and SVWD. The purpose of the Proposed Intertie-1 Project is to increase the emergency and drought resiliency of the City and SVWD by augmenting water supply, water storage, and fire flow capacities. The Proposed Intertie-1 Project was previously evaluated in the Santa Cruz Water Rights Project EIR (City of Santa Cruz 2021). Since then, modifications to the Proposed Intertie-1 Project have been made, and more detailed design information has been developed.



SOURCE: Bing Maps Accessed 2019, Kennedy/Jenks Consultants 2012 and 2014, URS 2013, County of Santa Cruz 2020

FIGURE 1

Previously Evaluated City of Santa Cruz and Scotts Valley Water District Intertie

Intertie-1 Project

DUDEK

0 500 1,000 Feet

2.2.1 Previously Evaluated Project

This section provides information about the Proposed Intertie-1 Project that was evaluated in the certified Santa Cruz Water Rights Project EIR. The information in this section is from the Santa Cruz Water Rights Project EIR, Section 3.4.3.2, Water Transfers and Exchanges and Intertie Improvements, pages 3-52 to 3-54.

The City's Water Supply Augmentation Strategy[1] includes passive recharge of regional aquifers by transferring treated drinking water to other water districts in the area so they can rest their groundwater wells, help the aquifers recover, and potentially store water for return to and use by the City in dry periods, as described in the Santa Cruz Water Rights Project EIR Chapter 3, Project Description. Modification of the City's appropriative water rights as proposed by the Santa Cruz Water Rights Project would facilitate the opportunity for potential future water transfers and exchanges with neighboring water agencies, including the SVWD, San Lorenzo Valley Water District (SLVWD), Soquel Creek Water District (SqCWD), and Central Water District (CWD). Such transfers and exchanges would likely be provided for via agreements with defined terms related to purpose, timing, volume of water, water-year conditions, return of water, etc., that would be developed between the City and each water district. The total volume of water for transfers and exchanges considered in the Santa Cruz Water Rights Project EIR included up to approximately 440 million gallons per year (mgy) (2.4 million gallons per day [mgd] from November 1 to April 30), with some volume of water potentially returned to the City during dry conditions. The amount of water that may be returned through exchanges was unknown at the time. When water is available and conditions of future agreements are met, these transfers would include up to approximately 163 mgy (0.9 mgd from November 1–April 30) of water that could be transferred by the City to the SVWD and/or SLVWD via the intertie facility described herein. Additionally, transfers with the SqCWD and CWD would include a range of water volumes of approximately 98 mgy to 277 mgy (0.5 to 1.5 mgd from November 1–April 30) transferred by the City to SqCWD and/or CWD via other proposed intertie facilities. Water transfers and exchanges would also include implementation of standard operational and construction practices described in the Santa Cruz Water Rights Project EIR and identified in Appendix A of this addendum, and listed below in Section 2.2.2.4, Applicable Mitigation Measures and Standard Practices.

The Proposed Intertie-1 Project evaluated in the Santa Cruz Water Rights Project EIR, referred to therein as the City/SVWD intertie, included interconnection of the City's water supply system to the SVWD's system through installation of approximately 8,000 linear feet of new 12-inch-diameter intertie piping from Sims Road in the south, along La Madrona Drive to the north to the City of Scotts Valley where a new pump station would be constructed (see Figure 1). A generalized location for the pump station was provided, but the precise location, facility footprint, and equipment characteristics and sizing were not known at the time. Given typical pump stations in Santa Cruz County, this pump station was expected to be a single-story building with an outdoor paved area surrounded by security fencing and low-wattage, shielded outdoor security lighting directed onto the site.

Once constructed, the City could deliver water to the SLVWD through the City/SVWD intertie, and the SVWD could then convey the water to the SLVWD through the SVWD's existing interconnection with the SLVWD. Interconnection of the SVWD and the SLVWD systems (referred to as Intertie2 or IT2) was constructed in 2016 and permitted for

[1] The Water Supply Advisory Committee (WSAC) was formed in 2014, and developed the Water Supply Augmentation Strategy to address a worst-case water shortage of 1.2 billion gallons per year during modeled worst-year conditions. The Water Supply Augmentation Strategy included four elements: Element 0 (additional water conservation), Element 1 (passive recharge of regional aquifers), Element 2 (active recharge of regional aquifers), and Element 3 (a potable water supply using advanced-treated recycled water). Element 1 specifically identifies passive recharge of regional aquifers by working to develop agreements for delivering surface water to the SqCWD and/or the SVWD so they can rest their groundwater wells, help the aquifers recover, and potentially store water for use by the City in dry periods. While WSAC recommendations considered only delivering surface water to SqCWD and SVWD, current conceptual-level planning considers delivering surface water to SLVWD and CWD as well.

emergency use as part of the Scotts Valley Multi-Agency Regional Intertie Project. Additional approvals would be required to use the existing intertie between the SVWD and the SLVWD systems for non-emergency use.

2.2.2 Modified Project

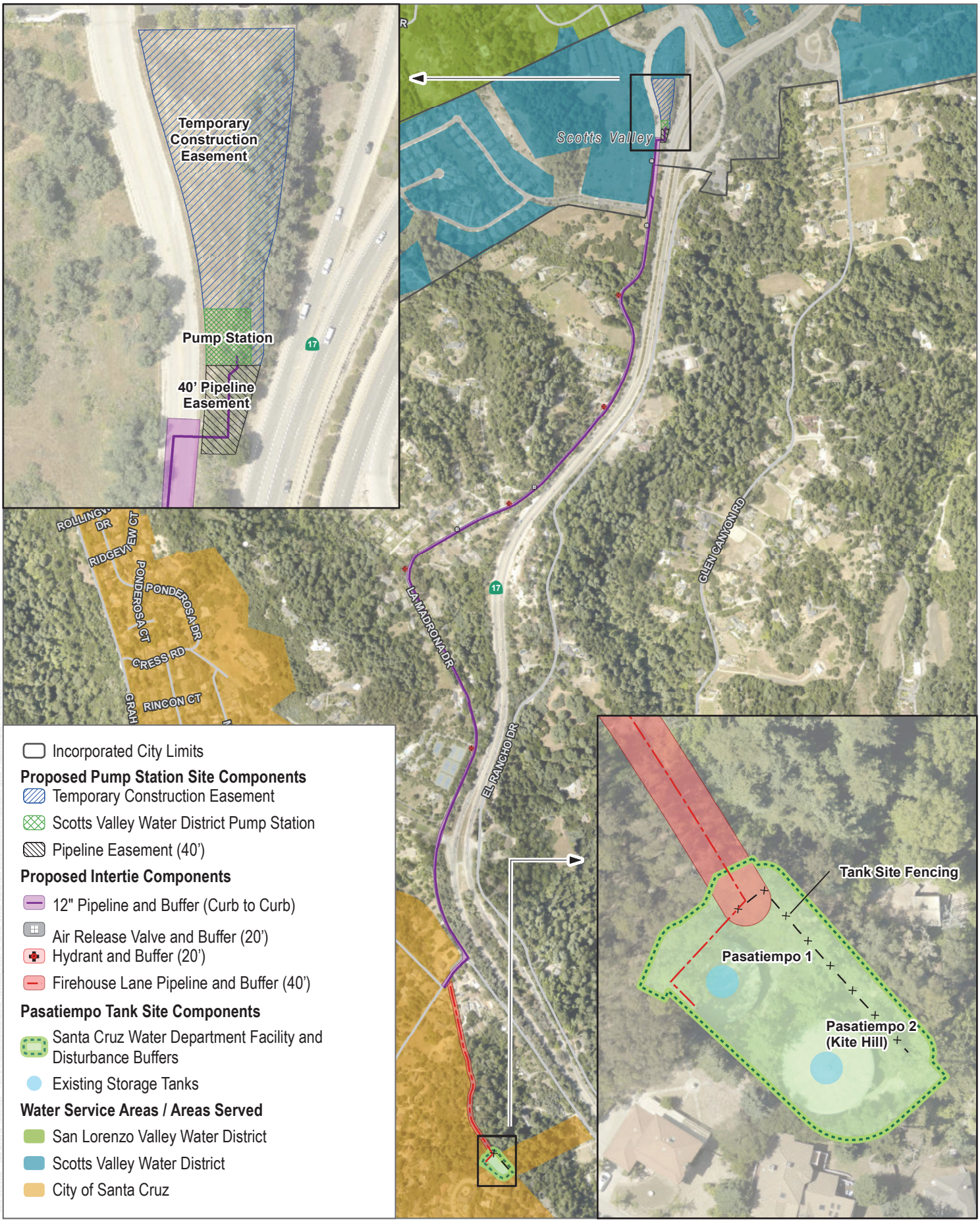
2.2.2.1 Overview of Project Components

Proposed Improvements

Since the evaluation of the Proposed Intertie-1 Project in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project is now being pursued, planned, and designed, with some modifications from the previously evaluated project. The proposed pipeline alignment is the same as that contemplated by the EIR, with the exception that an additional 1,600-linear-foot segment is now proposed and being designed for the reach of pipeline along Firehouse Lane. The additional segment extends from the original southern terminus of the pipeline on Sims Road to a new connection to the City's Pasatiempo water tanks. The current project design provides the designated site location for the pump station, which is in the same general location that was analyzed in the Santa Cruz Water Rights Project EIR, as well as additional operational details including occasional use of a portable backup generator. Lastly, the project modifications include specific information about the construction process, such as identifying areas for construction staging, changing the construction start date from the year 2027 to 2024, and extending the construction period from approximately 6 months (as anticipated in the Santa Cruz Water Rights Project EIR) to approximately 16 months. Details of the Proposed Intertie-1 Project and modifications are described below.

The Proposed Intertie-1 Project, as modified, is 20% longer than the previously evaluated project, consisting of approximately 9,600 linear feet of 12-inch-diameter bi-directional intertie pipeline and a pump station between the City and SVWD distribution systems. The intertie pipeline would facilitate transfers of water supply from the City to the SVWD during wet seasons, and from SVWD to the City during dry seasons or drought years. The pipeline would run from the City's Pasatiempo tanks at the southern extent of the project area along Firehouse Lane to Sims Road, and then north along La Madrona Drive to the City of Scotts Valley where the new pump station would be constructed in a similar, but more specific location. The Proposed Intertie-1 Project would also include installation of appurtenances that are required for pipeline operation, monitoring, and maintenance, including line valves, air release valves, isolation valves, sample stations, and hydrants. Figure 2 shows the modified alignment, pipeline appurtenances, pump station location, and worst-case disturbance buffers.

While the precise pump station location, facility footprint, and equipment characteristics and sizing were not known at the time the Santa Cruz Water Rights Project EIR was prepared, more project-specific information is now available. The proposed pump station would be located on a portion of an undeveloped parcel containing grass and shrubs. This pump station sizing would support an initial maximum operational capacity of 1.0 mgd, slightly larger than the 0.9 mgd capacity evaluated for the City/SVWD intertie in the Santa Cruz Water Rights Project EIR. In the future, the City may consider increasing the capacity of the pump station. As such, some mechanical and electrical elements of the pump station would be upsized as part of the Proposed Intertie-1 Project to accommodate future upgrades to increase operational capacity. Project elements that would need upgrades in the future to accommodate increased capacity include the pump motors, pump header piping, electrical service, and variable frequency drive (VFD) size. The Santa Cruz Water Rights Project EIR contemplated a total of up to 2.4 mgd of water transfers and exchanges.



SOURCE: Bing Maps Accessed 2019, Kennedy/Jenks Consultants 2012 and 2014, URS 2013, County of Santa Cruz 2020

DUDEK

0 500 1,000 Feet

FIGURE 2

Proposed Intertie-1 and Pump Station

Intertie-1 Project

The pump station would consist of a single-story, approximately 800-square-foot building that would contain three 40-horsepower pumps and their associated VFDs and related electrical equipment and piping. The building would have a ventilation system with integrated sound-attenuation characteristics to maintain the indoor temperature well below the maximum operating temperature of the VFDs (100 degrees Fahrenheit) and reduce noise produced by the pump station equipment. The ventilation system would consist of an exhaust fan with a capacity of 5,000 cubic feet per minute that would draw fresh air into the pump station building through acoustic louvers installed on the north face of the building and discharge exhaust air from the front (south face) of the pump station building. Exterior lighting at the pump station site would consist of a single building-mounted light-emitting diode (LED) lighting fixture on the south face of the building controlled by a photocell, and motion-sensor lighting on the other sides of the building. An asphalt concrete parking area would be constructed around the pump station building and used to temporarily park vehicles off of La Madrona Drive for pump station operation and maintenance. This area would also accommodate a portable generator during extended power outages. Development of the pump station building and associated improvements would result in a maximum of 2,500 square feet of total impervious surface area on the site.

The connection between the City and SVWD distribution systems would be provided via pumped flow from the City to the SVWD, and gravity flow from the SVWD to the City.[2] The pump station would be connected to the SVWD's existing supervisory control and data acquisition (SCADA) system to enable remote control of the pump station. Pump station instrumentation and controls would include a bi-directional flow meter, pressure transmitters, manual gate valves equipped with full-open and full-closed limit switches, and a bypass line flow control valve to control gravity flow from the SVWD to the City. The pumps would be used to provide water to the SVWD distribution system and the SVWD's Sequoia tank with City water. When SVWD is providing water to the City, the pump station bypass line would operate while the pumps are off, and the SVWD's Sequoia tank would primarily fill the City's Pasatiempo tanks. An 8-inch-diameter polyvinyl chloride (PVC) connection to the sanitary sewer in La Madrona Drive would be installed for purposes of flushing sample test water or pipeline potable water during startup and shutdown of the pump station.

Pacific Gas and Electric Company (PG&E) electrical service for the pump station would be provided by installation of a new utility pole near the pump station or by installation of approximately 500 feet of new underground conduit and cable along La Madrona Drive. The pump station would include provisions for connection of a portable backup power generator to provide system operation during power outages—a new feature of the pump station not previously evaluated. The standby power circuit breaker would be connected to a 600-amp rated generator receptacle mounted to the exterior of the pump station building. In the event of a power outage during a period when the pump station is needed, SVWD staff would typically bring a portable generator to the pump station and connect the portable generator to the generator receptacle. Once PG&E power is restored, staff would de-energize the portable generator and disconnect the generator from the generator receptacle.

Operational Agreement

The terms and conditions for operations of the intertie would be established in a pending operational agreement for water transfers between the City and SVWD as part of the Proposed Intertie-1 Project. Operational agreement terms would include uses for emergency and non-emergency use between the City and SVWD. The operational agreement is expected to include specifications for the duration of the agreement; facilities ownership, standard operating procedures, and responsibilities for maintenance; compliance responsibilities including grant terms, permitting, and

[2] The City or SVWD are not currently seeking the additional permitting required to allow the City to regularly deliver water to the SLVWD via the existing interconnection of the SVWD and the SLVWD systems that is currently permitted for emergency use only.

water quality standards for deliveries of treated water; procedures pertaining to water deliveries including approval, conditions for exchanging water, the basis for costs of water, and implementation of an operations plan; and terms for amending the agreement. The provisions of the operational agreement would be consistent with the sustainable management criteria and avoid any undesirable results identified in the adopted Groundwater Sustainability Plan (GSP) for the Santa Margarita Groundwater Basin, and in any future revisions to the GSP.

Permanent and Temporary Property Acquisition

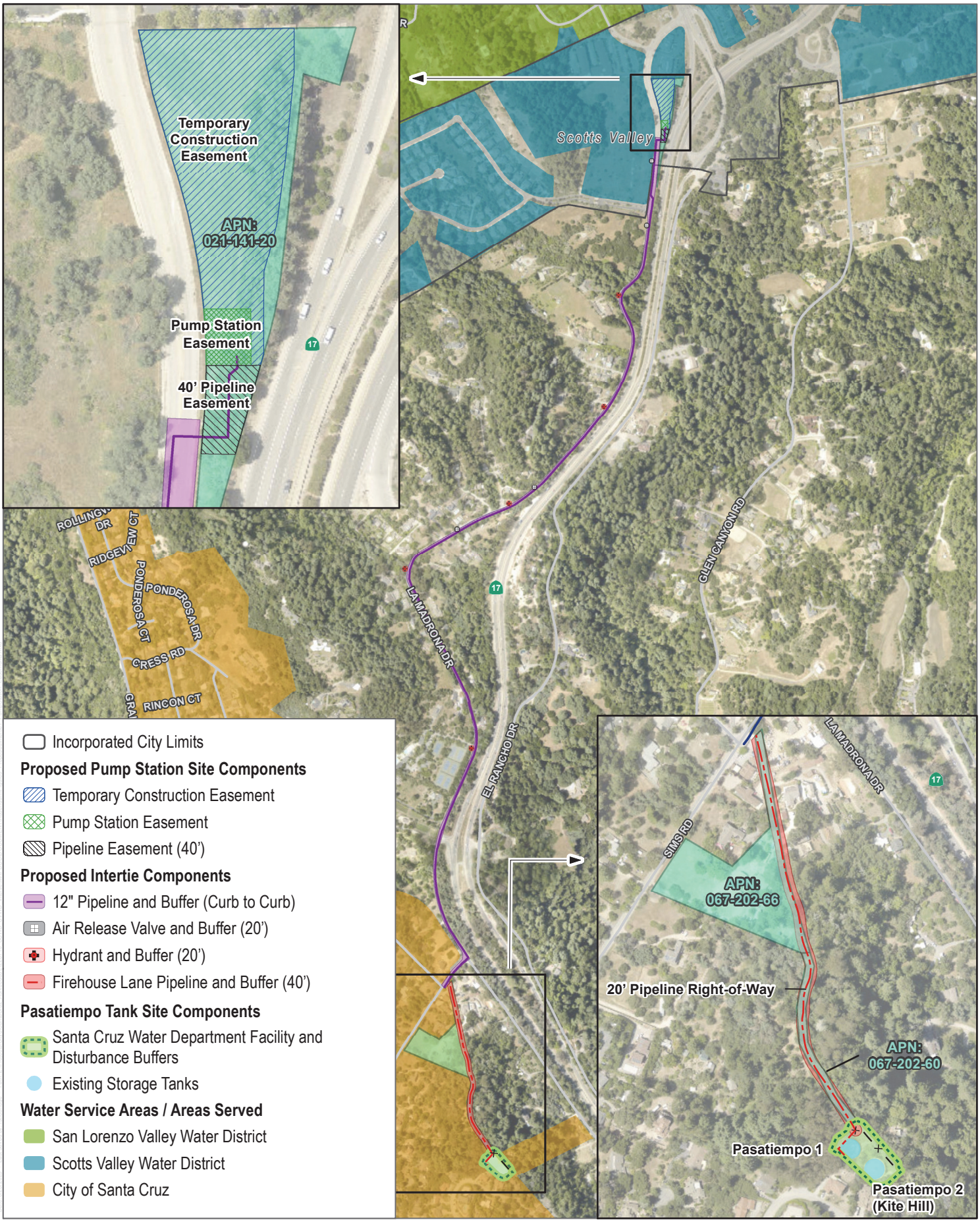
The Proposed Intertie-1 Project includes the purchase and/or acquisition of various easements and/or parcels to accommodate project facilities and construction as shown on Figure 3. On Firehouse Lane, the City would acquire a 20-foot-wide permanent easement on the parcel along the northern portion (APN 067-202-66), and the City would purchase or otherwise acquire the parcel that comprises the southern portion of Firehouse Lane (APN 067-202-60). On the SVFD property at 6000 La Madrona Drive (APN 021-141-20), the SVWD would acquire an approximately 30,800-square-foot temporary easement for construction staging and 11,000-square-foot permanent easement for the pump station and affiliated appurtenances.

2.2.2.2 Construction

The anticipated duration of project construction is 16 months, spanning from approximately March 2024 to July 2025. Construction activities would typically occur between 8:00 a.m. and 5:00 p.m. on weekdays. No construction-related activities would occur on weekends, holidays, or at night unless required by emergency conditions or another permitting authority, and with prior City Water Department Director approval.

Construction of the intertie pipeline would occur along the existing public rights-of-way of Sims Road and La Madrona Drive, privately owned Firehouse Lane, and at the City-owned Pasatiempo tank site. Construction would include excavation of an approximately 3-foot-wide trench, primarily limited to one of the two lanes of both La Madrona Drive and Sims Road, and along the single lane of Firehouse Lane. Construction would encumber the 12-foot road width of Firehouse Lane for up to one week, during which time, access to the residences on Firehouse Lane would be maintained by requiring the contractor to be ready at all times to plate the road for access. Traffic control would comply with the requirements of the California Department of Transportation (Caltrans), County of Santa Cruz, and City of Scotts Valley in their respective jurisdictions. Maximum excavation depth, including for pump station construction, would be 15 feet.

Construction methods for the pipeline would consist of open-cut trenching, which would progress with utility clearance/mark-out activities, vegetation clearing in undeveloped areas, sawcutting and removing existing asphalt concrete in paved areas, excavation, placement of bedding materials as required, placement of new sections of piping (typically 20-foot to 60-foot sections), backfilling and compaction of the trench, installation of temporary traffic plates over the backfilled trench, and restoration of the disturbed area. Pipeline construction would require a width of 10 feet on either side of the pipeline to accommodate construction equipment. Construction would necessitate the removal of existing underbrush and tree limbs and trunks that overhang or encroach in the alignment that may interfere with construction equipment. Removal of and/or impacts to approximately 25 mature trees would be required. Construction along the currently undeveloped portions of the alignment may require limited areas of temporary regrading to provide ground surfaces suitable for construction. Construction along developed portions of the alignment may require pruning of existing trees overhanging the alignment and removal of underbrush in limited areas where pipeline appurtenances (e.g., hydrants, air relief valves) will be installed. Once construction of the pipeline is complete, all surfaces would be restored to be similar to existing conditions prior to construction, with implementation of erosion-control improvements that may improve conditions compared to existing conditions.



SOURCE: Bing Maps Accessed 2019, Kennedy/Jenks Consultants 2012 and 2014, URS 2013, County of Santa Cruz 2020

DUDEK

0 500 1,000 Feet

FIGURE 3

Permanent and Temporary Easements

Intertie-1 Project

The pump station site is on a gently sloping, undeveloped portion of the SVFD property. Most of the site is covered by annual grasses but the eastern side is covered by shrubs consisting of native coyote bush (*Baccharis pilularis*) and non-native Scotch broom (*Cytisus scoparius*). The site would be regraded to provide a level area for the pump station and surrounding parking area and removal of some of the existing shrubs. Once construction of the pump station is complete, all grassy areas would be hydroseeded and restored to be similar to existing conditions prior to construction, with implementation of erosion-control improvements to accommodate runoff from the pump station.

Construction staging areas would be located immediately north of the proposed pump station location on the same SVFD property within the temporary construction easement, and if needed, at the City's Pasatiempo tank site property. Both areas would require the temporary placement of aggregate base material to provide stable working surfaces during construction. At the end of construction, the aggregate base material would be removed and ground surfaces restored to be similar to existing conditions prior to construction. If the construction contractor determines that an alternative staging area not identified at this time would need to be used for project construction, the City would require that the location is already paved with a modern hard surface or previously cleared such that there would be no potential to impact the underlying soil.

Construction would temporarily impact localized traffic flows and would require traffic control plans and encroachment permits. The City would need to obtain encroachment permits from the County of Santa Cruz for work on Sims Road and La Madrona Drive, the City of Scotts Valley for work on the portion of La Madrona Drive in its jurisdiction, and Caltrans for installation of temporary construction signage on southbound Highway 17 advising drivers of potentially slowed or stopped traffic at the Sims Road exit. Project construction would not alter roadway alignments and roadways would be restored to pre-existing conditions after completion of construction activities. Approximately 125,000 square feet of roadway may be repaved along the entirety of the alignment in accordance with County of Santa Cruz requirements.

2.2.2.3 Operations and Maintenance

Continued ongoing operations and maintenance (O&M) of both the new pipeline and new pump station would be required, as well as the City's existing Pasatiempo tanks and the SVWD's existing Sequoia tank. Generally, routine system operation would be performed at the pump station, which may include approximately one trip per day to the pump station by existing SVWD staff when the station is in operation. Typical operations would not involve ground disturbance. Maintenance may include occasional flushing[3] of the system at the pump station and pipeline blowoffs, system inspection, repairing pipeline integrity issues, mechanical and electrical systems inspections at the pump station, periodic inspections and maintenance of air relief valves with access provided to the pipeline sections by existing roads and easements, and vegetation management along rights-of-way. Flushing the system reduces the risk of water becoming stagnant in the pipeline. Pumping efficiencies are improved when operation of the pumps is rotated so that each of the three pumps is used periodically. The frequency of O&M activities would depend largely on the water quality and to maintain desirable pumping efficiencies. Operational access to the new pipeline would occur within the public rights-of-way, along the permanent pipeline easement, along City property, and from existing access points. Vegetation management along pipeline rights-of-way would consist of mowing grass, if needed, and the removal of woody vegetation that may conflict with the pipeline integrity and access. The Proposed Intertie-1 Project would not require new City or SVWD employees.

[3] Pipeline flushing is the process of cleaning out the system by the force of flushing water at high velocity through pipelines. Flushed water would be released into storm drains via hydrants or the sanitary sewer system via the connection in La Madrona Drive.

2.2.2.4 Applicable Mitigation Measures and Standard Practices

The adopted mitigation monitoring and reporting program (MMRP) for the Santa Cruz Water Rights Project, prepared pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations, Chapter 3, Sections 15074 and 15097), applies to the Proposed Intertie-1 Project and is included as Appendix A to this Addendum. This MMRP is intended to be used by City staff, its contractors and consultants, and mitigation monitoring personnel to ensure compliance with mitigation measures and standard operational and construction practices that apply to the Proposed Intertie-1 Project. Mitigation measures include pre-construction surveys and construction habitat protections and compensation for habitat loss where appropriate, cultural and tribal cultural resource protections, paleontological resource protections, pump station drainage improvements, and construction noise and vibration measures. Standard operational and construction practices include appropriate operational constraints for water transfers, and construction practices to provide for erosion and dust emissions control, water quality and habitat protection, site restoration, inadvertent discovery of cultural resources, construction noise notifications, and fire safety measures. Applicable mitigation measures and standard operational and construction practices are listed as follows.

Mitigation Measures

MM BIO-1: Project Siting (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). The City shall locate construction activities, including staging, on and adjacent to current development to the maximum extent feasible. All worker parking, equipment storage, and laydown areas should occur within developed areas and maintained rights-of-way, to the extent possible. Dirt or gravel pull-offs to the side of existing roads shall not be used except for temporary staging areas. To minimize temporary disturbances, the City shall restrict all vehicle traffic to established roads, construction areas, and other designated area.

If ground disturbing activities associated with staging and work areas will occur outside existing developed areas and maintained rights-of-way, avoidance and minimization of impacts to special-status species and their habitats, sensitive vegetation communities, and jurisdictional aquatic resources shall be prioritized during the site selection process. Other Proposed Project mitigation measures will provide for compensatory mitigation to address potentially significant impacts to special-status species and their habitats (MM BIO-4 through MM-BIO-10), sensitive vegetation communities (MM BIO-11), and jurisdictional aquatic resources (MM BIO-12 through MM BIO-14).

MM BIO-4: Preconstruction Nesting Bird Survey (Applies to New Aquifer Storage and Recovery [ASR] Facilities and Beltz ASR Facilities, Intertie Improvements, Felton Diversion Improvements, and Tait Diversion and Coast Pump Station Improvements). During the nesting season (February 1 – August 31), no more than two weeks prior to any ground disturbing activities, including removal of vegetation and clearing and grubbing activities, a nesting bird survey shall be completed by a qualified biologist to determine if any native birds are nesting in or adjacent to the study area (including within a 50-foot buffer for passerine species and a 250-foot buffer for raptors). If any active nests of native birds are observed during surveys, an avoidance buffer around the nests shall be established in the field to ensure compliance with California Fish and Game Code Section 3503. The avoidance buffer shall be determined by a qualified biologist in coordination with City staff, based on species, location, and extent and type of planned construction activity. Impacts to active nests shall be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist.

MM BIO-5: Preconstruction Wildlife Surveys (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). A qualified biologist shall conduct preconstruction surveys of all ground disturbance areas within off-pavement project footprint areas to determine if special-status wildlife species are present prior to the start of construction. The biologist will conduct these surveys no more than two weeks prior to the beginning of construction.

MM BIO-6: Exclusionary Fencing (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). High-visibility fencing for Environmentally Sensitive Areas shall be installed around all adjacent special-status species identified during the preconstruction surveys, which shall be retained and not disturbed by the Project, to preclude encroachment within the root-zone of these plants by construction crews or vehicles. A biological monitor shall also accompany the work crew during excavation and installation of exclusion fencing to prevent harm to species that may be active present and moving along the fence route. Buffers that are established around active bird nests and special-status species (including potentially active woodrat nests) to be avoided shall be delineated with flagging. Buffers and fencing for nesting birds shall be maintained until the biological monitor verifies that the birds have fledged. All other fencing shall be maintained in good repair throughout the entire construction period.

MM BIO-7: Biological Construction Monitoring (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). A qualified biologist shall monitor vegetation removal and ground disturbing activities during all work hours for off-pavement work or once a week for all other construction activities. The monitor shall check the exclusion fencing and buffers for active nesting birds once a week, and shall verify when birds have fledged if found present before construction. The biologist shall have stop-work authority in the event that a protected species is found within the active construction footprint. During construction, the biological monitor shall keep a daily observation log and a photo log to describe monitoring activities, remedial actions, non-compliance, and other issues and actions taken. These logs shall be kept on-site and made available for inspection by agency personnel.

MM BIO-8: Species Relocation (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). If special-status wildlife species are observed within the construction area prior to or during construction activities, the biologist shall capture and relocate such individuals out of the area affected by construction activities to nearby habitat that has equivalent value to support the species. The biologist shall identify suitable habitats as potential release sites prior to start of construction activities. If the special-status species is a federally- or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval.

MM BIO-9: Entrapment Avoidance (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). The construction contractor shall cover all construction-related holes in the ground overnight to prevent entrapment of any native wildlife species. The monitoring biologist shall inspect all construction pipes, culverts, or similar structures that are stored at the work area for one or more nights before the pipe is used or moved. If wildlife species are present, they shall be allowed to exit on their own or a qualified

biologist shall move them out of the construction area to nearby habitat that has equivalent value to support the species. If special-status species are present and are federally or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval.

MM BIO-10: Preconstruction Special-Status Plant Surveys and Compensation (Applies to New Aquifer Storage and Recovery Facilities and Intertie Improvements). If ground-disturbing activities associated with staging and work areas occur outside existing developed areas and maintained rights-of-way, a qualified biologist shall conduct a focused botanical survey for special-status plants during the appropriate bloom period for each species. If special-status species are not detected, no further surveys or mitigation would be necessary. If any individuals or populations are detected, the location(s) shall be mapped, and a plan focused on compensating for impacts to special-status plants shall be developed and include the following elements and criteria. This plan shall be a component of the project's Habitat Mitigation and Monitoring Plan described in MM BIO-11:

a. A description of any areas of habitat occupied by special-status plants to be preserved and/or removed by the project;
b. Identification and evaluation of the suitability of on-site or off-site areas for preservation, restoration, enhancement or translocation;
c. Analysis of species-specific requirements and considerations and specific criteria for success relative to the project's impact on this species and restoration, enhancement or translocation;
d. A description of proposed methods of preservation, restoration, enhancement, and/or translocation;
e. A description of specific performance standards, including a required replacement ratio and minimum success standard of 1:1 for impacted individuals or populations;
f. A monitoring and reporting program to ensure mitigation success; and
g. A description of adaptive management and associated remedial measures to be implemented in the event that performance standards are not achieved.

MM BIO-11: Sensitive Vegetation Communities Compensation (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements). Direct impacts to sensitive vegetation communities shall be mitigated via a combination of on-site and off-site measures. On-site measures shall include rehabilitation for areas temporarily impacted at a 1:1 mitigation ratio, and enhancement for areas permanently impacted at a 2:1 mitigation ratio. Areas temporarily impacted shall be returned to conditions similar to those that existed prior to grading and/or ground-disturbing activities. It is anticipated that a one-time restoration effort at the completion of the project followed by monitoring and invasive weed removal for a minimum of 3 years would adequately compensate for the direct temporary impacts to these vegetation communities. Areas permanently impacted shall be mitigated through on-site enhancement activities including removal of non-native and invasive species for a minimum of 3 years. If additional area is needed to compensate for permanent impacts at a 2:1 ratio, then an off-site location will be identified and evaluated. A Habitat Mitigation and Monitoring Plan shall be prepared and implemented to compensate for the loss of all sensitive vegetation communities (see below).

Rehabilitation and enhancement activities with Zayante soils, such as along the City/Scotts Valley Water District intertie, will be revegetated with plants native to the Zayante Sandhills, such as sticky monkeyflower (*Mimulus aurantiacus*), deer weed (*Lotus scoparius*), and silver bush lupine (*Lupinus albifrons* var. *albifrons*). These native plants will provide suitable habitat conditions for special-status species that might eventually colonize the temporarily impacted portion of the impact area. These revegetated areas will not include any landscape elements that degrade habitat for the special-status species, including mulch, bark, weed matting, rock, aggregate, or turf grass.

The Habitat Mitigation and Monitoring Plan shall detail the habitat restoration activities and shall specify the criteria and standards by which the revegetation and restoration actions will compensate for impacts of the Proposed Project on sensitive vegetation communities and shall at a minimum include discussion of the following:

a. The rehabilitation and enhancement objectives, type, and amount of revegetation to be implemented taking into account enhanced areas where non-native invasive vegetation is removed and replanting specifications that take into natural regeneration of native species when applicable.
b. The specific methods to be employed for revegetation.
c. Success criteria and monitoring requirements to ensure vegetation community restoration success.
d. Remedial measures to be implemented in the event that performance standards are not achieved.

MM CUL-2: Historic or Unique Archaeological Resources. Unique Archaeological Resources, Historical Resources of Archaeological Nature, and Subsurface Tribal Cultural Resources. Potentially significant impacts to unique archaeological resources, historical resources of an archaeological nature, or subsurface tribal cultural resources on the infrastructure component sites shall be addressed through the following measures:

a. **Identify Potential Unique Archaeological Resources, Historical Resources of Archaeological Nature, and Subsurface Tribal Cultural Resources (Applies to New Aquifer Storage and Recovery [ASR] Facilities and Other Components where Five Years Have Elapsed).** When new ASR facilities sites are identified and those components are being pursued by the City of Santa Cruz (City), a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, shall conduct a California Historical Resources Information System (CHRIS) records search, a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search and perform an intensive surface reconnaissance within a specifically defined Area of Direct Impact (ADI). Based on the above, all archaeological sites within or near the component site or area of potential effect shall be identified. The sensitivity of the site for discovering unknown resources, shall also be identified. The qualified archaeologist will prepare a technical report with the results of the above. The qualified archaeologist shall attempt to ascertain whether the archaeological sites qualify as unique archaeological resources, historical resources of an archaeological nature, or subsurface tribal cultural resources. If known or identified resources of these kinds are present on the site, measure c shall be implemented.

   This measure shall also be implemented for any other project or programmatic components that are implemented more than five years after the CHRIS records search and NAHC SLF search were conducted.

b. **Standard Sensitivity Training and Inadvertent Discovery Clauses (Applies to all Components).** The City or other lead agency shall include a standard clause in every construction contract for the Proposed Project, which requires cultural resource sensitivity training for workers prior to conducting earth disturbance in the vicinity of a documented cultural-resource-sensitive area, should one be identified in the future. Prior to site mobilization or construction activities on the project site, a qualified archaeologist with training and experience in California prehistory and historical period archaeology shall conduct the cultural resources awareness training for all project construction personnel. The training shall address the identification of buried cultural deposits, including Native American and historical period archaeological deposits and potential tribal cultural resources, and cover identification of typical prehistoric archaeological site components including midden soil, lithic debris, and dietary remains as well as typical historical period remains such as glass and ceramics. The training must also explain procedures for stopping work if suspected resources are encountered. Any personnel joining the work crew subsequent to the training shall also receive the same training before beginning work.

   Consistent with Standard Construction Practice #24, standard inadvertent discovery clauses shall also be included in every construction contract for the Proposed Project by the City or other lead agency, which requires that in the event that an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease until a qualified archaeologist can evaluate the find and make a recommendation for how to proceed, as specified in measure c.

c. **Evaluate Potential Unique Archaeological Resources, Historical Resources of Archaeological Nature, and Subsurface Tribal Cultural Resources (Applies to all Components).** For an archaeological resource that is discovered during initial site review (measure a) or during construction (measure b), the City or other lead agency shall:

   - Retain a qualified archaeologist to determine whether the resource has potential to qualify as either a unique archaeological resource, a historical resource of an archaeological nature, or a subsurface tribal cultural resource under Public Resources Code section 21074, California Environmental Quality Act (CEQA) Guidelines Section 15064.5, or Section 106 of the National Historic Preservation Act.
   - If the resource has potential to be a unique archaeological resource, a historical resource of an archaeological nature, or a subsurface tribal cultural resource, the qualified archaeologist, in consultation with the lead agency, shall prepare a research design and archaeological evaluation plan to assess whether the resource should be considered significant under CEQA criteria.
   - If the resource is determined significant, the lead agency shall provide for preservation in place, if feasible. If preservation in place is not feasible, the qualified archaeologist, in consultation with the lead agency, will prepare a data recovery plan for retrieving data relevant to the site's significance. The data recovery plan shall be implemented prior to, or during site development (with a 100-foot buffer around the resource). The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the Northwest Information Center, and provide for the permanent curation of recovered materials. The written report will provide new recommendations, which could include, but would not be limited to, archaeological and Native American monitoring for the remaining duration of project construction.

MM GEO-2: Paleontological Resources Impact Mitigation Program and Paleontological Monitoring. Potentially significant impacts to paleontological resources on the project and programmatic infrastructure component sites shall be addressed through the following measures:

a. **Identify Potential Paleontological Resources (Applies to New Aquifer Storage and Recovery [ASR] Facilities).** When new ASR facilities sites are identified and those components are being pursued by the City or other lead agency, a qualified a qualified paleontologist pursuant to the Society of Vertebrate Paleontology (SVP) 2010 guidelines, shall conduct a paleontological records search from the Natural History Museum of Los Angeles County (LACM) and conduct a desktop geological and paleontological research. Based on the above, all paleontological sites within or near the programmatic component site shall be identified. The sensitivity of the site for discovering unknown paleontological resources, shall also be identified. The qualified paleontologist will prepare a brief technical report with the results of the above. If known or identified resources are present on the site, or if the site has moderate to high sensitivity for paleontological resources, measures b and c shall be implemented.

b. **Develop Paleontological Resources Impact Mitigation Program (Applies to all Known Infrastructure Components and May Apply to New ASR Facilities).** Prior to commencement of any grading activity on infrastructure component sites with moderate to high paleontological sensitivity or that may have such sensitivity at depth, the City or other lead agency shall retain a qualified paleontologist pursuant to the SVP (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Proposed Project. The PRIMP can be written to include all infrastructure components located in sites with moderate to high paleontological sensitivity. The PRIMP shall be consistent with the SVP (2010) guidelines and shall, at a minimum, contain the following elements:

   - Introduction to the project, including project location, description of grading activities with the potential to impact paleontological resources, and underlying geologic units.
   - Description of the relevant laws, ordinances, regulations, and standards pertinent to the project and potential paleontological resources.
   - Requirements for preconstruction meeting attendance by the qualified paleontologist and/or their designee and worker environmental awareness training for grading contractors that outlines laws protecting paleontological resources and the types of resources that may be encountered on site.
   - Identification of locations where full-time paleontological monitoring within geological units with high paleontological sensitivity is required within the project or programmatic sites based on construction plans and/or geotechnical reports.
   - Requirements and frequency of paleontological monitoring spot-checks below a depth of five feet below the ground surface in areas underlain by Holocene sedimentary deposits.
   - The types of paleontological field equipment the paleontological monitor shall have on-hand during monitoring.
   - Discoveries treatment protocols and paleontological methods (including sediment sampling for microinvertebrate and microvertebrate fossils).
   - Requirements for adequate reporting and collections management, including daily logs, monthly reports, and a final paleontological monitoring report that details the monitoring

program and includes analyses of recovered fossils and their significance and the stratigraphy exposed during construction.

- Requirements for collection and complete documentation of fossils identified within the project site prior to construction and during construction, including procedures for temporarily halting construction within a 50-foot radius of the find while documentation and salvage occurs and allowing construction to resume once collection and documentation of the find is completed. Prepared fossils along with copies of all pertinent field notes, photos, maps, and the final paleontological monitoring report shall be deposited in a scientific institution with paleontological collections. Any curation costs shall be paid for by the City.

c. **Standard Paleontological Clauses in Construction Contracts (Applies to all Infrastructure Components).** The City or other lead agency shall include standard clauses in construction contracts for infrastructure components located in areas with moderate to high paleontological sensitivity. A standard clause shall be included that requires paleontological resource sensitivity training for workers prior to conducting earth disturbance activities. A standard inadvertent discovery clause shall also be included that indicates that in the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the monitor will allow grading to recommence in the area of the find.

MM HYD-3: Drainage Improvements (Applies to City of Santa Cruz/Scotts Valley Water District Intertie Pump Station and City of Santa Cruz/Soquel Creek Water District/Center Water District New Intertie Pump Stations). Final pump station designs shall include Low Impact Development features, which would: (1) reduce post-construction stormwater runoff rates to be less than or equal to existing conditions, for a 24-hour, 25-year storm event; and (2) minimize off-site runoff of stormwater pollutants through filtration features, such oil-water separators, vegetated swales, and bioretention basins. These features shall be inspected monthly to ensure functionality.

MM NOI-2: Construction Noise (Applies to all Infrastructure Components). The Proposed Project shall implement the following measures related to construction noise:

- Restrict construction activities and use of equipment that have the potential to generate significant noise levels (e.g., use of concrete saw, mounted impact hammer, jackhammer, rock drill, etc.) to between the hours of 8:00 a.m. and 5:00 p.m., unless specifically identified work outside these hours is authorized by the City's Water Director as necessary to allow for safe access to a construction site, safe construction operations, efficient construction progress, and/or to account for prior construction delays outside of a contractor's control (e.g., weather delays).
- Construction activities requiring operations continuing outside of the standard work hours of 8:00 a.m. and 5:00 p.m. (e.g., borehole drilling operations) shall locate noise generating equipment as far as possible from noise-sensitive receptors, and/or within an acoustically rated enclosure (meeting or exceeding Sound Transmission Class [STC] 27), shroud or temporary barrier as needed to prevent the propagation of sound into the surrounding areas in excess of the 60 dBA nighttime (10:00 p.m. to 8:00 a.m.) and 75 dBA daytime (8:00 a.m.

to 10:00 p.m.) criteria at the nearest sensitive receptor. Noisy construction equipment, such as temporary pumps that are not submerged, aboveground conveyor systems, and impact tools will likely require location within such an acoustically rated enclosure, shroud or barrier to meet these above criteria. Impact tools, in particular, shall have the working area/impact area shrouded or shielded whenever possible, with intake and exhaust ports on power equipment muffled or suppressed. Impact tools may necessitate the use of temporary or portable, application-specific noise shields or barriers to achieve compliance.

- Portable and stationary site support equipment (e.g., generators, compressors, and cement mixers) shall be located as far as possible from nearby noise-sensitive receptors.
- Construction equipment and vehicles shall be fitted with efficient, well-maintained mufflers that reduce equipment noise emission levels at the project site. Internal-combustion-powered equipment shall be equipped with properly operating noise suppression devices (e.g., mufflers, silencers, wraps) that meet or exceed the manufacturer's specifications. Mufflers and noise suppressors shall be properly maintained and tuned to ensure proper fit, function, and minimization of noise.
- Construction equipment shall not be idled for extended periods of time (i.e., 5 minutes or longer) in the immediate vicinity of noise-sensitive receptors.

MM NOI-3: Construction Vibration (Applies to New Aquifer Storage and Recovery Facilities and all Intertie Improvements). The Proposed Project shall implement the following measures to reduce the potential for structural damage from groundborne noise and vibration:

- Vibratory rollers or compactors shall not be used within 15 feet of sensitive receptors.
- Heavy equipment required to operate within 9 feet of sensitive receptors shall be limited to rubber-tired equipment.

Standard Operational Practices

5. Diversions by the City from surface streams to support City water transfers and/or exchanges to neighboring agencies will be limited by the following:
   - The City will not divert water from surface streams to transfer to neighboring agencies pursuant to the Proposed Project in months classified as Hydrologic Condition 4 (dry) or Hydrologic Condition 5 (driest) as defined in the Agreed Flows (Table 3-5a).

Standard Construction Practices

1. Implement erosion control best management practices for all construction activities occurring in or adjacent to jurisdictional aquatic resources (resources subject to permitting under Clean Water Act Section 404, Clean Water Act Section 401, Porter-Cologne Water Quality Act Section 13000 et seq., and/or California Fish and Game Code Section 1600). These measures may include, but are not limited to, (1) installation of silt fences, fiber or straw rolls, and/or bales along limits of work/construction areas and from the edge of the water course; (2) covering of stockpiled spoils; (3) revegetation and physical stabilization of disturbed graded and staging areas; and (4) sediment control including fencing, dams, barriers, berms, traps, and associated basins.

2. Provide stockpile containment and exposed soil stabilization structures (e.g., Visqueen plastic sheeting, fiber or straw rolls, gravel bags, and/or hydroseed).

3. Provide runoff control devices (e.g., fiber or straw rolls, gravel bag barriers/chevrons) used during construction phases conducted during the rainy season. Following all rain events, runoff control devices shall be inspected for their performance and repaired immediately if they are found to be deficient.

4. Implement wind erosion (dust) controls, including the following:
   - Use a water truck;
   - Water active construction areas as necessary to control fugitive dust;
   - Hydro seed and/or apply non-toxic soil binders to exposed areas after cut and fill operations;
   - Cover inactive storage piles;
   - Cover all trucks hauling dirt, sand, or loose materials off site; and
   - Install appropriately effective track-out capture methods at the construction site for all exiting trucks.

5. Locate and stabilize spoil disposal sites and other debris areas such as concrete wash sites. Sediment control measures shall be implemented so that sediment is not conveyed to waterways or jurisdictional resources (resources subject to permitting under Clean Water Act Section 404, Clean Water Act Section 401, and/or California Fish and Game Code Section 1600).

6. Minimize potential for hazardous spills from heavy equipment by not storing equipment or fueling within a minimum of 65 feet of any active stream channel or water body unless approved by permitting agencies along with implementation of additional spill prevention methods such as secondary containment and inspection.

7. Ensure that gas, oil, or any other substances that could be hazardous to aquatic life or pollute habitat are prevented from contaminating the soil or entering waters of the state or of the United States by storing these types of materials within an established containment area. Vehicles and equipment will have spill kits available, be checked daily for leaks, and will be properly maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Any gas, oil, or other substance that could be considered hazardous shall be stored in water-tight containers with secondary containment. Emergency spill kits shall be on site at all times.

8. Prevent equipment fluid leaks through regular equipment inspections.

9. Implement proper waste/trash management.

10. For facilities that are in or adjacent to streams and drainages, avoid activities in the active (i.e., flowing) channel whenever possible. New ASR facilities shall avoid streams and drainages.

11. Isolate work areas as needed and bypass flowing water around work site (see dewatering measures below).

12. Personnel shall use the appropriate equipment for the job that minimizes disturbance to the channel bed and banks. Appropriately tired vehicles, either tracked or wheeled, shall be used depending on the situation.

13. Avoid disturbance of retained riparian vegetation to the maximum extent feasible when working in or adjacent to an active stream channel.

14. Restore all temporarily disturbed natural communities/areas by replanting native vegetation using a vegetation mix appropriate for the site.

15. Require decontamination of any used tools and equipment prior to entering water ways.

16. A qualified biologist shall conduct a training-educational session for project construction personnel prior to any mobilization-construction activities within the project sites to inform personnel about species that may be present on site. The training shall consist of basic identification of special-status species that may occur on or near the project site, their habitat, their basic habits, how they may be encountered in the work area, and procedures to follow when they are encountered. The training will include a description of the project boundaries; general provisions of the Migratory Bird Treaty Act, California Fish and Game Code, and federal and state Endangered Species Acts; the necessity for adhering to the provision of these regulations; and general measures for the protection of special-status species, including breeding birds and their nests. Any personnel joining the work crew later shall receive the same training before beginning work.

24. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Proposed Project, immediately stop all construction work occurring within 100 feet of the find until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find, and whether the archaeological resources qualify as unique archaeological resources, historical resources of an archaeological nature, or subsurface tribal cultural resources. The archaeologist will determine whether additional study is warranted. Should it be required, the archaeologist may install temporary flagging around a resource to avoid any disturbances from construction equipment. Depending upon the significance of the find under CEQA (14 CCR 15064.5[f]; California Public Resources Code, Section 21082), the archaeologist may record the find to appropriate standards (thereby addressing any data potential) and allow work to continue. If the archaeologist observes the discovery to be potentially significant under CEQA, preservation in place or additional treatment may be required.

25. In accordance with Section 7050.5 of the California Health and Safety Code, if potential human remains are found, immediately notify the lead agency staff and the County Coroner of the discovery. The coroner will provide a determination within 48 hours of notification. No further excavation or disturbance of the identified material, or any area reasonably suspected to overlie additional remains, can occur until a determination has been made. If the County Coroner determines that the remains are, or are believed to be, Native American, the coroner will notify the Native American Heritage Commission within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the Most Likely Descendant from the deceased Native American. Within 48 hours of this notification, the Most Likely Descendant will recommend to the lead agency her/his preferred treatment of the remains and associated grave goods.

27. For construction on undeveloped sites or sites with surrounding trees and other vegetation, internal combustion engine equipment shall include spark arrestors, fire suppression equipment (e.g., fire extinguishers and shovels) must be stored onsite during use of such mechanical equipment, and construction activities may not be conducted during red flag warnings issued by the California Department of Forestry and Fire Protection (CAL FIRE). Red flag warnings and fire weather watches are issued by CAL FIRE based on weather patterns (low humidity, strong winds, dry fuels, etc.) and listed on their website (https://www.fire.ca.gov/programs/communications/red-flag-warnings-fire-weather-watches/).

2.3 Project Approvals

The following discretionary approvals would be required for implementation of the Proposed Intertie-1 Project:

- City and SVWD: Approval of Proposed Intertie-1 Project intertie facilities, water transfer agreements, and purchase of temporary and permanent easements.
- Caltrans, County of Santa Cruz, and City of Scotts Valley: Approval of encroachment permits and traffic control plans for work in public roadways.

Other approvals could also be necessary, including review and approval of an Operations Plan from the SWRCB Division of Drinking Water. Although the Proposed Intertie-1 Project is located within unincorporated Santa Cruz County and the City of Scotts Valley, the City of Santa Cruz is not required to obtain building or grading permits from the County of Santa Cruz or City of Scotts Valley, pursuant to California Government Code Sections 53091(d) and (e), which provide that facilities for the production, generation, storage, treatment, or transmission of water supplies are exempt from local zoning and building ordinances.

3 EIR Consistency Checklist

1. **Project title:**

   Intertie-1 Project

2. **Lead agency name and address:**

   City of Santa Cruz Water Department
   212 Locust Street, Suite C
   Santa Cruz, California 95060

3. **Contact person and phone number:**

   Sarah Easley Perez
   (831) 420-5327

4. **Project location:**

   Firehouse Lane, Sims Road, and La Madrona Drive in unincorporated Santa Cruz County and 6000 La Madrona Drive (APN 021-141-20) in the City of Scotts Valley (see Figure 1)

5. **Project sponsor's name and address:**

   City of Santa Cruz Water Department
   212 Locust Street, Suite C
   Santa Cruz, California 95060

6. **General plan designation:**

   R-UVL, R-UL, R-R (County of Santa Cruz); C-S, P (City of Scotts Valley)

7. **Zoning:**

   R-1, RA, SU (County of Santa Cruz); C-S, P (City of Scotts Valley)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   The Proposed Intertie-1 Project is the interconnection of the City's water system with that of the SVWD to facilitate future water transfers and exchanges between the two agencies through approximately 9,600 linear feet of new 12-inch-diameter bi-directional intertie pipeline and appurtenances extending south to north from the City's existing Pasatiempo tank facility along Firehouse Lane, Sims Road, and La Madrona Drive, to a new pump station in the City of Scotts Valley. Project operation would allow for a flow rate of 1.0 mgd to either the City or SVWD. See Chapter 2, Project Description, for further details.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

The proposed alignment is primarily located in a rural residential area within unincorporated Santa Cruz County, while the northernmost portion enters a more developed commercial area of the City of Scotts Valley. Firehouse Lane is a privately owned roadway and Sims Road and La Madrona Drive are public roadways owned and maintained by the County of Santa Cruz. The proposed alignment traverses lands designated Urban Very Low Density Residential (R-UVL), Urban Low Density Residential (R-UL), and Rural Residential (R-R) and zoned Residential Agricultural (RA), Special Use (SU), and Single-Family Residential (R-1) in unincorporated Santa Cruz County, before entering the City of Scotts Valley where it traverses lands designated and zoned Service Commercial (C-S) and Public/Quasi Public (P).

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- County of Santa Cruz and City of Scotts Valley: Approval of encroachment permits and traffic control plans for work in public roadways.
- SVWD: Approval of water transfer agreements and intertie facilities.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Assembly Bill (AB) 52 requires lead agencies to complete formal consultations with California Native American tribes prior to the preparation of a CEQA document to identify tribal cultural resources that may be subject to significant impacts by a project. The City has prepared an Addendum to the prior EIR prepared for the Santa Cruz Water Rights Project, certified in 2021. The preparation of an Addendum does not re-initiate the consultation process. Potential impacts to tribal cultural resources were analyzed in the prior EIR.

Determination

On the basis of review of the Proposed Intertie-1 Project modifications in the following checklist, the City determines that the modifications represent minor changes related to project design and construction schedule that would not result in new significant or substantially more severe impacts than identified in the certified Santa Cruz Water Rights Project EIR. Similarly, there are no substantial changes with respect to the circumstances under which the project is undertaken or new information of substantial importance that would result in new significant impacts or a substantial increase in severity of previously identified impacts since certification of the EIR, as explained in the following review. None of the conditions described in Section 15162 of the CEQA Guidelines have occurred that would require preparation of a Subsequent EIR. Therefore, pursuant to Section 15164 of the CEQA Guidelines, preparation of this Addendum to the Santa Cruz Water Rights Project Final EIR (State Clearinghouse No. 2018102039) is the appropriate environmental review document for the Proposed Intertie-1 Project modifications.

Evaluation of Environmental Impacts

Environmental Checklist for Supplemental Environmental Review

The purpose of the checklist presented on the following pages is to evaluate the impact categories in terms of any "changed condition" (i.e., changed circumstances, project changes, or new information of substantial importance) that may result in a changed environmental effect. A "no" answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact since it was analyzed and addressed with mitigation measures in the prior environmental document.

Explanation of Checklist Evaluation Categories

Where Impact was Analyzed in Prior EIR? This column provides a cross-reference to the pages of the certified Final EIR (FEIR) where information and analysis may be found relative to the environmental issue listed under each topic.

Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? Pursuant to Section 15162(a)(1) of the CEQA Guidelines, this column indicates whether the changes represented by the current project would result in new significant impacts that have not already been considered and mitigated by the prior environmental review or a substantial increase in the severity of a previously identified impact.

Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? Pursuant to Section 15162(a)(2) of the CEQA Guidelines, this column indicates whether there have been changes to the project site or the vicinity (circumstances under which the project is undertaken) which have occurred subsequent to the prior environmental document, which would result in the current project having new significant environmental impacts that were not considered in the prior environmental document or that substantially increase the severity of a previously identified impact.

Any New Information Requiring New Analysis or Verification? Pursuant to Section 15162(a)(3)(A-D) of the CEQA Guidelines, this column indicates whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental document was certified as complete is available requiring an update to the analysis of the previous environmental document to verify that the environmental conclusions and mitigation measures remain valid. If the new information shows that: (A) the project would have one or more significant effects not discussed in the prior environmental document; or (B) that significant effects previously examined would be substantially more severe than shown in the prior environmental document; or (C) that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects or the project, but the project proponents decline to adopt the mitigation measure or alternative; or (D) that mitigation measures or alternatives which are considerably different from those analyzed in the prior environmental documents would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative, then the question would be answered "yes" requiring the preparation of a subsequent or supplemental EIR. However, if the additional analysis completed as part of this environmental review finds that the conclusions of the prior environmental document remain the same and no new significant impacts are identified, or identified environmental impacts are not found to be more severe, or additional mitigation is not necessary, then the question would be answered "no," and no additional environmental documentation (supplemental or subsequent EIR) is required.

Prior EIR Mitigation Measures Implemented or Address Impacts? Pursuant to Section 15162(a)(3) of the CEQA Guidelines, this column indicates whether the prior environmental document provides mitigation measures to address effects in the related impact category. In some cases, the mitigation measures have already been implemented. A "yes" response will be provided if mitigation measures were included in the prior environmental document or have already been implemented for the respective impact category, and the measures will be listed. "None applicable to Proposed Intertie-1 Project" indicates that the Santa Cruz Water Rights Project EIR included mitigation measures for other components that are not applicable to the proposed intertie improvements analyzed herein. If "none" is indicated, this environmental review concludes that the impact would be less than significant with this project and therefore no mitigation measures are needed. If "not applicable" is indicated, this environmental review concludes that the impact would not occur with this project and therefore no mitigation measures are needed.

Discussion. A discussion of the elements of the checklist is provided under each topic for each question in Appendix G of the CEQA Guidelines to clarify the answers. The discussion provides information about the particular environmental issue, how the project relates to the issue, and the status of any mitigation measures that may be required or that have already been implemented.

Mitigation Measures. Applicable mitigation measures from the prior environmental review that apply to the project are listed under each topic.

Conclusions. A discussion of the conclusion relating to the analysis contained in each section.

3.1 Aesthetics

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
I.	**AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project:					
a)	Have a substantial adverse effect on a scenic vista?	pp. 4.1-3 to 4.1-4	No	No	No	Not Applicable
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	pp. 4.1-3 to 4.1-4	No	No	No	Not Applicable
c)	In non-urbanized areas, 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 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?	pp. 4.1-3 to 4.1-4	No	No	No	Not Applicable
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	pp. 4.1-3 to 4.1-4	No	No	No	Not Applicable

Discussion

The Santa Cruz Water Rights Project EIR evaluated aesthetics in Section 4.1.1. The analysis in the EIR concluded that the Proposed Intertie-1 Project would have less-than-significant aesthetic impacts for the following reasons. The pipeline would be below ground and therefore, would not result in changes to scenic vistas, scenic resources, visual character, or light and glare. The new pump station facility would be located in a predominantly developed area on a relatively small site, would be limited in height (e.g., equivalent to a one-story building), and would have new outdoor lighting for nighttime security only, which would be low wattage and directed downward to minimize light spillage, and therefore, would not substantially affect scenic vistas, scenic resources, visual character, or light and glare. Operational activities would involve the movement of water in subgrade pipelines between water agencies and districts which would not be visible above ground.

a) Would the project have a substantial adverse effect on a scenic vista?

As described in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project would have a less-than-significant impact on scenic vistas. As the majority of the Proposed Intertie-1 Project would be located below ground (i.e., pipeline), aesthetic impacts would be minimal and would be limited to

vegetation management along pipeline rights-of-way, including in the new segment proposed along Firehouse Lane. The new pump station would be located in a predominantly developed commercial area. The pump station would consist of a small (i.e., less than 800 square feet) new structure that would be a single story and not visible from long-range public vantage points. Additionally, according to the Santa Cruz County General Plan and the Scotts Valley General Plan, there are no scenic vistas located on or nearby the pipeline alignment or new pump station site (City of Scotts Valley 1994; County of Santa Cruz 2022b, 2022d). Furthermore, given its proposed location and small size, the new pump station would be situated below ridge lines and would not obstruct public views of prominent ridges, natural features or important public scenic vistas. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to scenic vistas than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As described in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project would have a less-than-significant impact on scenic resources within scenic highways or roadways. As the majority of the Proposed Intertie-1 Project would be located below ground (i.e., pipeline), aesthetic impacts would be minimal and would be limited to vegetation management along pipeline rights-of-way. The new pump station would be constructed just east of Highway 17, which is a County-designated scenic road and is eligible as a state scenic highway (Caltrans 2019; County of Santa Cruz 2022d). However, given the limited height of the proposed single-story structure and the dense canopy of trees and vegetation between Highway 17 and the pump station site, the pump station would not be visible from Highway 17. The Scotts Valley General Plan also identifies the portion of La Madrona Drive within and near the City limits, including the proposed pump station site, as being within a scenic road corridor, though it does not identify any important vistas looking toward the project site (City of Scotts Valley 1994). There are no natural scenic resources such as rock outcroppings present on site or in the project area. Construction of the pump station would not require tree removal, and the site is in close proximity to other commercial development and would be visually consistent with such development. As such, the Proposed Intertie-1 Project would not substantially damage scenic resources. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to scenic resources within scenic highways or roadways than previously identified in the Santa Cruz Water Rights Project EIR.

c) In non-urbanized areas, would the project 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 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?

Pursuant to the criteria for "urbanized area" in Public Resources Code Section 21071, the Project site is considered to be located in a "non-urbanized area" for the purposes of this analysis. As described in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project would have a less-than-significant impact on existing visual character or quality of public views of the site and its surroundings. As indicated above, the majority of the Proposed Intertie-1 Project would be located below ground (i.e., pipeline), and would not be visible and would not degrade the visual character of the surrounding area. As the new pump station facility would be located in a predominantly developed area on a relatively small site, would be a single story, and would have limited outdoor lighting for nighttime security only, it would not substantially

degrade or affect the visual character of the site or surrounding area. The new pump station would be located in a small 800-square foot building. Thus, the overall mass, scale, and height of the building would be similar or less than existing buildings in the vicinity. As indicated above, the project site is not located within a public scenic vista. Furthermore, while the Proposed Intertie-1 Project is not in an urbanized area, it would nevertheless not conflict with regulations governing scenic quality. The pump station site is zoned Public/Quasi Public (P) and surrounded by lands zoned Service Commercial (C-S), which would generally permit structures of the size and type as the proposed new pump station. However, as previously noted, pursuant to California Government Code Sections 53091(d) and (e), facilities for the production, generation, storage, treatment, or transmission of water supplies are exempt from local zoning and building ordinances. As such, the Proposed Intertie-1 Project modifications would not substantially degrade the visual character of the surrounding area. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to visual character or quality than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

As described in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project would have a less-than-significant impact related to light and glare. As proposed lighting for the new pump station facility would be limited to nighttime security only, which would be low wattage and directed downward to minimize light spillage, the Proposed Intertie-1 Project would not substantially affect light and glare. As such, the Proposed Intertie-1 Project modifications would not create a new source of substantial light or glare. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to light and glare than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to aesthetics, and no new mitigation measures related to aesthetics are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to aesthetics than previously identified in the Santa Cruz Water Rights Project EIR.

3.2 Agriculture and Forestry Resources

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	FEIR p. 4.9-31	No	No	No	None Applicable to Proposed Intertie-1 Project
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	FEIR p. 4.9-31	No	No	No	None Applicable to Proposed Intertie-1 Project
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	FEIR p. 4.9-31	No	No	No	None Applicable to Proposed Intertie-1 Project
d) Result in the loss of forest land or conversion of forest land to non-forest use?	FEIR p. 4.9-31	No	No	No	None Applicable to Proposed Intertie-1 Project
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?	FEIR p. 4.9-31	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated agriculture and forestry in Section 4.9. The analysis in the EIR concluded that the Proposed Intertie-1 Project would have no impact related to agriculture and forestry. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) or forest lands are located on the project site, nor is the site zoned for forest/timberland or enrolled in a Williamson Act contract (County of Santa Cruz 2022a, 2022e). The project site is mapped as Urban and Built-Up Land by the California Department of Conservation, and the surrounding lands are also Urban and Built-Up Land (California Department of Conservation 2018). The project site would traverse some lands zoned for residential agricultural uses by the County of Santa Cruz; however, the Proposed Intertie-1 Project would not conflict with such zoning because the pipeline would be installed in the roadway along Sims Road and La Madrona Drive, and therefore would not convert agricultural or forest land and there would be no impact. However, the facility would be exempt from local zoning under California Government Code Section 53091 (d).

a) Would the project 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?

As described in the Santa Cruz Water Rights Project EIR, no Farmland designated under the State's Farmland Mapping and Monitoring Program is identified on the project site, including the newly proposed segment of pipeline along Firehouse Lane; as such, the Proposed Intertie-1 Project would not convert Farmland to non-agricultural use. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts on Farmland than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

As described in the Santa Cruz Water Rights Project EIR, no lands enrolled in Williamson Act contracts are located near the project site. The project site would traverse some lands zoned for residential agricultural uses by the County of Santa Cruz; however, the Proposed Intertie-1 Project would not conflict with such zoning given that the Proposed Intertie-1 Project would consist of a belowground pipeline within the roadways of Firehouse Lane, Sims Road, and La Madrona Drive, and would not conflict with any adjacent residential agricultural zoning. Nonetheless, the Proposed Intertie-1 Project would be exempt from local zoning under California Government Code Section 53091 (d) and the, Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with agricultural zoning or Williamson Act contracts than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?

As described in the Santa Cruz Water Rights Project EIR, no forest land or timberland is located on or near the project site. Furthermore, the Proposed Intertie-1 Project would be exempt from local zoning under California Government Code Section 53091 (d) and the. Therefore, the Proposed Intertie-1 Project

modifications would not result in new or substantially more severe impacts related to conflicts with existing zoning for forest land or timberland than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

As described in the Santa Cruz Water Rights Project EIR, no forest land is located on or near the project site, including in the newly proposed pipeline segment along Firehouse Lane. Approximately up to 25 trees would be removed and/or impacted along Firehouse Lane to accommodate pipeline construction; however, there are no lands designated as forest land near the project site. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to loss of forest land or conversion of forest land to non-forest use than previously identified in the Santa Cruz Water Rights Project EIR.

e) Would the project 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?

As described in the Santa Cruz Water Rights Project EIR, and as previously discussed, the project site is designated as Urban and Built-Up Land by the Department of Conservation (DOC 2018). There is no Farmland or forest land located in the vicinity of the project site; therefore, the project would have no impact on Farmland or forest land or lead to conversion of such lands to non-agricultural or non-forest uses. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conversion of Farmland or forest land than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to agriculture and forestry resources that are applicable to the Proposed Intertie-1 Project, and no new mitigation measures related to agriculture and forestry resources are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to agriculture and forestry resources than previously identified in the Santa Cruz Water Rights Project EIR.

3.3 Air Quality

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
III.	**AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management district 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?	p. 4.2-20	No	No	No	None
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?	pp. 4.2-22 to 4.2-25	No	No	No	None
c)	Expose sensitive receptors to substantial pollutant concentrations?	pp. 4.2-25 to 4.2-30	No	No	No	None
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	p. 4.2-30	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated air quality in Section 4.2. The Proposed Intertie-1 Project is located in the North Central Coast Air Basin (Air Basin), which consists of Monterey, Santa Cruz, and San Benito counties and encompasses an area of 5,159 square miles. A series of mountain ranges and valleys influences the dispersion of criteria air pollutants through the Air Basin. The northwest sector of the Air Basin, where the Proposed Intertie-1 Project is located, is dominated by the Santa Cruz Mountains.

The Monterey Bay Air Resources District (MBARD) is the designated air quality control agency for the Air Basin and is required to monitor air pollutant levels to ensure that state and federal ambient air quality standards are met and, if they are not met, to develop strategies to meet the standards. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. The Air Basin is designated as non-attainment for the state PM_{10} standard, and as unclassified or attainment for all other state and federal standards (CARB 2022).

The Santa Cruz Water Rights Project EIR anticipated an approximately 6-month construction schedule for the Proposed Intertie-1 Project, occurring in the spring to fall of 2027. The Proposed Intertie-1 Project modifications include a different construction schedule, planned to occur over a longer duration (16 months) beginning in March 2024.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

MBARD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the Air Basin. The most recent update is the 2012–2015 AQMP, which was adopted in March 2017 (before the Air Basin achieved attainment with the state O_3 standard). The analysis in the EIR concluded that the Santa Cruz Water Rights Project, including the Proposed Intertie-1 Project, would not conflict with or obstruct implementation of the AQMP. The Proposed Intertie-1 Project as modified is generally consistent with the construction and operations assumptions in the EIR, though the proposed construction schedule would occur sooner and over a longer duration. However, as indicated in the EIR, construction emissions are accounted for in the AQMP emissions inventory (MBARD 2018), and therefore Proposed Intertie-1 Project construction emissions would not result in a new significant impact. Furthermore, the emissions modeling conducted for the EIR, which included the Proposed Intertie-1 Project, found that construction and operational emissions would not exceed the MBARD thresholds of significance. The longer construction duration that is now proposed would result in similar emissions dispersed over a longer temporal scale, but would not result in exceeding MBARD daily emissions thresholds as explained below. Regarding long-term operations, as assumed in the EIR, the Proposed Intertie-1 Project would result in a minimal increase in on-road vehicle activity and negligible emissions associated with routine inspection and maintenance activities. As such, the Proposed Intertie-1 Project as modified would not conflict with or obstruct implementation of the AQMP. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with or obstruction of implementation of the AQMP than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project 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?

MBARD has established thresholds of significance for criteria air pollutants of concern for construction and operations (MBARD 2008). For construction, the threshold is 82 pounds per day of PM_{10}. For operations, a project would result in a significant impact if it results in the generation of emissions of or in excess of 137 pounds per day for ROG or NO_x, 550 pounds per day of CO, 150 pounds per day of sulfur oxides (SO_x), and 82 pounds per day of PM_{10} from on-site sources (MBARD 2008). Notably, if a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions; and, conversely, if a project's emissions are below the MBARD thresholds, then the project's cumulative impact would be considered to be less than significant.

The Santa Cruz Water Rights Project EIR included modeling of maximum daily construction emissions for each component of the Santa Cruz Water Rights Project, which included the Proposed Intertie-1 Project. The EIR also included modeling of maximum daily operational emissions for the Santa Cruz Water Rights Project as a whole, which consisted of emissions from mobile sources associated with a minimal increase in on-road vehicle trips associated with routine inspection and maintenance of new facilities.

The analysis in the EIR concluded that short-term construction and long-term operational activities associated with the Santa Cruz Water Rights Project as a whole, including the Proposed Intertie-1 Project, would result in a minimal increase in daily criteria air pollutant emissions and would not exceed the applicable MBARD thresholds. Table 1 summarizes the estimated maximum daily construction and operational criteria air pollutant emissions associated with the Proposed Intertie-1 Project, as disclosed in the Santa Cruz Water Rights Project EIR.

Table 1. Estimated Maximum Daily Construction and Operational Criteria Air Pollutant Emissions

Project Component	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	(pounds per day)					
Construction						
Pipeline	1.84	12.33	16.15	0.03	0.73	0.50
Pump Station	5.81	15.49	23.49	0.04	6.45	3.65
Maximum daily emissions[2]	**7.65**	**27.82**	**39.64**	**0.07**	**7.18**	**4.15**
MBARD threshold	*N/A*	*N/A*	*N/A*	*N/A*	*82*	*N/A*
Threshold exceeded?	**N/A**	**N/A**	**N/A**	**N/A**	**No**	**N/A**
Operation						
Mobile Sources	0.02	0.04	0.31	<0.01	0.09	0.02
Maximum daily emissions	**0.02**	**0.04**	**0.31**	**<0.01**	**0.09**	**0.02**
MBARD threshold	*137*	*137*	*550*	*150*	*82*	*N/A*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**N/A**

Notes: CO = carbon monoxide; N/A = not applicable; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ROG = reactive organic gases; SO_x = sulfur oxides.

As shown in Table 1, maximum daily emissions of PM_{10} associated with construction of the intertie improvements would not exceed the applicable MBARD significance threshold. Long-term operations were assumed to consist of an increase of up to eight daily one-way vehicle trips associated with routine inspection and maintenance activities by City staff. Of these, the Proposed Intertie-1 Project would contribute approximately 1 vehicle trip per day and, therefore, would represent an increment of the emissions shown. As shown in Table 1, the minimal increase in on-road vehicle activity would result in a negligible increase in criteria air pollutant emissions and would not exceed the applicable MBARD significance thresholds. As described in Section 2.2.2.3, Operations and Maintenance, in case of an emergency that corresponds with a power outage, existing stand-by portable generators would be temporarily brought to the site to operate the pump station if needed during the outage. As these portable generators are already in existence and on maintenance schedules, their use for the above purpose would not result in a net increase in air pollutant emissions. As such, construction and operational emissions would result in a less-than-significant impact.

The Proposed Intertie-1 Project would result in an earlier construction start date and an extended construction schedule than was analyzed in the Santa Cruz Water Rights Project EIR. However, the extended construction schedule would not result in increased daily emissions and likely could reduce daily construction emissions as construction would occur over an extended period. Nonetheless, the modeled emissions were substantially below MBARD emissions thresholds, and the Proposed Intertie-1 Project's change in construction timing and duration would not substantially change modeled emissions or reach a level that would result in a new significant impact. Therefore, the Proposed Intertie-1 Project would not

result in a cumulatively considerable increase in criteria pollutant emissions, and would not result in new or substantially more severe impacts related to criteria air pollutant emissions than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

As described in the Santa Cruz Water Rights Project EIR, land uses where air-pollution-sensitive individuals are most likely to spend time include schools and schoolyards (i.e., preschools and kindergarten through grade 12 schools), parks and playgrounds, daycare centers, nursing homes, hospitals, live-in housing (i.e., prisons, dormitories, hospices, or similar), and residential communities (sensitive sites or sensitive land uses) (CARB 2005; MBARD 2008). Sensitive receptors are located immediately adjacent to and within close proximity to the Proposed Intertie-1 Project.

The analysis in the EIR concluded that the Proposed Intertie-1 Project would not expose sensitive receptors to substantial pollutant concentrations, resulting in a less-than-significant impact, based on the modeling of construction and operational criteria air pollutant emissions described above. Because construction and operation of the Proposed Intertie-1 Project with the proposed modifications would not result in the emissions of criteria air pollutants that would exceed the applicable MBARD significance thresholds, and because the MBARD thresholds are based on levels that the Air Basin can accommodate without affecting the attainment date for the ambient air quality standards and the ambient air quality standards are established to protect public health and welfare, the Proposed Intertie-1 Project would not result in health effects associated with criteria air pollutants and would not expose sensitive receptors to substantial pollutant concentrations, and the impact would continue to be less than significant with the Proposed Intertie-1 Project.

During construction, diesel particulate matter (DPM) would be the primary toxic air contaminant (TAC) emitted from diesel-fueled equipment and trucks. Heavy-duty construction equipment and commercial trucks are subject to the California Air Resources Board (CARB) Air Toxic Control Measures to reduce diesel particulate emissions. As discussed above, maximum daily total PM_{10} emissions generated by construction equipment operation and trucks (exhaust particulate matter, or DPM, combined with fugitive dust generated by equipment operation and vehicle travel), would be well below the MBARD significance threshold. Furthermore, construction would proceed along the pipeline alignment and would not require the extensive use of heavy-duty construction equipment or diesel trucks in any one location over the duration of development, which would limit the exposure of any proximate individual sensitive receptor to TACs. No long-term sources of TAC emissions are anticipated during operation of the Proposed Intertie-1 Project. Due to the relatively short period of exposure at any individual sensitive receptor and minimal particulate emissions generated, TACs emitted during construction would not be expected to result in concentrations causing significant health risks, which would be a less-than-significant impact.

The Proposed Intertie-1 Project is generally consistent with the construction and operation assumptions used in the modeling for the Santa Cruz Water Rights Project EIR, except that construction would start earlier and extend over a longer period than accounted for in the EIR emissions modeling. However, as explained above, the change in construction schedule would not substantially increase daily emissions that were found to be substantially below MBARD daily emissions thresholds. Therefore, the Proposed Intertie-1 Project with modifications would not result in new or substantially more severe impacts related to exposure of sensitive receptors to substantial pollutant concentrations than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The analysis in the EIR concluded that the Proposed Intertie-1 Project would not result in odors that would affect a substantial number of people, resulting in a less-than-significant impact. Odors would be potentially generated during construction, attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly and generally occur at magnitudes that would not affect substantial numbers of people, and thus not result in a significant construction-related impact. Regarding operations, the Proposed Intertie-1 Project involves water infrastructure improvements, new underground pipeline and pump station, which are not a typical source of odors. As indicated in the EIR, any odors produced would be minimal and would be similar to existing conditions. The Proposed Intertie-1 Project modifications and minor change in construction schedule would be consistent with these findings in the EIR as no new sources of odors or other emissions would be generated due to changes in construction schedule. Therefore, the Proposed Intertie-1 Project would not result in new or substantially more severe impacts related to odors than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to air quality, and no new mitigation measures related to air quality are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to air quality than previously identified in the Santa Cruz Water Rights Project EIR.

3.4 Biological Resources

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
IV.	**BIOLOGICAL RESOURCES** – 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 Game or U.S. Fish and Wildlife Service?	pp. 4.3-84 to 4.3-88, 4.3-91, 4.3-93 to 4.3-98, 4.3-100	No	No	No	Yes MM BIO-1, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	pp. 4.3-101 to 4.3-103, 4.3-105 to 4.3-106	No	No	No	Yes MM BIO-1, BIO-11
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?	pp. 4.3-107 to 4.3-108	No	No	No	None Applicable to Proposed Intertie-1 Project
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 sites?	pp. 4.3-111 to 4.3-113	No	No	No	None
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	p. 4.3-75	No	No	No	Not Applicable
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?	pp. 4.3-75 to 4.3-76	No	No	No	Not Applicable

Discussion

The Santa Cruz Water Rights Project EIR evaluated biological resources in Section 4.3. Dudek prepared a biological resources assessment for the Proposed Intertie-1 Project in May 2023 (Appendix B) to review the areas not previously surveyed for the Santa Cruz Water Rights Project EIR, as well as to inspect the project area evaluated for the Santa Cruz Water Rights Project EIR to confirm that existing conditions remain consistent with those described in the EIR. The Proposed Intertie-1 Project would include implementation of standard operational practice #5, which limits diversions to provide water for transfers to neighboring agencies in months classified as dry or driest in the Agreed Flows (see Appendix A). Therefore, the EIR determined that operational impacts on biological resources would be less than significant, and the discussion below focuses on construction impacts.

a) Would the project 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 Game or U.S. Fish and Wildlife Service?

The EIR found that the following special-status wildlife species have at least a moderate potential to occur within the natural vegetation communities along the Proposed Intertie-1 Project site: four amphibians (California giant salamander, California red-legged frog, Santa Cruz black salamander, and Santa Cruz long-toed salamander), three birds (white-tailed kite, yellow warbler, and yellow-breasted chat), two mammals (pallid bat and San Francisco dusky-footed woodrat), and one reptile (western pond turtle). Additionally, three species associated with the sandhills habitat have a potential to occur within Proposed Intertie-1 Project site: Mount Hermon June beetle, Ohlone tiger beetle, and the Zayante band-winged grasshopper. Several special-status plant species have at least a moderate potential to occur within the natural vegetation communities along the Proposed Intertie-1 Project including the following 10 species: Monterey spineflower, Scotts Valley spineflower, robust spineflower, Santa Cruz wallflower, Santa Cruz tarplant, marsh microseris, woodland woolythreads, white-flowered rein orchid, Scotts Valley polygonum, and Santa Cruz clover. Additionally, four species associated with the sandhills habitat could occur including: Bonny Doon manzanita, Ben Lomond spineflower, Ben Lomond buckwheat, and northern curly-leaved monardella.

The EIR found that construction of the Proposed Intertie-1 Project would have potentially significant impacts to special-status wildlife and plant species that have at least a moderate potential to occur within the natural vegetation communities along the alignment. The EIR included mitigation measures MM BIO-1 (Project Siting), MM BIO-4 (Preconstruction Nesting Bird Survey), MM BIO-5 (Preconstruction Wildlife Surveys), MM BIO-6 (Exclusionary Fencing), MM BIO-7 (Biological Construction Monitoring), MM BIO-8 (Species Relocation), and MM BIO-9 (Entrapment Avoidance), and MM BIO-10 (Preconstruction Special-Status Plant Surveys and Compensation) to reduce impacts on these species to less-than-significant levels by limiting construction disturbance, protecting species identified during preconstruction and construction monitoring through the use of exclusionary fencing, relocation of observed species and avoidance of entrapment, and requiring focused botanical surveys for special-status plants and the mapping and implementation of a mitigation plan if individuals or populations are detected during these surveys. The EIR found that construction impacts on special-status fish species would be less than significant because no work would be conducted in streams or drainages, and the Proposed Intertie-1 Project would include implementation of the City's standard construction practices which would protect water quality and fish habitat.

The Proposed Intertie-1 Project modifications include a southern extension of the pipeline from Sims Road and specific locations for the pump station and construction staging. The biological resources assessment summarized in Appendix B found fewer potential special status wildlife species than identified in the EIR, but did identify some additional potential special status plant species not identified in the Santa Cruz Water Rights Project EIR, but those mostly occur within vegetation types outside of the pump station site and pipeline extension, As described in Appendix B, potentially significant impacts on special-status species would be reduced to less-than-significant levels with implementation of the mitigation measures identified in the Santa Cruz Water Rights Project EIR that are applicable to the Proposed Intertie-1 Project. These measures generally include pre-construction surveys, project siting to avoid resources, biological monitoring during construction, and procedures for species avoidance. These measures continue to be required, are applicable to the area of the extended pipeline, the pump station site, and construction staging areas. The pre-construction special status plant survey (MM BIO-10) will be conducted this year.

Should any species be found MM BIO-1 regarding siting to avoid resources would be implemented as the project engineering design plans are developed and/or mitigated as set forth in MM BIO-10. Therefore, the Proposed Intertie-1 Project would not result in new or substantially more severe impacts related to special-status species than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The EIR identified potentially significant construction-related impacts of the Proposed Intertie-1 Project on riparian and other sensitive vegetation communities, if present. Natural vegetation communities that occur along the Proposed Intertie-1 Project site include annual grassland, coastal scrub, coastal oak woodland, montane hardwood-conifer, and redwood. The EIR found that collectively, these vegetation communities have the potential to support 12 sensitive vegetation communities: bigleaf maple forest and woodland, California bay forest and woodland, dune mat, hazelnut scrub, madrone forest, redwood forest and woodland, salt rush swales, sand dune sedge swaths, seaside woolly-sunflower – seaside daisy – buckwheat patches, Shreve oak forests, silver dune lupine – mock heather scrub, and wax myrtle scrub. Additionally, approximately 830 linear feet of the alignment has been mapped as supporting sandhills habitat, which is considered a sensitive habitat by the County of Santa Cruz.

The biological resources assessment conducted for the Proposed Intertie-1 Project identified two vegetation communities that would be considered sensitive within the context of CEQA: redwood and coastal oak woodland. Areas of redwood habitat are primarily located outside of the Proposed Intertie-1 Project pipeline, pump station, and construction staging area sites, and coastal oak woodland is found within the area of the new pipeline extension south of Sims Road. Limited disturbance could occur during installation of the pipeline. The EIR included mitigation measures MM BIO-1 (Project Siting) and MM BIO-11 (Sensitive Vegetation Communities Compensation), which would avoid substantial adverse effects on sensitive vegetation communities by limiting construction disturbance and providing for rehabilitation and revegetation of impacted areas at a 1:1 mitigation ratio using native plants and monitoring and invasive weed removal for a minimum of 3 years. As described in Appendix B, these mitigation measures continue to apply to the Proposed Intertie-1 Project. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to sensitive vegetation communities than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project could potentially have construction-related impacts to jurisdictional aquatic resources, if present. One unnamed, perennial stream which is a tributary to Carbonera Creek and potentially under U.S. Army Corps of Engineers, Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife jurisdiction crosses the proposed pipeline site. As described in Appendix B, the biological resources assessment conducted in May 2023 found that one perennial drainage and four intermittent streams intersect Proposed Intertie-1 Project area, including at the southern end of the extended pipeline. However, the Proposed Intertie-1 Project would not directly impact drainage features as it would be designed to locate construction activities, including

staging and other temporary activities, outside potentially jurisdictional resources. Construction impacts for new facilities would occur outside of streams and drainages, and construction would follow all of the relevant standard construction practices listed in Appendix A, including avoiding activities in active channels (Standard Construction Practice #10), using appropriate equipment to minimize disturbance to channels (Standard Construction Practice #12), avoiding retained riparian vegetation (Standard Construction Practice #13), and restoring temporarily disturbed natural communities/areas by replanting with natives (Standard Construction Practice #14). As a result, no direct or indirect impacts to jurisdictional aquatic resources would occur. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to jurisdictional aquatic resources than previously identified in the Santa Cruz Water Rights Project EIR.

D) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a less-than-significant impact on wildlife movement. As described in Appendix B, there are no federally or state-designated regionally important wildlife corridors that overlap the project area. The Proposed Intertie-1 Project would not build any new structures in woodland patches that provide movement habitat. Construction activities may temporarily disrupt local wildlife movement in adjacent habitat but would not create any new movement barriers to wildlife. Wildlife that currently move through the project area and along its drainages would continue to do so after construction is completed. As such, the Proposed Intertie-1 Project would not interfere substantially with fish or wildlife movement or established wildlife corridors and the impact would be less than significant. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to wildlife movement than previously identified in the Santa Cruz Water Rights Project EIR.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have no impact related to conflicts with local policies or ordinances protecting biological resources. As described in the EIR, the Proposed Intertie-1 Project is located outside of the coastal zone and therefore no local coastal program is applicable. The Proposed Intertie-1 Project relates to operation, utilization, and storage of water resources and therefore, is legally exempt under California Government Code Section 53091 (d) and (e) from the County of Santa Cruz and City of Scotts Valley building and zoning ordinances. Nonetheless, the EIR determined that the Proposed Intertie-1 Project would not conflict with local policies and ordinances protecting biological resources. The Proposed Intertie-1 Project including modifications remains exempt from local building and zoning ordinances. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with local plans than previously identified in the Santa Cruz Water Rights Project EIR.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have no impact related to conflicts with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP. The Proposed Intertie-1 Project site is located within the County of Santa Cruz's Interim Programmatic Habitat Conservation Plan (IPHCP) area. The U.S. Fish and Wildlife Service approved the IPHCP for the County and City to issue incidental take permits (ITPs) under the ESA for the incidental take of the Mount Hermon June beetle and Ben Lomond spineflower from activities covered by the IPHCP and ITPs. The Proposed Intertie-1 Project is located within areas identified by the County as having potential sandhills habitat that could support these species. However, the IPHCP is intended to be used for small residential development projects only. Regardless, the EIR concluded that the impacts and compensatory mitigation (MM BIO-10 and MM BIO-11) associated with the Proposed Intertie-1 Project would be consistent with the provisions, and minimization and mitigation measures contained in the IPHCP. Therefore, the Proposed Intertie-1 Project would not conflict with the IPHCP. The Proposed Intertie-1 Project including modifications remains subject to the applicable mitigation measures identified in the EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with HCPs or NCCPs than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

As indicated above, with implementation of identified mitigation measures, potentially significant impacts related to biological resources would be reduced to a less-than-significant level. All mitigation measures identified in the table above would continue to be required with the Proposed Intertie-1 Project modifications. No new mitigation measures are required with the Proposed Intertie-1 Project modifications as no new significant impacts have been identified.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to biological resources than previously identified in the Santa Cruz Water Rights Project EIR.

3.5 Cultural Resources

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
V.	**CULTURAL RESOURCES** – Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	p. 4.4-22	No	No	No	None Applicable to Proposed Intertie-1 Project
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	pp. 4.4-26 to 4.4-30	No	No	No	Yes MM CUL-2
c)	Disturb any human remains, including those interred outside of formal cemeteries?	pp. 4.4-26 to 4.4-30	No	No	No	Yes MM CUL-2

Discussion

The Santa Cruz Water Rights Project EIR evaluated cultural resources in Section 4.4. No cultural resources were identified in the vicinity of the Proposed Intertie-1 Project in the Santa Cruz Water Rights Project EIR. The analysis in the EIR concluded that the Proposed Intertie-1 Project would have no impact on historical built environment resources because none were present on the project site. The EIR determined that there is a low potential for encountering potentially significant unknown archaeological resources, including unique archaeological resources or historical resources of an archaeological nature. Notwithstanding the low sensitivity of the project site, the EIR included MM CUL-2 which is applicable to the Proposed Intertie-1 Project to avoid a substantial adverse change in the significance of unique archaeological resources or historical resources of an archaeological nature. Dudek prepared a cultural resources assessment for the Proposed Intertie-1 Project in April 2023 (Appendix C) to review the areas not surveyed for the Santa Cruz Water Rights EIR. No cultural resources were identified in the new pipeline segment or in the vicinity of the pump station site during the April 2023 cultural resources assessment.

A) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No historical built environment resources were identified on the project site based on the 2020 survey and records search conducted for the Proposed Intertie-1 Project in the Santa Cruz Water Rights Project EIR. Consistent with the conclusions of the cultural resource study conducted for the EIR, Dudek's April 2023 cultural resources assessment of the Proposed Intertie-1 Project modifications did not identify any known historical built environment resources within or adjacent to the Proposed Intertie-1 Project footprint. As such, implementation of the Proposed Intertie-1 Project would not cause a substantial adverse change in the significance of a historical built environment resource, and no impact would occur. Therefore, the

Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to historical resources than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Dudek conducted a CHRIS records search and a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search within 0.25 miles of the project site as well as an intensive surface reconnaissance within and immediately adjacent to the site for the Santa Cruz Rights Project EIR. No archaeological resources were identified within the project site. The EIR determined that there is low potential for encountering potentially significant unknown archaeological resources during construction. If such resources are present on the project site, Standard Construction Practice #24 would be implemented to stop work, evaluate the significance of the find, and determine whether additional study, preservation in place, or additional treatment of the find may be required, as described in the Santa Cruz Water Rights EIR. However, with the implementation of Standard Construction Practice #24, potential impacts related to construction could still cause substantial adverse changes in the significance of such historical or unique archaeological resources, as the standard construction practice stops short of specifying how to appropriately treat such a significant resource. Therefore, the EIR concluded that the impact of the Proposed Intertie-1 Project on unique archaeological resources or historical resources of an archaeological nature would be potentially significant, and included MM CUL-2, which includes specifications for treatment of resources determined to be significant, to avoid a substantial adverse change in the significance of unique archaeological resources or historical resources of an archaeological nature.

An updated cultural resources assessment (Appendix C) was conducted for the Proposed Intertie-1 Project that included the extended pipeline south of Sims Road. The results suggest there are no potentially significant cultural resources within the Proposed Intertie-1 Project area that could be adversely affected by the Proposed Intertie-1 Project. The results also suggest that the potential for encountering unknown archaeological resources during construction of the Proposed Intertie-1 Project is low. Specifically, the records search did not identify any known archaeological resources within the Proposed Intertie-1 Project area and the surface reconnaissance was negative for evidence of previously unknown archaeological resources. However, MM CUL-2 is still applicable to the Proposed Intertie-1 Project in the event that resources are discovered during construction. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to unique archaeological resources or historical resources of an archaeological nature than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

The Santa Cruz Water Rights Project EIR determined that with the implementation of Standard Construction Practice #25, which describes procedures to follow in the event of an inadvertent discovery of human remains, potential impacts on human remains related to construction of the Proposed Intertie-1 Project would be less than significant. This standard construction practice would remain applicable to the Proposed Intertie-1 Project, including in newly added areas along Firehouse Lane and at the pump station site. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to human remains than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR identified MM CUL-2 to reduce impacts related to inadvertent discovery of unknown archaeological resources during construction activities to a less-than-significant level. MM CUL-2 remains applicable to the Proposed Intertie-1 Project. No new mitigation measures related to cultural resources are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to cultural resources than previously identified in the Santa Cruz Water Rights Project EIR.

3.6 Energy

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
VI. ENERGY – Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	pp. 4.13-33 to 4.13-35	No	No	No	None
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	p. 4.13-35	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated energy in Section 4.13. The analysis in the EIR concluded that the Proposed Intertie-1 Project would not result in wasteful or inefficient energy use or conflicts with renewable energy or energy efficiency plans, as the Proposed Intertie-1 Project's energy use from construction and operations would be minimal compared to statewide energy use, and would not be unusual or wasteful as compared to overall local or regional demand for energy resources.

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

As described in the Santa Cruz Water Rights Project EIR, construction activities would not use natural gas, and would use a minimal amount of electricity. The EIR included an estimate of construction petroleum demand, including diesel usage from construction equipment, haul trucks, and vendor trucks, and gasoline fuel usage from worker vehicles, as shown in Table 2.

Table 2. Proposed Intertie-1 Project Construction Petroleum Demand

Project Component	Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
	(gallons)			
Pipeline	11,157.02	564.98	837.27	429.62
New Pump Station	3,151.48	0.00	72.59	83.99
Total	**14,308.50**	**564.98**	**909.86**	**513.61**

Source: City of Santa Cruz 2021.

As shown in Table 2, the Santa Cruz Water Rights Project EIR estimated that the Proposed Intertie-1 Project would consume a total of approximately 16,297 gallons of petroleum during the construction phase. According to the EIR, this amount would constitute less than 0.0001% of the annual statewide petroleum consumption of approximately 29 billion gallons. The modifications to the Proposed Intertie-1 Project include an additional pipeline segment, resulting in a 20% longer overall pipeline length, which would result in an incremental increase in construction petroleum use. Overall, because the Proposed Intertie-1 Project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state, the Proposed Intertie-1 Project construction would not result in wasteful, inefficient, or unnecessary consumption of petroleum. While the Proposed Intertie-1 Project modifications would result in a longer overall construction duration, the activities would be generally consistent with the construction assumptions used in the Santa Cruz Water Rights Project EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to construction energy consumption than previously identified in the Santa Cruz Water Rights Project EIR.

Operation

The Santa Cruz Water Rights Project EIR concluded that the additional electricity demand for the Proposed Intertie-1 Project would represent a minimal increase in usage throughout the County and would not be unusual or wasteful as compared to overall local and regional demand for energy resources. The EIR estimated gasoline fuel usage associated with new employees for Proposed Intertie-1 Project operations to be approximately 1,520 gallons per year, which would represent a minimal increase in gasoline demand; therefore, the EIR concluded that Proposed Intertie-1 Project operations would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The Proposed Intertie-1 Project modifications

would not result in a change in operations relative to the analysis in the Santa Cruz Water Rights Project EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to operational energy consumption than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Part 6 of Title 24 of the California Code of Regulations establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. Title 24 also includes Part 11, the California Green Building Standards (CALGreen). CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial and state-owned buildings. The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would meet any applicable Title 24 and CALGreen standards to reduce energy demand and increase energy efficiency. Additionally, the EIR found that the Proposed Intertie-1 Project would not conflict with the various state and local plans that mandate reduced energy use. The Proposed Intertie-1 Project modifications do not include equipment or operations that would alter operational energy demand, and thus, the Proposed Intertie-1 Project would remain consistent with these conclusions. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with energy plans than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to energy, and no new mitigation measures related to energy are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to energy than previously identified in the Santa Cruz Water Rights Project EIR.

3.7 Geology and Soils

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
VII. GEOLOGY AND SOILS – 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.	p. 4.5-22	No	No	No	Not Applicable
ii) Strong seismic ground shaking?	pp. 4.5-25 to 4.5-26	No	No	No	None Applicable to Proposed Intertie-1 Project
iii) Seismic-related ground failure, including liquefaction?	pp. 4.5-25 to 4.5-26	No	No	No	None Applicable to Proposed Intertie-1 Project
iv) Landslides?	pp. 4.5-25 to 4.5-26	No	No	No	None Applicable to Proposed Intertie-1 Project
b) Result in substantial soil erosion or the loss of topsoil?	p. 4.8-65	No	No	No	Yes MM HYD-3
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?	p. 4.5-29	No	No	No	None
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?	p. 4.5-30	No	No	No	None

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	p. 4.5-22	No	No	No	Not Applicable
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	pp. 4.5-32 to 4.5-34	No	No	No	Yes MM GEO-2

Discussion

The Santa Cruz Water Rights Project EIR evaluated geology and soils in Section 4.5; soil erosion/loss of topsoil is discussed in Section 4.8. The Proposed Intertie-1 Project is located in the seismically active Monterey Bay area. An update to the geotechnical investigation for the Proposed Intertie-1 Project was prepared in March 2023 to include an assessment of the newly added pipeline segment along Firehouse Lane (HKA 2023a).

a) Would the project 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.

As indicated in the Santa Cruz Water Rights Project EIR, surface fault rupture is not anticipated in the vicinity of the Proposed Intertie-1 Project and no impacts related to fault rupture would occur. Similarly, no fault traces cross the newly added pipeline segment along Firehouse Lane. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to fault rupture than previously identified in the Santa Cruz Water Rights Project EIR.

ii) Strong seismic ground shaking?

and

iii) Seismic-related ground failure, including liquefaction?

Due to its location in a seismically active region, the Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would be susceptible to damage as a result of ground shaking, seismic related ground failure, and liquefaction and associated lateral spreading, although part of the site had not been fully studied with regards to liquefaction. However, the EIR concluded that, while the Proposed Intertie-1 Project is located in a region with inherent seismic

hazards, project design and construction would be completed in accordance with standard, site-specific geotechnical investigations that provide recommendations to address these issues in accordance with California Building Code (CBC) and California Division of Occupational Safety and Health (Cal/OSHA) regulations, thus minimizing the potential for damage and safety impacts. Furthermore, the Proposed Intertie-1 Project would not exacerbate the potential for seismic hazards, which already exist in the project area. The updated geotechnical investigation for the Proposed Intertie-1 Project did not find any new seismic hazards associated with the Proposed Intertie-1 Project modifications (HKA 2023a). Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to seismic hazards than previously identified in the Santa Cruz Water Rights Project EIR.

iv) Landslides?

The Santa Cruz Water Rights Project EIR determined that locally steep slopes along the Proposed Intertie-1 Project alignment may be susceptible to failure; however, pipeline construction within existing public roadways would minimize the potential for slope instability or failure. No landslides are mapped in the vicinity of the Proposed Intertie-1 Project, and no visual indications of slope instability were observed along the proposed alignment during field investigation and site reconnaissance for the updated geotechnical investigation. The updated geotechnical investigation determined that the potential for landslides to affect the Proposed Intertie-1 Project is low, including along the steepest portion of the alignment, located within the newly added pipeline segment along Firehouse Lane (HKA 2023a). Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to landslides than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project result in substantial soil erosion or the loss of topsoil?

As described in the Santa Cruz Water Rights Project EIR, the pump station component of the Proposed Intertie-1 Project could increase runoff associated with new paving as this site is currently undeveloped, which could cause associated erosion. Given that this facility is located outside of the coastal zone and is a water infrastructure facility exempt from local ordinances under California Government Code 53091 (d) and (e) (see Section 2.3, Project Approvals), the City of Scotts Valley's drainage design standards would not apply, potential erosion impacts would be potentially significant if the facilities are not properly designed. The EIR included MM HYD-3, which would avoid substantial erosion by requiring that post-construction stormwater runoff rates be equal to or less than under existing conditions, to prevent off-site erosion. Therefore, with the implementation of this mitigation measure, the impact of the new pump station on soil erosion would be reduced to a less-than-significant level. MM HYD-3 continues to apply to the Proposed Intertie-1 Project. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to soil erosion than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project 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?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have less-than-significant impacts related to unstable geologic units or soils. Pipeline construction would take place in existing public roadways, which would minimize the potential for slope instability or failure, and the Proposed Intertie-1 Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Proposed Intertie-1 Project. Additionally, design and construction of the pipeline and pump station would be completed in accordance with site-specific geotechnical investigations and applicable CBC regulations pertaining to slope stability, further minimizing the potential for slope instability during construction and operation. The updated geotechnical investigation for the Proposed Intertie-1 Project modifications did not identify any additional impacts related to unstable geologic units or soils. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to unstable geologic units or soils than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project 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?

Expansive soils are clay-rich deposits that expand when wet and contract when dry. Alternating soil expansion and contraction can result in distress and damage to overlying structure foundations and/or infrastructure, such as pipelines. The Santa Cruz Water Rights Project EIR found that construction of the Proposed Intertie-1 Project may be located on expansive soil but would not create substantial direct or indirect risks as a result, resulting in a less-than-significant impact. As described in the EIR, limited portions of the pipeline alignment are located on Watsonville loam soils, which may be susceptible to soil expansion, resulting in possible damage to proposed infrastructure. However, construction would be completed in accordance with CBC regulations, which include provisions for construction on expansive soils. These construction techniques include over-excavation of soils beneath structures and pipelines, followed by construction on a layer of sandy, nonexpansive soils. Alternatively, post-tensioned slabs can be constructed to prevent cracking associated with expansive soils. In addition, construction and operation of the Proposed Intertie-1 Project would not exacerbate the potential for soil expansion to occur.

The update to the geotechnical investigation (HKA 2023a) investigated the soils along the newly added pipeline segment along Firehouse Lane. Highly elastic silty sand was encountered during the field investigation and is considered to have low to moderate expansion potential. The risk of adverse consequences to the pipeline from expansive soils is considered low provided the exposed soils in the trench excavations are moisture conditioned 4% to 6% above optimum for a minimum 48 hours prior to placing any backfill (HKA 2023a). The Proposed Intertie-1 Project would be constructed in accordance with the design recommendations in the geotechnical report. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to expansive soils than previously identified in the Santa Cruz Water Rights Project EIR.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The Proposed Intertie-1 Project, including modifications, would have no impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, as the Proposed Intertie-1 Project would not involve the installation of septic tanks or alternative wastewater disposal systems. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to septic tanks or alternative wastewater disposal systems than previously identified in the Santa Cruz Water Rights Project EIR.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As indicated in the Santa Cruz Water Rights Project EIR, geologic units with high paleontological sensitivity—Pleistocene terrace deposits and the Santa Margarita Formation—underlie the Proposed Intertie-1 Project. The EIR identified potentially significant impacts related to potential destruction of paleontological resources during construction in the event of any excavations in undisturbed Pleistocene deposits, and included MM GEO-2 requiring development and implementation of a Paleontological Resources Impact Mitigation Program (PRIMP) on sites with moderate to high paleontological sensitivity as well as inclusion of standard paleontological clauses in construction contracts, including sensitivity training and procedures to follow in the event of inadvertent discoveries of paleontological resources, to reduce the impact to a less-than-significant level. MM GEO-2 remains applicable to the Proposed Intertie-1 Project, including modifications. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts on paleontological resources than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR identified MM GEO-2 to reduce impacts related to inadvertent discovery of unknown paleontological resources during construction activities to a less-than-significant level, and MM HYD-3 to reduce erosion-related impacts regarding post-construction stormwater runoff rates. These mitigation measures remain applicable to the Proposed Intertie-1 Project. No new mitigation measures related to geology and soils are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to geology and soils than previously identified in the Santa Cruz Water Rights Project EIR.

3.8 Greenhouse Gas Emissions

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
VIII. GREENHOUSE GAS EMISSIONS – Would the project:						
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	pp. 4.6-25 to 4.6-28	No	No	No	None
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	pp. 4.6-28 to 4.6-31	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated greenhouse gas (GHG) emissions in Section 4.6. The EIR included modeling of construction and operational GHG emissions, which were compared to the 900 metric tons of carbon dioxide equivalent (MT CO_2e) per year screening level threshold identified by the California Air Pollution Control Officers Association (CAPCOA) (CAPCOA 2008), as further discussed below.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The Santa Cruz Water Rights Project EIR included an estimate of GHG emissions that would be generated by each component of the Santa Cruz Water Rights Project during construction and operation, including the Proposed Intertie-1 Project. In accordance with common practice for the evaluation of construction-generated GHGs, construction-generated GHG emissions were amortized over an assumed 30-year project life. The EIR found that the Santa Cruz Water Rights Project would result in an increase of approximately 141 MT CO_2e per year as a result of operations. The EIR found that construction activities for the Santa Cruz Water Rights Project as a whole would generate a total of 2,353.09 MT CO_2e, which would be 78.44 MT CO_2e amortized over 30 years. After summing the Proposed Project's amortized temporary construction emissions with operational emissions, the EIR found that total GHGs generated by the Santa Cruz Water Rights Project would be approximately 220 MT CO_2e per year. As such, increased annual operational GHG emissions with amortized construction emissions would not exceed the applied threshold of 900 MT CO_2e per year.

The increased pipeline length resulting from the Proposed Intertie-1 Project modifications would result in an incremental increase in GHG emissions, however the sum of total amortized construction GHG emissions and operational GHG emissions for the Santa Cruz Water Rights Project would remain well below the 900 MT CO_2e per year screening level threshold. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to GHG emissions than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Santa Cruz Water Rights EIR found that the Proposed Intertie-1 Project would have a less-than-significant impact related to conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The analysis in the EIR determined that the Santa Cruz Water Rights Project, of which the Proposed Intertie-1 Project is one component, would not conflict with the goals and GHG reduction strategies contained in the City of Santa Cruz Climate Action Plan (CAP), County of Santa Cruz Climate Action Strategy, Association of Monterey Bay Area Governments (AMBAG) 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), or California Air Resources Board (CARB) Scoping Plan. Subsequent to the certification of the EIR, updates were made to the City of Santa Cruz CAP 2030 (adopted in September 2022), AMBAG 2045 MTP/SCS (adopted in June 2022), and 2022 CARB Scoping Plan (approved in December 2022), discussed as follows.

The City of Santa Cruz CAP 2030 contains Measure T-5 to increase commercial EV adoption to 25% by 2030 and 35% by 2035, and Measure T-6 to electrify or otherwise decarbonize 50% of off-road equipment by 2030 and 75% by 2035. These measures would encourage the adoption of EVs and low-emissions off-road vehicles and equipment by enhancing EV infrastructure, replacing the municipal fleet of off-road equipment with low- or zero-emissions equipment, and supporting the transition of commercial fleets to zero-emissions off-road equipment. Thus, vehicles and equipment used in Proposed Intertie-1 Project construction and operational activities could include low- or zero-emissions vehicles and off-road equipment as the City embarks on that transition. There are no other provisions of the CAP that would be applicable to the Proposed Intertie-1 Project, and, therefore, the Proposed Intertie-1 Project would not conflict with the City's CAP.

The major goals of the AMBAG 2045 MTP/SCS are as follows:

- Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region.
- Raise the region's standard of living by enhancing the performance of the transportation system.
- Promote environmental sustainability and protect the natural environment.
- Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices, and encourage active transportation.
- Provide an equitable level of transportation services to all segments of the population.
- Preserve and ensure a sustainable and safe regional transportation system.

The Proposed Intertie-1 Project would not conflict with any of the above goals or provisions of the 2045 Plan and would not inhibit AMBAG from achieving these goals.

The 2022 Scoping Plan identifies measures for cutting GHG emissions and reducing the utilization of fossil fuels within California, transitioning to zero-emission transportation, and phasing out the use of petroleum and natural gas used for heating homes and buildings. It also sets a more aggressive goal to reduce carbon emissions by 48% below 1990 levels in 2030, which represents an 8% increase from the current SB 32 target of a 40% reduction. The Plan identifies three priority areas for local governments including electrification of transportation, reducing vehicle miles traveled (VMT), and decarbonization of buildings.

The Proposed Intertie-1 Project would not involve any land use development that would directly result in population growth or increased VMT. The Proposed Intertie-1 Project would be affected by the Scoping Plan measures related to fuel and clean vehicle standards because activities would involve the use of equipment required for construction, management, and maintenance activities. These measures would lead to cleaner vehicles and equipment for the Proposed Intertie-1 Project and thus lower GHG emissions. Therefore, the Proposed Intertie-1 Project would not conflict with the Scoping Plan.

Furthermore, the Proposed Intertie-1 Project modifications remain consistent with the overall intertie project analyzed in the Santa Cruz Water Rights Project EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to GHG emissions, and no new mitigation measures related to GHG emissions are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to GHG emissions than previously identified in the Santa Cruz Water Rights Project EIR.

3.9 Hazards and Hazardous Materials

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
IX.	**HAZARDS AND HAZARDOUS MATERIALS** – Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	pp. 4.7-22 to 4.7-23	No	No	No	None Applicable
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?	p. 4.7-25	No	No	No	None Applicable to Proposed Intertie-1 Project

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	p. 4.7-28	No	No	No	None Applicable to Proposed Intertie-1 Project
d) Be located on a site that 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?	p. 4.7-22	No	No	No	Not Applicable
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?	p. 4.7-22	No	No	No	Not Applicable
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	pp. 4.7-28 to 4.7-29	No	No	No	None
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	pp. 4.7-29 to 4.7-30	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated hazards and hazardous materials in Section 4.7. The evaluation included a review of online hazardous material site databases and fire hazard maps. The regulatory records review in the EIR included site history based on historical aerial photographs and topographic maps, pipelines and oil drilling features documented in the National Pipeline Mapping System and the California Geologic Energy Management Division Well Mapping database, and the list of sites compiled pursuant to Government Code Section 65962.5 (i.e., the Cortese List). As described in the EIR, La Madrona Drive was constructed in the 1960s. Prior to development it was primarily undeveloped land adjacent to sparse residential housing. The pump station site has been undeveloped land since at least 1953. One natural gas pipeline was identified running north-south along Graham Hill Road, approximately 0.37 miles west of the proposed intertie pipeline alignment at its nearest point. No known hazardous material release sites are located on or near the intertie pipeline alignment or pump station site, and there is no existing use of hazardous materials occurring at the site.

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have less-than-significant impacts related to routine transport, use, or disposal of hazardous materials during construction and operation. Construction activities would include the use of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, adhesive materials, grease, solvents, and architectural coatings. Proposed Intertie-1 Project operations would likely similarly include small amounts of commonly used hazardous substances such as lubricating oil, grease, and solvents. All hazardous materials would be managed in accordance with the City's standard construction practices regarding prevention of and responses to potential spills, as well as all applicable federal, state, and local laws and regulations, which are intended to minimize health risk to the public associated with hazardous materials. Compliance with these regulations would avoid significant hazards to the public or the environment due to the routine transport, use, and disposal of these materials and impacts would be less than significant. The Proposed Intertie-1 Project modifications would still entail the same construction and operational activities and associated hazardous materials use as described in the Santa Cruz Water Rights Project EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to public or environmental hazards created through the routine transport, use, or disposal of hazardous materials than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project 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?

The Santa Cruz Water Rights Project EIR concluded that the Proposed Intertie-1 Project would have a less-than-significant impact related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials. No known hazardous materials release sites are documented on or adjacent to the Proposed Intertie-1 Project pipeline alignment, including Firehouse Lane, or pump station site, and no associated impacts would occur (SWRCB 2023; DTSC 2023). In April 2023, a field investigation and laboratory testing was undertaken to collect subsurface samples and assess potential contamination of the soil near the existing Pasatiempo (Kite Hill) water storage tanks. Samples collected were tested for petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, xylene, methyl tert-butyl ether, pesticides, polychlorinated biphenyls, and heavy metals; all concentrations were below environmental screening levels (HKA 2023b). Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to public or environmental hazards created through reasonably foreseeable upset and accident conditions involving the release of hazardous materials than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have a less-than-significant impact related to hazardous emissions or handling of hazardous materials near schools. Brook Knoll Elementary School is located at 151 Brook Knoll Drive, within 0.25 miles of the Proposed Intertie-1 Project alignment. As discussed in the Santa Cruz Water Rights Project EIR, hazardous materials would be handled, transported, stored, and disposed of in accordance with federal, state, and local laws and

regulations. Hazardous materials used during construction and operation would be properly stored within site boundaries. Additionally, the City's standard construction practices would further reduce the risk of use, transportation, and disposal of hazardous materials. As required, HMBPs, spill prevention plans, and emergency response plans would be developed. These regulations and requirements would provide protection from emissions and releases of hazardous materials to the environment, including nearby schools, during construction and operation of the Proposed Intertie-1 Project, including modifications. The Proposed Intertie-1 Project would not result in stationary emissions due to operations. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to hazardous emissions or handling of hazardous materials near schools than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project be located on a site that 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?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would not be located on a hazardous materials site that is included on a list compiled pursuant to Government Code Section 65962.5 (also known as the Cortese List), as none are located on or adjacent to the Proposed Intertie-1 Project alignment or pump station site (SWRCB 2023; DTSC 2023), and therefore would not create a significant hazard to the public or the environment related to such a site, and no associated impact would occur. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to Cortese List sites than previously identified in the Santa Cruz Water Rights Project EIR.

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?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would not result in a safety hazard or excessive noise for people working or residing in the study area due to airports because the Proposed Intertie-1 Project site is not located within two miles of a public use airport nor is it located within an airport land use plan, and no associated impact would occur. The Proposed Intertie-1 Project location remains the same as evaluated in the EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to airport hazards than previously identified in the Santa Cruz Water Rights Project EIR.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a less-than-significant impact related to emergency response or emergency evacuation. As described in the Santa Cruz Water Rights Project EIR, construction of the Proposed Intertie-1 Project could require partial road closures or access limitations in public rights-of-way on a temporary and periodic basis during the construction period. As described above in Chapter 2, Project Description, encroachment permits would need to be obtained in most cases from the applicable agencies for construction in public roadways, including the County of Santa Cruz, City of Scotts Valley, and Caltrans. The issuance of encroachment

permits requires submission of a traffic control plan in Santa Cruz County if pedestrian, bicycle, or vehicle traffic would be impacted. The associated fee and permit process are described in the Santa Cruz County Code, Chapter 9.70, Streets and Roads. Several provisions are included on the encroachment permit application, including those related to traffic protection and minimum interference, storage of material, cleanup, drainage, maintenance, pavement replacement, and tree trimming, among others, with which the applicant must comply. While the issuance of encroachment permits in the City of Scotts Valley only specifies the need for a traffic control plan if required by the Public Works Director/City Engineer, other requirements of encroachment permits include conducting all street improvements in accordance with the City of Scotts Valley Standard Details and Specification, which include policies for addressing lane closures or any form of traffic diversions. The City would also be required to obtain an encroachment permit from Caltrans for installation of temporary construction signage on southbound Highway 17 advising drivers of potentially slowed or stopped traffic at the Sims Road exit and would be required to comply with requirements for public traffic control and any applicable provisions. The Proposed Intertie-1 Project modifications would result in a longer construction period than considered in the Santa Cruz Water Rights Project EIR, but implementation of traffic controls for installation of the pipeline in public rights-of-way would continue to be provided, and emergency and/or evacuation access would be maintained. In addition, access would be maintained on Firehouse Lane, as described above in Section 2.2.2.2, Construction. Therefore, with implementation of traffic control plans and compliance with applicable provisions required as part of encroachment permits, construction impacts would not physically interfere with an adopted emergency response plan or emergency evacuation plan and the impact would be less than significant.

Once operational, the intertie pipeline would be located below ground such that existing rights-of-way would not be permanently impeded. The new pump station would not be located in the public right-of-way and therefore would not permanently impede emergency response. Therefore, operational impacts of the project and programmatic components would be less than significant. The Proposed Intertie-1 Project modifications would not change these conclusions. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to emergency response or emergency evacuation than previously identified in the Santa Cruz Water Rights Project EIR.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As described in the Santa Cruz Water Rights Project EIR, most of the unincorporated area of the County is in a moderate to high fire hazard severity zone (FHSZ). The Proposed Intertie-1 Project is within a moderate FHSZ. Areas where the state has financial responsibility for wildland fire protection (i.e., state responsibility areas, or SRAs) cover most of the Proposed Intertie-1 Project site, except for the area in the City of Scotts Valley, where the Scotts Valley Fire District has responsibility for wildland fire protection (i.e., local responsibility areas, or LRAs). The proposed pipeline alignment is primarily located within a SRA along La Madrona Drive. The pump station and the newly added pipeline segment along Firehouse Lane are located within a LRA. The EIR concluded that construction and operation of the Proposed Intertie-1 Project would not exacerbate wildfire risks or include habitable structures that could expose people or structures to wildfire, resulting in a less-than-significant impact. Construction of the Proposed Intertie-1 Project could include the use of welding equipment, torching, generators, chainsaws, and chippers, all of which could produce sparks. However, the City's Standard Construction Practice #27 includes fire safety measures that would be implemented during construction on undeveloped sites or sites with surrounding trees and other vegetation, specifically during use of such equipment. Spark arrestors would be required for internal

combustion engine equipment, fire suppression equipment would be required on site during use of such mechanical equipment, and construction activities would not be conducted during high fire hazard periods (i.e., red flag warnings).[4] Fire suppression equipment would include items such as fire extinguishers and shovels. The Proposed Intertie-1 Project modifications would extend the construction period, but the same safety measures would be in place. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to exposure of people or structures to risks involving wildland fires than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to hazards and hazardous materials that are applicable to the Proposed Intertie-1 Project, and no new mitigation measures related to hazards and hazardous materials are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to hazards and hazardous materials than previously identified in the Santa Cruz Water Rights Project EIR.

3.10 Hydrology and Water Quality

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
X.	**HYDROLOGY AND WATER QUALITY** – Would the project:					
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	pp. 4.8-40 to 4.8-42	No	No	No	None
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	pp. 4.8-57 to 4.8-58	No	No	No	None Applicable to Proposed Intertie-1 Project

[4] Red flag warnings and fire weather watches are issued by CAL FIRE based on weather patterns (low humidity, strong winds, dry fuels, etc.) and listed on its website (https://www.fire.ca.gov/programs/communications/red-flag-warnings-fire-weather-watches/).

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
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;	p. 4.8-65	No	No	No	Yes MM HYD-3
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	p. 4.8-65	No	No	No	Yes MM HYD-3
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; or	p. 4.8-65	No	No	No	Yes MM HYD-3
iv) impede or redirect flood flows?	p. 4.8-65	No	No	No	Yes MM HYD-3
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	p. 4.8-67	No	No	No	None
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	pp. 4.8-40 to 4.8-42, 4.8-57 to 4.8-58	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated hydrology and water quality in Section 4.8. The analysis was supported by hydrologic and water supply modeling conducted for the Santa Cruz Water Rights Project, which assesses operations with the implementation of the water rights modifications and all infrastructure components, described in Appendix D of the EIR and in the following discussion.

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The Santa Cruz Water Rights Project EIR concluded that the Proposed Intertie-1 Project would not violate any water quality standards or waste discharge requirements, and would have a less-than-significant impact related to water quality standards, waste discharge requirements, or degradation of water quality.

The City has identified Standard Construction Practices #1 through #9 (listed in Appendix A) that would be implemented by the City or its contractors during construction activities, where relevant, to reduce erosion and protect water quality during construction. Additionally, dewatering would be required if trenching for pipeline installation intercepts shallow groundwater and such activities would be subject to permitting approval by the Central Coast RWQCB. Water removed from the excavation would be pumped into temporary portable tanks to allow sediment to drop out and meet National Pollutant Discharge Elimination System (NPDES) dewatering permit (Order No. R3-2017-0042, NPDES Permit No. CAG993001, Waste Discharge Requirements, NPDES General Permit for Discharges with Low Threat to Water Quality) water quality standards before being discharged into storm drains or area drainages. Any potentially contaminated groundwater in dewatering wells would not be discharged into storm drains or area drainages, as temporarily stored water would also be tested for pollutants prior to discharge.

Another type of discharge would involve pipeline flushing. The newly installed pipeline would be disinfected with chlorine before being put into service which would require flushing of chlorinated water. Operations and maintenance would also include periodic pipeline flushing. Flushed water would be discharged into storm drains unless flushing occurs at the pump station, where it could be flushed into the sanitary sewer system via the connection on La Madrona Drive. Without proper controls, these discharges could adversely affect water quality in downstream receiving water bodies by increasing turbidity (if discharged directly without appropriate treatment) or due to high chlorine (the primary disinfectant used for drinking water) concentrations. However, the discharges would be subject to the Statewide General Waste Discharge Requirements (WDRs) for drinking water system discharges (SWRCB Order WQ. 2014-0194-DWQ, *Statewide National Pollutant Discharge Elimination System (NPDES) for Drinking Water System Discharges to Waters of the United States*). The General WDRs require that the City neutralize the residual chlorine remaining in disinfection effluent such that detectable chlorine levels are less than 0.019 mg/L, and require that the total dissolved solids be within surface water and groundwater quality objectives. In addition, the WDRs require implementation of proven BMPs provided by professional associations or institutes such as the American Water Works Association. Compliance with the General WDRs and the conditions therein would protect water quality in receiving water bodies. Therefore, the impact of pipeline flushing discharges would be less than significant.

No water quality impacts are anticipated with operation of the Proposed Intertie-1 Project, as no pollutants would be used within the pipeline. Operation of the pump station would result in hazardous materials use during operation of these facilities in accordance with requirements and recommendations in the applicable Safety Data Sheet(s) and federal, state, and local laws and regulations. Hazardous materials required for operation and maintenance would be stored in secured, covered areas with secondary containment. Therefore, operation of the proposed pump stations would not result in spills that could affect adjacent water bodies or underlying groundwater.

The Proposed Intertie-1 Project modifications would extend the proposed pipeline location and construction duration, but would not change construction methods or operations. As a result, construction and operation of the Proposed Intertie-1 Project, including modifications, would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to water quality standards, waste discharge requirements, or degradation of water quality than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have a less-than-significant impact related to groundwater supplies. As described in the EIR, dewatering would be required if trenching for pipeline installation intercepts shallow groundwater. However, such dewatering would be temporary and localized, and would result in a negligible quantity of groundwater being extracted with respect to the quantity of groundwater present in the aquifers. In addition, dewatering would occur in accordance with a dewatering discharge permit to be issued by the Central Coast RWQCB. The pipeline would not require a net increase in paving and therefore would not result in a loss of recharge. The pump station would result in small areas of paving that would be inconsequential with respect to recharge.

The EIR indicated that modification of the City's appropriative water rights through the Santa Cruz Water Rights Project would facilitate the opportunity for potential future water transfers and exchanges with neighboring water agencies, including but not limited to SVWD. Such transfers and exchanges would likely be provided for via agreements, such as the one being developed between the City and SVWD as part of the Proposed Intertie-1 Project, with defined terms related to timing, volume of water, water-year conditions, return of water, etc.

Additionally, while the EIR groundwater analysis indicates that up to approximately 0.9 mgd of water could be transferred by the City to SVWD and/or SLVWD via the proposed intertie facilities based on EIR Chapter 3, Project Description, the EIR includes coverage of up to a total volume of 2.4 mgd of water transfers and exchanges with neighboring water agencies, with some volume of water potentially returned to the City during dry periods. The amount of water that may be returned through exchanges is unknown at this time and would be based on the conditions described in the GSP for the Santa Margarita Groundwater Basin. As described in Chapter 2, Project Description, above, the provisions of the operational agreement would be consistent with the sustainable management criteria and avoid any undesirable results identified in the adopted GSP for the Santa Margarita Groundwater Basin, and in any future revisions to the GSP.

The Santa Margarita GSP describes a range of potential projects and management actions that will allow the Basin to attain sustainability. The Santa Margarita GSP identifies transfers with the City of Santa Cruz for inter-district conjunctive use as one of the projects and management actions for using surface water sources outside of the Santa Margarita Groundwater Basin to offset groundwater pumping during the wet season months. The Santa Margarita GSP indicates that a transfer project with the City of Santa Cruz has the primary objective of helping recover groundwater levels in the Lompico aquifer in the Scotts Valley area, as it would allow for passive groundwater recharge in areas where the SLVWD and SVWD extract groundwater by using treated surface water supply from the City of Santa Cruz in lieu of groundwater pumping. The GSP notes that the project has the potential to increase groundwater levels and create additional groundwater in storage if adequate amounts of treated surface water are available (SMGWA 2021).

To the extent that water transfers occur on a regular basis and allow neighboring water agencies to rest their groundwater wells, such transfers could have a beneficial impact on groundwater conditions in the Santa Margarita Groundwater Basin. As a result, the EIR concluded that the Proposed Intertie-1 Project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the sustainable groundwater management of the basin would be impeded. The Proposed Intertie-1 Project

modifications slightly extend the length of the intertie pipeline, but would not result in changes to construction methods or operations. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to groundwater supplies than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project 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?

and

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

and

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?

and

iv) Impede or redirect flood flows?

The Santa Cruz Water Rights Project EIR concluded that the Proposed Intertie-1 Project would have a potentially significant impact related to drainage patterns which would be reduced to less than significant with mitigation. The pump station would be constructed on relatively flat to gently sloping topography and would not substantially alter the drainage patterns of the area through the alteration of the course of a stream or river. However, the pump station could increase runoff associated with new paving as this site is currently undeveloped, which could cause associated erosion, contribution of runoff water which would exceed the capacity of drainage systems or result in substantial additional sources of polluted runoff. Given that this facility is located outside of the coastal zone and is a water infrastructure facility exempt from local ordinances under California Government Code 53091 (d) and (e), the City of Scotts Valley's drainage design standards would not apply to the Proposed Intertie-1 Project, these impacts would be potentially significant if the facilities were not properly designed.

The Proposed Intertie-1 Project modifications identify a specific site for the pump station. While impervious surfaces would increase, the area would be similar to other developed commercial properties in the vicinity. Implementation of MM HYD-3 identified in the EIR would avoid substantial erosion or siltation on or off site; substantial increases in the rate or amount of surface runoff; substantial additional sources of polluted runoff; or impeding or redirecting flood flows by requiring that: post-construction stormwater runoff rates be equal to or less than under existing conditions, to prevent off-site erosion, flooding, and exceedance of existing stormwater drainage capacities; and pollutants in stormwater runoff are minimized. This mitigation measure remains applicable to the Proposed Intertie-1 Project. Therefore, the Proposed Intertie-1 Project modifications would not

result in new or substantially more severe impacts related to drainage patterns than previously identified in the Santa Cruz Water Rights Project EIR.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

As described in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project would not traverse any flood zones, including in the newly added pipeline segment along Firehouse Lane. As a result, no impacts related to risk of release of pollutants due to inundation would occur. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to risk of release of pollutants due to inundation than previously identified in the Santa Cruz Water Rights Project EIR.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, for reasons discussed above in Section 3.10a and 3.10b. The Proposed Intertie-1 Project's modifications would slightly extend the length of the underground intertie pipeline and identify a specific pump station location, neither of which would result in conflicts with these plans. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with water quality control plans or sustainable groundwater management plans than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR identified MM HYD-3 to reduce impacts related to stormwater runoff at the proposed pump station to a less-than-significant level. MM HYD-3 remains applicable to the Proposed Intertie-1 Project. No new mitigation measures related to hydrology and water quality are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to hydrology and water quality than previously identified in the Santa Cruz Water Rights Project EIR.

3.11 Land Use and Planning

		Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XI.	**LAND USE AND PLANNING** – Would the project:					
a)	Physically divide an established community?	p. 4.9-21	No	No	No	Not Applicable
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?	pp. 4.9-22 to 4.9-29	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated land use and planning in Section 4.9. Under California Government Code Section 53091 (d), facilities for the production, generation, storage, treatment, and transmissions of water supplies, such as the project and programmatic infrastructure components of the Proposed Intertie-1 Project, are exempt from local building and zoning regulations.

a) Would the project physically divide an established community?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have no impact related to physical division of an established community. The only linear element in the Proposed Intertie-1 Project consists of a pipeline that would be located below ground, and the overlying areas would be restored after construction. The Proposed Intertie-1 Project modifications would not introduce any new linear elements within the landscape that would be above ground and could serve as a barrier to divide an existing community. The Proposed Intertie-1 Project modifications would extend the underground pipeline and site the pump station in a specific location in the same area identified in the EIR. Therefore, the Proposed Intertie-1 Project would not result in new or substantially more severe impacts related to physical division of an established community than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project 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?

The Santa Cruz Water Rights Project EIR determined that under California Government Code Section 53091 (d) and (e) facilities for the production, generation, storage, treatment, and transmissions of water supplies, such as the project and programmatic infrastructure components of the Proposed Intertie-1 Project, are exempt from local building and zoning regulations. Therefore, there are no local plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect that would be applicable to the Proposed Intertie-1 Project. The Proposed Intertie-1 Project modifications include extension of the intertie

pipeline within unincorporated Santa Cruz County. The addition of the pipeline segment along Firehouse Lane would be in the same location as the remainder of the pipeline, and but County and City of Scotts Valley plans, policies and regulations are not applicable to the Proposed Intertie-1 Project. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to land use and planning, and no new mitigation measures related to land use and planning are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to land use and planning than previously identified in the Santa Cruz Water Rights Project EIR.

3.12 Mineral Resources

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XII. MINERAL RESOURCES – 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?	p. 4.9-33	No	No	No	None
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?	p. 4.9-33	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated mineral resources in Section 4.9. Mineral resources include fossil fuels, metals, industrial minerals, and construction aggregate. The California Geological Survey is responsible for classifying land into Mineral Resource Zones (MRZs) under the Surface Mining and Reclamation Act (SMARA) based on the known or inferred mineral resource potential of that land. Mineral lands are classified based on geologic and economic factors without regard to existing land use and ownership (CGS 2021). The following MRZ categories are used to classify land:

- MRZ-1: Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- MRZ-2: Areas where geologic information indicates the presence of significant mineral resources.
- MRZ-3: Areas containing known or inferred mineral resources of undetermined mineral resource significance.
- MRZ-4: Areas where available geologic information is inadequate to assign to any other MRZ category.

a) Would the project 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?

and

b) Would the project 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?

As described in the Santa Cruz Water Rights Project EIR, no known areas of identified mineral resource significance are located on or in the immediate vicinity of the Proposed Intertie-1 Project. The pump station site is classified as MRZ-3(a), and the pipeline alignment is classified as MRZ-3(a) and MRZ-3(d), indicating areas containing known or inferred mineral resources of undetermined mineral resource significance (County of Santa Cruz 2022c). MRZ-3[a] indicates areas with potential for metallic mineral resources, and MRZ-3[d] indicates areas with potential for construction aggregate mineral resources; however, the MRZ-3 classification indicates areas containing mineral deposits, but the significance of which cannot be evaluated, and thus is not considered a valuable or locally important mineral resource. The EIR determined that, because the pipeline would be located within an existing public roadway, the Proposed Intertie-1 Project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. The Proposed Intertie-1 Project modifications include extension of the intertie pipeline south of Sims Road along a private road, which also would not result in loss of availability of know mineral resources. The Proposed Intertie-1 Project would not result in the loss of availability of a known or locally important mineral resource, as the Proposed Intertie-1 Project is located on lands designated as MRZ-3 and is primarily located within existing roadways. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to mineral resources than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to mineral resources, and no new mitigation measures related to mineral resources are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to mineral resources than previously identified in the Santa Cruz Water Rights Project EIR.

3.13 Noise

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XIII. NOISE – Would the project result in:					
a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	p. 4.10-25	No	No	No	None Applicable to Proposed Intertie-1 Project
b) 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?	p. 4.10-29 to 4.10-30	No	No	No	Yes MM NOI-2
c) Generation of excessive groundborne vibration or groundborne noise levels?	pp. 4.10-35	No	No	No	Yes MM NOI-3
d) 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?	p. 4.10-24	No	No	No	Not Applicable

Discussion

The Santa Cruz Water Rights Project EIR evaluated noise in Section 4.10. The primary noise source occurring in the ambient noise environment surrounding the Proposed Intertie-1 Project site is vehicular traffic noise on the local and regional roadway network. Highway 17 runs just to the east of the majority of the proposed pipeline alignment and the proposed pump station site and has a modeled noise level of 76.7 A-weighted decibels (dBA) at a distance of 100 feet, based on its average daily traffic volume of 60,100 vehicles. Roadway noise would attenuate with distance and shielding provided by intervening objects between the source roadway and the receptors. Based on modeling of composite traffic noise levels conducted for the Santa Cruz Water Rights Project EIR, the existing noise level at the pump station site is 66 dBA, and the existing noise level along the pipeline alignment ranges from 65 to 79 dBA.

a) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a less-than-significant impact on ambient noise levels. Once construction is complete, the intertie pipeline would not introduce any new noise sources in the ambient noise environment. The EIR assumed that the pump station would be constructed in a manner consistent with other pump stations in the study area, which locate all pumps, motors, and noise-generating components within a concrete masonry unit (CMU) brick building. The enclosed CMU brick buildings housing the equipment at existing pump stations within the area generate noise levels at or below the existing ambient levels. Additionally, the general location for the pump station that was analyzed in the EIR was located between approximately 150 and 500 feet from the centerline of Highway 17, consistent with the current proposed pump station location. As such, existing and future traffic noise levels at the pump station site would result in an elevated ambient noise environment. Operational noise levels generated by the pump station are anticipated to be at or below ambient noise levels in the immediate vicinity. The Proposed Intertie-1 Project modifications would not change the above conclusions, as the pipeline in the newly added segment along Firehouse Lane would not generate any operational noise, similar to the rest of the pipeline alignment, and the pump station is consistent with the location and design anticipated in the EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to increases in ambient noise levels than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project result in 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?

Pipeline construction activities would generate temporary noise typical of other pipeline installation projects throughout the state. The pipeline construction would occur within close proximity to noise-sensitive receptors, as existing residential land uses are located adjacent to the proposed alignment. As described in the Santa Cruz Water Rights Project EIR, noise-generating phases of the pipeline construction would be the pipeline installation and paving phases. The loudest construction noise levels would occur during the paving phase of the pipeline construction, with predicted composite construction noise levels of 85.8 dBA equivalent noise level (L_{eq}) at a distance of 50 feet from the centerline of the linear construction area active at that time. Paving operations associated with the intertie pipeline would generate noise levels exceeding the 60 dBA threshold at distances less than 500 feet and the 75 dBA threshold at distances less than 131 feet.

The pump station would be constructed in phases. The phases would be site preparation, building construction, architectural coating, paving, and testing. Building construction would be the loudest phase, with a predicted composite construction noise level of 86.2 dBA L_{eq} at a distance of 50 feet from the center of construction operations. Based on noise levels associated with pipeline noise levels, the proposed pump station construction would generate noise levels exceeding the 60 dBA threshold at a distance of 518 feet and the 75 dBA threshold at a distance of 136 feet. The pump station location identified with the Proposed Intertie-1 Project modifications would be in the same general area identified and analyzed in the Santa Cruz Water Rights Project EIR, and thus, construction impacts would be similar to those identified in the EIR.

Based on the proximity of potential nearby noise-sensitive receptors, construction of the Proposed Intertie-1 Project would exceed the noise level thresholds in some locations for a limited duration. Construction of the pipeline would progress along the pipeline corridor rapidly and therefore the exposure of sensitive receptors would be limited in duration. Likewise, construction of the pump station would occur over a two-month period and therefore exposure of sensitive receptors would also be limited in duration. These construction activities would generate typical construction noise that is intermittent and varies throughout the construction period depending on the construction activity, equipment being used, location of equipment on the pipeline corridor or pump station site, etc. However, this programmatic component is conservatively assumed to result in a potentially significant impact**.**

To address potentially significant construction noise impacts, the Santa Cruz Water Rights Project EIR included MM NOI-2, which requires implementation of various measures related to construction noise. MM NOI-2 would reduce the temporary increase in ambient noise levels during construction in excess of applicable standards in the vicinity of the Proposed Intertie-1 Project facilities by restricting construction hours to between the hours of 8:00 a.m. and 5:00 p.m.; requiring the location of noise-generating equipment as far as possible from noise-sensitive receptors, within an acoustically rated enclosure, shroud, or temporary barrier if construction hours cannot be restricted to the standard work hours of 8:00 a.m. to 5:00 p.m.; requiring certain types of construction equipment be located within such enclosures, shrouds, or temporary barriers regardless of hours of construction; requiring portable and stationary site support equipment to be located as far as possible from nearby sensitive receptors; requiring the use of mufflers and noise suppressors on equipment; and limiting equipment idling. Implementation of MM NOI-2 would result in the minimization of elements of construction noise that would be typically considered to be unreasonably disturbing, such as noise having excessive intensity, duration, or pitch. Therefore, the EIR determined that implementation of MM NOI-2 would reduce construction noise to a less-than-significant level.

The Proposed Intertie-1 Project modifications would extend the pipeline along a private road with some private residences, and would also extend the overall construction period, however, similar levels of fluctuating construction noise would be expected to occur throughout the construction period. Although the construction area and duration would be expanded with the Proposed Intertie-1 Project modifications, the Proposed Intertie-1 Project would not change construction methods or result in substantially increased temporary noise impacts on a given day in a given location. However, MM NOI-2 is still applicable to the Proposed Intertie-1 Project, including modifications.

As indicated above, operational noise levels generated by the Proposed Intertie-1 Project would not permanently increase ambient noise levels and therefore also would not exceed applicable noise standards established in local general plans or noise ordinances. As described in Section 2.2.2.3, Operations and Maintenance, the pump station would be connected to a portable back generator in the event of a power outage when the pump station is needed. Since Section 5.17.030 B of the City of Scotts Valley municipal code allows noise from such emergency generators to be as high as 75 dBA at a property line, and because Santa Cruz County considers such noise to be temporary, operational noise that includes sound from the operating portable emergency generators would result in a less-than-significant impact.

Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to temporary increases in ambient noise levels in excess of standards than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Groundborne noise and vibration sources associated with the Proposed Intertie-1 Project would include the use of heavy equipment (e.g., excavator, tractors, dozers, vibratory roller), air compressors, cement mixer trucks, and powered hand tools. The Proposed Intertie-1 Project would include linear construction for pipeline installation and construction of the proposed pump station. Use of a vibratory roller during the paving portions of pipeline installation would produce vibration levels exceeding the Caltrans threshold of 0.3 in/sec peak particle velocity (PPV) at distances less than 15 feet from the vibratory roller. The heavy equipment associated with the construction of the proposed pump station would produce vibration levels exceeding the Caltrans 0.3 in/sec PPV threshold at distances less than 9 feet.

As the precise construction limits were not specifically defined at the time that the Santa Cruz Water Rights Project EIR was published, the EIR determined that Proposed Intertie-1 Project construction may generate significant groundborne noise and vibration levels at adjacent sensitive receptors, and therefore concluded that generation of groundborne noise and vibration levels associated with this programmatic component would result in a potentially significant impact. The EIR included MM NOI-3 requiring that vibratory rollers or compactors be used at least 15 feet away from sensitive receptors, and any use of rubber tires on any heavy equipment operating within 9 feet of sensitive receptors. Therefore, with the implementation of this mitigation measure, the EIR determined that the vibration impacts of the Proposed Intertie-1 Project would be reduced to a less-than-significant impact level. MM NOI-3 is applicable to any work in the vicinity of sensitive receptors for the Proposed Intertie-1 Project. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to groundborne vibration than previously identified in the Santa Cruz Water Rights Project EIR.

d) 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?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have no impact related to exposure of people in the project area to excessive airport-related noise, as the Proposed Intertie-1 Project is not located within an airport influence area or within an airport land use plan. The nearest airstrip to the Proposed Intertie-1 Project is the Bonny Doon Village Airport, which is a private use airport located approximately 6 miles to the northwest. The nearest public or public-use airport is Watsonville Municipal Airport, which is located approximately 15 miles to the southeast. The Proposed Intertie-1 Project modifications do not change the overall Project location in relation to the airports. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to airport noise than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR identified MM NOI-2 to reduce impacts related to temporary increases in ambient noise levels from construction noise, and MM NOI-3 to reduce impacts related to construction vibration to less-than-significant levels. MM NOI-2 and MM NOI-3 remain applicable to the Proposed Intertie-1 Project. No new mitigation measures related to noise are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to noise than previously identified in the Santa Cruz Water Rights Project EIR.

3.14 Population and Housing

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XIV. POPULATION AND HOUSING – 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)?	pp. 5-10 to 5-18	No	No	No	Not Applicable
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	pp. 4.1-5 to 4.1-6	No	No	No	Not Applicable

Discussion

The Santa Cruz Water Rights Project EIR evaluated population and housing in Section 4.1.2. As described in the EIR, no new housing units are proposed that could induce substantial unplanned population growth, and no displacement of housing is proposed. Therefore, the Proposed Intertie-1 Project would have a less-than-significant impact related to population and housing, as described below.

a) ***Would the project 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)?***

The EIR found that the Proposed Intertie-1 Project would not directly foster economic or population growth or construction of additional housing, as it would not result in construction of new residential or commercial development and would not result in a substantial number of new permanent employees that would induce population growth or construction of new housing. The Proposed Intertie-1 Project would not indirectly induce population growth through the expansion of public services into an area that does not currently receive these services. There are no obstacles to population growth that would be removed or affected as a result of the Proposed Intertie-1 Project.

A primary purpose of the Proposed Intertie-1 Project is to provide water supplies during dry periods and multiple drought years and to provide flexibility in implementing a conjunctive water use strategy within the areas served by the City and with other regional partners to promote sustainable groundwater management due to overdrafted regional aquifers. As described in the EIR, existing plans for SVWD and SLVWD report adequate supplies to support planned growth in their respective service areas but recognize that long-term groundwater management is needed to alleviate overdrafted groundwater conditions. As such, future potential water transfers between the City and these agencies as a result of the Proposed Intertie-1 Project would support regional groundwater managements goals and plans and would not be considered growth inducing.

The Proposed Intertie-1 Project modifications extend the length of the intertie pipeline and provide a specific location for the associated pump station, but do not change the primary purpose and function of the Proposed Intertie-1 Project. Therefore, the proposed modifications do not change the above analysis and conclusion in the Santa Cruz Water Rights Project EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to direct or indirect inducement of substantial unplanned population growth than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

As described in the Santa Cruz Water Rights EIR, the Proposed Intertie-1 Project site does not contain existing housing; therefore, the Proposed Intertie-1 Project would not displace substantial numbers of existing people or housing and would not require the construction of replacement housing elsewhere. The Proposed Intertie-1 Project modifications including the additional pipeline segment along Firehouse Lane and the determination of the proposed pump station site on vacant SVFD property do not change this conclusion. The Proposed Intertie-1 Project, including the modifications, is located within roadway rights-of-way and on SVFD property no housing is present on the site. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to displacement of people or housing than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to population and housing, and no new mitigation measures related to population and housing are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to population and housing than previously identified in the Santa Cruz Water Rights Project EIR.

3.15 Public Services

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XV. PUBLIC SERVICES					
a) 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 for any of the public services:					
Fire protection?	p. 4.1-6	No	No	No	Not Applicable
Police protection?	p. 4.1-6	No	No	No	Not Applicable
Schools?	p. 4.1-6	No	No	No	Not Applicable
Parks?	p. 4.1-6	No	No	No	Not Applicable
Other public facilities?	p. 4.1-6	No	No	No	Not Applicable

Discussion

The Santa Cruz Water Rights Project EIR evaluated public services in Section 4.1.3. As described in the EIR, no new housing units are proposed that could increase population and demand for public services. Additionally, the Proposed Intertie-1 Project would not include any new land uses that would generate substantial new demand for public services. Therefore, the Proposed Intertie-1 Project would have a less-than-significant impact on public services.

a) 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 for any of the public services: fire protection, police protection, schools, parks, and other public facilities?

The Proposed Intertie-1 Project modifications would include an additional segment of pipeline, and more detailed pump station design, and would not result in any additional impacts on public services. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to public services than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to public services, and no new mitigation measures related to public services are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to public services than previously identified in the Santa Cruz Water Rights Project EIR.

3.16 Recreation

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XVI. RECREATION					
a) Would the project conflict with established recreational uses of the area?	pp. 4.11-10 to 4.11-12	No	No	No	None
b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	p. 4.11-12	No	No	No	None
c) 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?	p. 4.11-10	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated recreation in Section 4.11. As further explained below, the EIR found that the Santa Cruz Water Rights Project, including the Proposed Intertie-1 Project, would not result in a substantial increase in population which would increase remand for recreational facilities. The EIR included modeling of hydrology and water supply with the Santa Cruz Water Rights Project to evaluate potential changes to recreational uses at Loch Lomond Reservoir, Newell Creek, the San Lorenzo River, and the North Coast Streams, as further described below.

a) Would the project conflict with established recreational uses of the area?

Hydrologic and water supply modeling for the Santa Cruz Water Rights Project EIR was performed to evaluate potential changes to recreational uses due to implementation of water rights modifications and water supply augmentation components. The EIR found that augmentation of the City's water supply with aquifer storage and recovery (ASR) facilities in particular would reduce the City's reliance on Loch Lomond Reservoir, thereby increasing lake levels and having a beneficial effect on boating. The Proposed Intertie-1

Project was also included in the water supply augmentation components that were modeled for the Santa Cruz Water Rights Project EIR and, thus, the effects of the Proposed Intertie-1 Project are accounted for in the modeling and analysis. The Proposed Intertie-1 Project modifications would remain within the total volume of water transfers that were considered in the EIR. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with established recreational uses than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have a less-than-significant impact related to use of parks and recreational facilities. The Proposed Intertie-1 Project would not result in new permanent staff that could increase the use of parks and recreational facilities such that substantial deterioration would occur. The Proposed Intertie-1 Project modifications would not result in any additional employment and associated increase in population. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to deterioration of parks and recreational facilities than previously identified in the Santa Cruz Water Rights Project EIR.

c) 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?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have no impact related to the construction or expansion of recreational facilities because it would not include recreational facilities, and the Proposed Intertie-1 Project modifications similarly do not include recreational facilities. Furthermore, as discussed above, the Proposed Intertie-1 Project would not result in new population that would require the construction or expansion of recreational facilities. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to construction or expansion of recreational facilities than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to recreation, and no new mitigation measures related to recreation are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to recreation than previously identified in the Santa Cruz Water Rights Project EIR.

3.17 Transportation

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XVII. TRANSPORTATION – Would the project:					
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	pp. 4.12-15 to 4.12-18	No	No	No	None
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	pp. 4.12-18 to 4.12-19	No	No	No	None
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	pp. 4.12-19 to 4.12-20	No	No	No	None
d) Result in inadequate emergency access?	pp. 4.12-20 to 4.12-21	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated transportation in Section 4.12. The transportation network in the vicinity of the Proposed Intertie-1 Project site is described as follows. Generally, no transit stops are located in the project area and pedestrian and bicycle facilities are limited.

Highway 17 is a north-south, four-lane divided freeway that connects the City of Santa Cruz with areas of unincorporated Santa Cruz County, as well as to Santa Clara County and the San Jose metropolitan area. Highway 17 connects with Interstate 880 (I-880) in the City of San Jose and Highway 1 in the City of Santa Cruz. No bicycle or pedestrian facilities are provided. The posted speed limit ranges from 50 mph to 65 mph.

La Madrona Drive is a north-south, two-lane, undivided roadway that connects the City of Scotts Valley and City of Santa Cruz and acts as a frontage road to Highway 17. According to the functional street classification within the County's General Plan Circulation Element, it is identified as a Collector roadway. Pedestrian facilities are not provided. According to the Santa Cruz County Bike Map, La Madrona Drive is listed an Alternate Route. The posted speed limit is 35 mph.

Sims Road is an east-west, two-lane, undivided roadway that connects Graham Hill Road to La Madrona Drive. According to the functional street classification within the County's General Plan Circulation Element, it is identified as a Collector roadway. Bicycle and pedestrian facilities are not provided. The posted speed limit is 25 mph.

Firehouse Lane is a north-south, one-lane, private roadway that provides local access to residences.

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would have a less-than-significant impact related to conflicts with programs, plans, ordinances, or policies addressing the circulation system, based on an evaluation of the overlapping construction phases for the components of the Santa Cruz Water Rights Project that constitute the peak phase of construction activities. Analysis of the peak construction overlapping phases of the Santa Cruz Water Rights Project indicated that the expected number of peak hour and daily trips would not create a measurable impact on any roadway or intersection in the area and would not conflict with applicable local agency level of service (LOS) policies. The Proposed Intertie-1 Project would have fewer peak hour and daily trips than the peak construction phase analyzed in the EIR, and, therefore would also be less than significant. Including modifications, the Proposed Intertie-1 Project would not increase roadway capacity, generate a permanent increase in traffic, or change traffic patterns that could cause an impact to the circulation system including transit, roadway, bicycle, and pedestrian facilities and therefore would not conflict with adopted policies addressing the circulation system.

Once Proposed Intertie-1 Project construction is complete, operations would entail a minimal increase in on-road vehicle trips associated with routine inspection and maintenance of the new facilities by City staff as discussed in the Santa Cruz Water Rights Project EIR. Due to the nominal increase in trips generated during operations and maintenance, the roadway operations in the area would not substantially differ from existing conditions. Therefore, operation of the Proposed Intertie-1 Project would not conflict with adopted policies, plans, or programs addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. The Proposed Intertie-1 Project modifications would slightly extend the underground intertie pipeline and construction period, but would not result conflicts with programs, plans, ordinances, or policies addressing the circulation system. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to conflicts with programs, plans, ordinances, or policies addressing the circulation system than previously identified in the Santa Cruz Water Rights Project EIR.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The project and programmatic infrastructure components of the Santa Cruz Water Rights Project would be categorized under (3), qualitative analysis, as Subdivision (b)(3) recognizes that lead agencies may not be able to quantitatively estimate VMT for every project type. Furthermore, the Governor's Office of Planning and Research (OPR) has identified a screening threshold that states that projects that generate fewer than 110 daily trips generally may be assumed to cause a less-than-significant impact related to VMT (OPR 2018).

The County of Santa Cruz has published guidelines for the implementation of Senate Bill (SB) 743, along with screening criteria that uses the guidance published within the OPR technical advisory as a reference point. Specifically, the guidance excludes from further analysis "small projects" that generate fewer than 100 net new trips per day. The City of Santa Cruz also has developed implementation guidelines for SB 743, including the same screening criteria that excludes "small projects" that generate less than 110 trips per day from further analysis, which matches the recommended guidance within the OPR Technical Advisory. As described in the EIR, during the peak overlapping construction phases, the Santa Cruz Water Rights Project would result in a total of approximately 46 daily trips, or 68 total passenger-car-equivalent (PCE)[5] daily trips, within the study area and roadway network.

As indicated above, the Proposed Intertie-1 Project was not part of the peak construction phase evaluated in the EIR, but as a single project it would have fewer trips than described for the peak overlapping construction schedule, which represents a worst-case scenario. As a worst-case scenario, the Proposed Intertie-1 Project is expected to result in a similar number (36) of daily trips as estimated for the City/Soquel Creek Water District/Central Water District intertie evaluated in the peak overlapping construction phase in the Santa Cruz Water Rights Project EIR as both are similar types of infrastructure projects. With addition of the Proposed Intertie-1 Project to the other overlapping trips analyzed in the EIR, the combined number would total 82 daily trips. The combined daily trips would still fall under the 110 daily trips threshold for "small projects" that was considered in the EIR for impacts related to VMT. Additionally, construction-related traffic and resulting VMT would be temporary and short term. Construction traffic and its related trips would be eliminated upon completion of construction. Furthermore, while neither OPR nor the County's or City's VMT guidelines provide additional guidance for temporary, construction-related trips, construction-related trips of the Proposed Intertie-1 Project and other projects analyzed in the EIR would still be below the "small projects" threshold.

Once construction is completed, VMT would return to pre-project conditions as the neither the Proposed Intertie-1 Project or modifications would result in increased staff or operations. Therefore, as the Proposed Intertie-1 Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) or cause an increase in VMT which is greater than 15% below the regional average VMT, impacts would be less than significant, the Proposed Intertie-1 Project modifications would not change this conclusion. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to VMT than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would not substantially increase hazards due to a geometric design feature or incompatible uses. The pipeline component would use public roadways for installation of the underground pipeline, intermittent construction staging, and parking. Any roadway blockages for larger construction trucks would be temporary, would occur with flagging and safe maneuvers, and would be under the provisions of a traffic control plan or other encroachment permit requirements, as described in Impact TRA-4 and therefore would not create

[5] Passenger car equivalency factors are used in level of service (LOS) analyses to more accurately account for the effect of trucks on the circulation system. All truck trips are converted to PCE trips using a factor of 2.0 PCE for vendor trucks and 3.0 PCE for haul trucks. For the consideration of VMT impacts, the non-PCE metric is used since VMT is focused on commuting passenger-car impacts. Therefore, the PCE metric is not used in the evaluation of VMT impacts.

hazardous roadway conditions. Proposed Intertie-1 Project operations would generate nominal traffic and vehicle trips associated with routine operations and maintenance of the facility. The Proposed Intertie-1 Project modifications would extend the underground pipeline, but does not include modifications to existing roads or introduction of sharp curves, dangerous intersections, or incompatible uses during construction or operation. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to roadway hazards than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project result in inadequate emergency access?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a less-than-significant impact on emergency access. As described in the Santa Cruz Water Rights Project EIR, construction and staging areas would be located to not block any egress or ingress points. Construction of some of the Proposed Intertie-1 Project would require partial road closures or access limitations in public roadways on a temporary and periodic basis during the construction period. Encroachment permits would need to be obtained from the County of Santa Cruz and City of Scotts Valley for work done within the public right-of-way. The issuance of encroachment permits requires submission of traffic control plans in Santa Cruz County. While the City of Scotts Valley specifies the need for a traffic control plan only if required by the Public Works Director/City Engineer, other requirements of encroachment permits include conducting all street improvements in accordance with the City of Scotts Valley Standard Details and Specification, which include policies for addressing lane closures or any form of traffic diversions. Traffic control would also comply with the requirements of the Caltrans encroachment permit for installation of temporary construction signage on Highway 17. Implementation of these plans and requirements would ensure that access for emergency vehicles would be maintained during construction. Additionally, access would be maintained on Firehouse Lane. Therefore, the construction of the Proposed Intertie-1 Project would comply with all applicable local requirements and would not result in inadequate emergency access. Similarly, the Proposed Intertie-1 Project would have limited operational traffic and vehicle trips associated with routine maintenance of facilities. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts on emergency access than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to transportation, and no new mitigation measures related to transportation are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to transportation than previously identified in the Santa Cruz Water Rights Project EIR.

3.18 Tribal Cultural Resources

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XVIII. TRIBAL CULTURAL RESOURCES					
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 Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	pp. 4.4-30 to 4.4-31	No	No	No	Yes MM CUL-2
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?	pp. 4.4-30 to 4.4-31	No	No	No	Not Applicable

Discussion

The Santa Cruz Water Rights Project EIR evaluated tribal cultural resources in Section 4.4. Dudek conducted a NAHC SLF search for the EIR, which did not identify any known tribal cultural resources within the study area and 0.25-mile buffer. Dudek notified tribes traditionally associated with the study area about the Proposed Intertie-1 Project and requested information regarding tribal cultural resources on April 7, 2020. The City also consulted with tribes pursuant to Assembly Bill (AB) 52. No known geographically defined tribal cultural resources have been identified.

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 Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

and

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The Santa Cruz Water Rights Project EIR found that the Proposed Intertie-1 Project would not impact known tribal cultural resources, but that the Proposed Intertie-1 Project could have a potentially significant impact on the significance of a tribal cultural resource in the event of an inadvertent discovery. In the event that unknown tribal cultural resources are uncovered during the course of construction, Standard Construction Practices #24 and #25 outline protocols to be followed in the event of inadvertent discoveries of archaeological resources or human remains, respectively, and would be implemented. With the implementation of Standard Construction Practice #25, potential impacts on human remains would be less than significant. However, the EIR determined that with the implementation of Standard Construction Practice #24, the Proposed Intertie-1 Project could still cause substantial adverse changes in the significance of a tribal cultural resource, as the practice stops short of specifying how to appropriately treat such a significant resource, as described in Section 3.5, Cultural Resources. The EIR included MM CUL-2 which includes specifications for treatment of resources determined to be significant, which would avoid substantial adverse changes in the significance of tribal cultural resources, as described above in Section 3.5. The Proposed Intertie-1 Project modifications extend the intertie pipeline and construction area, and MM CUL-2 remains applicable to the Proposed Intertie-1 Project, although no potentially significant cultural resources were identified within the Proposed Intertie-1 Project area, including extended pipeline area, which could be adversely affected by the Proposed Intertie-1 Project as summarized in Appendix C. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to tribal cultural resources than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR identified MM CUL-2 to reduce impacts related to inadvertent discovery of tribal cultural resources during construction activities to a less-than-significant level. MM CUL-2 remains applicable to the Proposed Intertie-1 Project. No new mitigation measures related to tribal cultural resources are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to tribal cultural resources than previously identified in the Santa Cruz Water Rights Project EIR.

3.19 Utilities and Service Systems

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XIX. UTILITIES AND SERVICE SYSTEMS – 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?	p. 4.13-28	No	No	No	Yes MM BIO-1, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-11, CUL-2, GEO-2, HYD-3, NOI-2, NOI-3
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	pp. 4.13-30 to 4.13-31	No	No	No	None
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?	pp. 4.13-31 to 4.13-32	No	No	No	None
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?	p. 4.13-32	No	No	No	None
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	pp. 4.13-32 to 4.13-33	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated utilities and service systems in Section 4.13. Utility providers in the project area are summarized as follows.

Water. As discussed in the EIR, water supply in the project area is provided by the City of Santa Cruz and the SVWD. The City provides drinking water primarily from surface water sources with some groundwater production in the Santa Cruz Mid-County Groundwater Basin. The City serves approximately 25,000 connections in an

approximate 20-square-mile area, including the City, a portion of the City of Capitola, and portions of unincorporated Santa Cruz County in Live Oak, Soquel, and along Graham Hill Road, as well as limited service along the coast north of the City,[6] primarily along State Highway 1. The current population residing in the City's water service area is estimated as 95,251 people.

SVWD provides potable and recycled water and serves most of the City of Scotts Valley and some unincorporated areas north of the City, serving a population of approximately 11,000. The only source of potable water for the SVWD is groundwater from the Santa Margarita Groundwater Basin. SVWD shares the basin with neighboring SLVWD, the Mount Hermon Association, other small water systems, and over 1,100 private well users.

Wastewater. The City wastewater treatment facility (WWTF) serves the cities of Santa Cruz and Capitola and parts of unincorporated Santa Cruz County. The City also provides capacity for the City of Scotts Valley to discharge its treated wastewater into the Pacific Ocean via the City's discharge.

Solid Waste. Disposal of solid waste generated by the Proposed Intertie-1 Project would likely occur at the City of Santa Cruz Resource Recovery Facility (RRF) or the County of Santa Cruz Buena Vista Landfill. The Santa Cruz Water Rights Project EIR indicates that the City's RRF has a remaining capacity of 46% and an estimated closure date of January 2058, and the County's Buena Vista Landfill has a remaining capacity of 29% and an estimated closure date of July 2031.

a) Would the project 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?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would result in new or expanded water facilities that would result in significant impacts, which would be reduced to less than significant with mitigation incorporated. The EIR evaluated the impacts of construction and operation of the Proposed Intertie-1 Project throughout Chapter 4 of the EIR as summarized in the preceding sections of this Addendum, and identified potentially significant impacts that could be reduced to a less-than-significant level with mitigation related to: special-status wildlife and nesting birds (MM BIO-1, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10), special-status plants (MM BIO-1, BIO-10), sensitive habitat (MM BIO-1, BIO-11); archaeological resources (MM CUL-2), tribal cultural resources (MM CUL-2), paleontological resources (MM GEO-2), construction noise (MM NOI-2), and construction vibration (MM NOI-3). As demonstrated throughout this checklist, no new or more severe impacts have been identified for the Proposed Intertie-1 Project. All of the mitigation measures identified in the EIR as being applicable to the City/SVWD intertie improvements are still applicable to the Proposed Intertie-1 Project, and no new mitigation measures are required as no new significant impacts have been identified as resulting from the Proposed Intertie-1 Project modifications. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to new or expanded water facilities than previously identified in the Santa Cruz Water Rights Project EIR.

[6] The City's service on the coast north of the City consists of limited numbers of connections that primarily derive from the City's agreements with landowners along its water pipelines. The City also provides approximately 12 mgy of raw water for agricultural irrigation along the coast north of the City.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a beneficial impact related to water supply by allowing water transfers with other water districts, in support of the implementation of the City's Water Supply Augmentation Strategy Element 1 (passive recharge of regional aquifers via water transfers and exchanges). While existing City water supplies would be used for water transfers, this would occur at times of water availability and would also result in underground storage of water for future extraction during dry periods. Therefore, the Proposed Intertie-1 Project would help alleviate potential water shortfalls during dry and multiple-dry years to meet the projected demand in the areas served by the City. The Proposed Intertie-1 Project modifications would not change the purpose of the Project with or change this conclusion. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to water supplies than previously identified in the Santa Cruz Water Rights Project EIR.

c) Would the project 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?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a less-than-significant impact related to wastewater treatment capacity. As described in the EIR, the Proposed Intertie-1 Project would not include substantial new employment that would generate increased wastewater treatment demand; the proposed modifications would not result in increased employment. The Proposed Intertie-1 Project modifications include installation of a connection to the County of Santa Cruz sanitary sewer line in La Madrona Drive for purposes of flushing sample test water or pipeline potable water during startup and shutdown of the pump station. Sewer discharge permits from the Santa Cruz County Sanitation District (SCCSD) would be required to permit discharge from the new facility. Since pipeline flushing is an intermittent activity, it would not substantially affect average wastewater flows, and there is existing adequate excess capacity available to the SCCSD at the City's WWTF as described in the EIR, and therefore, the Proposed Intertie-1 Project's impact would be less than significant. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to wastewater treatment capacity than previously identified in the Santa Cruz Water Rights Project EIR.

d) Would the project 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?

The Santa Cruz Water Rights Project EIR determined that the Proposed Intertie-1 Project would have a less-than-significant impact related to solid waste generation. As described in the EIR, construction activities would generate solid waste, including vegetation, asphalt, concrete, and other nonhazardous materials, that could be disposed of in a landfill. Excavation during construction of pipeline trenches and the pump station would generate spoils, some of which would be expected to be reused on site as fill material. In general, the Proposed Intertie-1 Project would not be large in size and would not result in the generation of a substantial amount of waste materials requiring off-site disposal. Earthen spoils that could not be accommodated on site could either be used as fill for other construction projects in the area or could be

hauled to a landfill to be used as intermediate cover.[7] It is expected that the disposal of construction materials would generally be limited, and the majority of construction waste would be recycled and reused due to the cost of disposing of such materials. As further described in the EIR, landfills serving the Proposed Intertie-1 Project have adequate capacity to accommodate solid waste generated by the Proposed Intertie-1 Project. The Proposed Intertie-1 Project modifications would include the additional pipeline segment along Firehouse Lane, resulting in approximately 1,600 feet more of pipeline and an associated increase in solid waste generation. Similar to the rest of the pipeline alignment, excavated materials from the additional segment would also be expected to be reused on site to the extent possible, used as fill for other construction projects in the area, or hauled to a landfill to be used as intermediate cover. As such, the Proposed Intertie-1 Project modifications would not generate a substantial increase in solid waste requiring landfill disposal. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to solid waste generation than previously identified in the Santa Cruz Water Rights Project EIR.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As described in the Santa Cruz Water Rights Project EIR, the Proposed Intertie-1 Project would be required to comply with all applicable regulations associated with the reduction of solid waste entering landfills, as well as plans, policies, and programs related to recycling/diversion and disposal of solid waste. As previously noted, during construction, all wastes would be expected to be recycled to the maximum extent possible, in accordance with applicable regulations. All nonhazardous solid waste generated from the Proposed Intertie-1 Project once operational would be recycled, with a goal of 75%, in compliance with the Integrated Waste Management Act. Unsalvageable materials generated from the Proposed Intertie-1 Project would be disposed of at authorized sites in accordance with all applicable federal, state, and local statutes and regulations. Thus, the Proposed Intertie-1 Project would comply with state and local statutes and regulations related to solid waste during construction and operation and the impact would be less than significant. The Proposed Intertie-1 Project modifications would not change this conclusion. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to compliance with solid waste regulations than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to utilities and service systems, and no new mitigation measures related to utilities and service systems are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts. Mitigation measures for significant impacts related to other impacts resulting from the Proposed Intertie-1 Project, including modifications, are summarized in Section 3.19(a) above.

[7] As defined in 27 CCR Section 20700, intermediate cover is compacted earthen material of at least 12 inches placed on the surface of a fill where no additional solid waste will be deposited within 180 days. Intermediate cover reduces odors, keeps litter from scattering, and helps deter scavengers.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to utilities and service systems than previously identified in the Santa Cruz Water Rights Project EIR.

3.20 Wildfire

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XX. WILDFIRE – 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 evacuation plan?	pp. 4.7-29 to 4.7-30	No	No	No	None
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?	pp. 4.7-29 to 4.7-30	No	No	No	None
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?	pp. 4.7-29 to 4.7-30	No	No	No	None
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?	pp. 4.7-29 to 4.7-30	No	No	No	None

Discussion

The Santa Cruz Water Rights Project EIR evaluated wildfire in Section 4.7. As shown on Figure 4.7-2 of the EIR, the Proposed Intertie-1 Project is located within a moderate FHSZ. The proposed pipeline alignment is primarily located within a SRA along La Madrona Drive. The pump station and the newly added pipeline segment along Firehouse Lane are located within a LRA.

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

and

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

and

c) Would the project 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?

and

d) Would the project 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?

The Santa Cruz Water Rights Project EIR determined that impacts related to wildfire would be less than significant. The Proposed Intertie-1 Project would not include modifications to the existing roadway system that could impair emergency access or evacuation during construction or operation, as described in Section 3.9, Hazards and Hazardous Materials. In addition to the City's standard construction fire safety practices described above, facilities would be designed in accordance with the California Fire Code and would be required to comply with all applicable regulations for fire safety, as described in the EIR. The Proposed Intertie-1 Project would not include drainage changes or other features that could exacerbate wildfire risk or wildfire-related hazards such as flooding or landslides. Additionally, as the Proposed Intertie-1 Project, including modifications, would not include habitable structures, it would not expose project occupants to wildfire risks. As such, the Proposed Intertie-1 Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and would not be located in or near lands classified as very high FHSZs and impacts would be less than significant. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to wildfire than previously identified in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

The Santa Cruz Water Rights Project EIR did not identify any mitigation measures related to wildfire, and no new mitigation measures related to wildfire are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to wildfire than previously identified in the Santa Cruz Water Rights Project EIR.

3.21 Mandatory Findings of Significance

	Where Impact was Analyzed in Prior EIR	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any Changed Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Prior EIR Mitigation Measures Implemented or Address Impacts?
XXI. MANDATORY FINDINGS OF SIGNIFICANCE					
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?	pp. 4.3-84 to 4.3-88, 4.3-91, 4.3-93 to 4.3-98, 4.3-100 to 4.3-103, 4.3-105 to 4.3-108, 4.4-22, 4.4-26 to 4.4-30	No	No	No	Yes MM BIO-1, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-11, MM CUL-2
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.)	Sections 4.2.3.4, 4.3.4.4, 4.4.4.4, 4.5.3.4, 4.6.3.4, 4.7.3.4, 4.8.3.4, 4.9.3.4, 4.10.4.4, 4.11.3.4, 4.12.3.4, 4.13.3.4	No	No	No	Not Applicable
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Sections 4.2, 4.5, 4.6, 4.7, 4.10	No	No	No	Yes MM NOI-2, MM NOI-3

Discussion

The Santa Cruz Water Rights Project EIR evaluated mandatory findings of significance in various sections, summarized in the checklist table above discussed as follows.

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?

As discussed above in Section 3.4, Biological Resources, and Section 3.5, Cultural Resources, the Proposed Intertie-1 Project modifications would not result in any new significant impacts or substantially more severe impacts than identified in the Santa Cruz Water Rights Project EIR. The EIR included mitigation measures related to special-status wildlife and nesting birds, special-status plants, sensitive habitat; archaeological resources, and tribal cultural resources, which would reduce all related impact to less-than-significant levels. These mitigation measures continue to apply to the Proposed Intertie-1 Project. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to environmental quality, fish or wildlife habitat or populations, plant or animal communities including special-status species, or examples of California history or prehistory than previously identified in the Santa Cruz Water Rights Project EIR.

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.)

The Santa Cruz Water Rights Project EIR evaluated cumulative impacts of the Proposed Intertie-1 Project in combination with past, present, and reasonably foreseeable future development, for each environmental resource topic. Significant cumulative impacts were identified for agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, paleontological resources, GHG emissions, recreation, wildfire; however, the Proposed Intertie-1 Project's incremental contribution was not found to be cumulatively considerable. The cumulative impacts analysis in the EIR included consideration of the La Madrona Mixed-Use Project, proposed near the intersection of La Madrona Drive and Silverwood Drive in the immediate vicinity of the Proposed Intertie-1 pump station site. The La Madrona Mixed-Use Project is currently undergoing CEQA review and the estimated construction schedule is not known at this time. As described in the EIR, while it is not known for certain whether construction of the La Madrona Mixed-Use Project would overlap with construction of the Proposed Intertie-1 Project, significant cumulative impacts are not anticipated. The additional pipeline segment along Firehouse Lane does not appreciably expand the project area such that other cumulative projects not previously considered would need to be analyzed. As discussed in this Addendum, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts that would lead to new significant or more severe impacts related to cumulative impacts than previously identified in the Santa Cruz Water Rights Project EIR.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The Santa Cruz Water Rights Project EIR identified significant impacts related to construction noise and vibration. As discussed above, mitigation measures identified in the EIR would reduce impacts related to construction noise and vibration to less-than-significant levels and remain applicable to the Proposed Intertie-1 Project. The Proposed Intertie-1 Project modifications would not result in new significant impacts or more

severe impacts than those analyzed in the EIR as explained in Section 3.13, Noise, above. Therefore, the Proposed Intertie-1 Project modifications would not result in new or substantially more severe impacts related to adverse effects on human beings than evaluated in the Santa Cruz Water Rights Project EIR.

Mitigation Measures

As indicated above, with implementation of identified mitigation measures, potentially significant impacts related to biological resources, cultural resources, and noise would be reduced to a less-than-significant level. All mitigation measures identified in the table above would continue to be required with the Proposed Intertie-1 Project modifications. No new mitigation measures are required with the Proposed Intertie-1 Project modifications as this Addendum has not identified any new significant impacts.

Conclusion

As demonstrated in the discussion above, the Proposed Intertie-1 Project modifications would not result in new significant impacts or substantially more severe impacts related to the mandatory findings of significance than previously identified in the Santa Cruz Water Rights Project EIR.

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4.2 List of Preparers

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Appendix A

Adopted Mitigation Monitoring and Reporting Program

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Adopted Mitigation Monitoring and Reporting Program

The adopted mitigation monitoring and reporting program (MMRP) for the Santa Cruz Water Rights Project, prepared pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations, Chapter 3, Sections 15074 and 15097), applies to the Intertie-1 Project and is attached. This MMRP is intended to be used by City of Santa Cruz (City) staff, its contractors, and mitigation monitoring personnel to ensure compliance with mitigation measures during project construction and implementation. Mitigation measures identified in this MMRP were developed during the preparation of the EIR prepared for the Santa Cruz Water Rights Project.

The MMRP includes all mitigation measures identified in the EIR and, for each measure, the party responsible for implementation and implementation timing. The MMRP also includes the City's standard operational and construction practices, which would be implemented by the City and its contractors during project operations and construction activities. The applicable measures for the Intertie-1 Project include those measures marked with a check mark in the left-hand column of the MMRP.

Santa Cruz Water Rights Project Mitigation Monitoring and Reporting Program

Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
MITIGATION MEASURES IDENTIFIED IN THE ENVIRONMENTAL IMPACT REPORT			
Biological Resources			
✓	**MM BIO-1: Project Siting (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** The City shall locate construction activities, including staging, on and adjacent to current development to the maximum extent feasible. All worker parking, equipment storage, and laydown areas should occur within developed areas and maintained rights-of-way, to the extent possible. Dirt or gravel pull-offs to the side of existing roads shall not be used except for temporary staging areas. To minimize temporary disturbances, the City shall restrict all vehicle traffic to established roads, construction areas, and other designated area. If ground disturbing activities associated with staging and work areas will occur outside existing developed areas and maintained rights-of-way, avoidance and minimization of impacts to special-status species and their habitats, sensitive vegetation communities, and jurisdictional aquatic resources shall be prioritized during the site selection process. Other Proposed Project mitigation measures will provide for compensatory mitigation to address potentially significant impacts to special-status species and their habitats (MM BIO-4 through MM-BIO-10), sensitive vegetation communities (MM BIO-11), and jurisdictional aquatic resources (MM BIO-12 through MM BIO-14).	City responsible for limiting construction activities, including staging, to existing developed areas and restricting all vehicle traffic to designated areas. City responsible for implementing other referenced mitigation measures if ground disturbing activities will occur outside existing developed areas. City responsible for inclusion of measure in construction specifications and contracts and periodic inspection. Contractor responsible for implementation.	Include measure in construction specifications and contracts: Prior to construction. Limit construction activities to designated areas: Prior to and during construction. Periodic inspections: During construction.
	MM BIO-2: Instream Construction (Applies to Tait Diversion and Coast Pump Station Improvements). All instream construction activities shall be limited to the low-flow period between June 15 through November 1, except by extension approved by the California Department of Fish and Wildlife (CDFW) and National Marine Fisheries Service (NMFS). If an extension of instream construction activities is determined necessary beyond the low-flow period, then	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation. City responsible for providing CDFW and NMFS with a rationale and method for	Include measure in construction specifications and contracts: Prior to construction. Limit in-stream construction to low-flow period: During construction.

Santa Cruz Water Rights Project Mitigation Monitoring and Reporting Program

Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	the City shall provide the CDFW and NMFS with a rationale and method that ensures protection of fish species.	protection of fish species, if instream construction activities need to extend beyond low-flow period.	Coordination with CDFW and NMFS: During construction.
	MM BIO-3: Aquatic Vertebrate Rescue and Relocation Plan (Applies to Tait Diversion and Coast Pump Station Improvements). If native fish or native aquatic vertebrates are present during construction of a new or modified intake design, check dam modifications/notching, Coanda intake screen, and other required fish passage upgrades at the Tait Diversion facility, a native fish and aquatic vertebrate rescue and relocation plan shall be prepared. The plan shall be implemented by a qualified biologist during dewatering to ensure that significant numbers of native fish and aquatic vertebrates are not stranded.	City responsible for inclusion of measure in construction specifications and contracts, and for hiring a qualified biologist to prepare and implement relocation plan.	Include measure in construction specifications and contracts: Prior to construction. Plan preparation: Prior to construction. Plan implementation: During construction.
✓	**MM BIO-4: Preconstruction Nesting Bird Survey (Applies to New Aquifer Storage and Recovery [ASR] Facilities and Beltz ASR Facilities, Intertie Improvements, Felton Diversion Improvements, and Tait Diversion and Coast Pump Station Improvements).** During the nesting season (February 1 – August 31), no more than two weeks prior to any ground disturbing activities, including removal of vegetation and clearing and grubbing activities, a nesting bird survey shall be completed by a qualified biologist to determine if any native birds are nesting in or adjacent to the study area (including within a 50-foot buffer for passerine species and a 250-foot buffer for raptors). If any active nests of native birds are observed during surveys, an avoidance buffer around the nests shall be established in the field to ensure compliance with California Fish and Game Code Section 3503. The avoidance buffer shall be determined by a qualified biologist in coordination with City staff, based on species, location, and extent and type of planned construction activity. Impacts to active nests shall be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist.	City responsible for hiring qualified biologist to conduct surveys.	Nesting bird pre-construction survey: Within 7 days prior to initiation of construction activities. Roosting bat survey: Within 30 days prior to tree removal.

Santa Cruz Water Rights Project Mitigation Monitoring and Reporting Program

Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
✓	**MM BIO-5: Preconstruction Wildlife Surveys (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** A qualified biologist shall conduct preconstruction surveys of all ground disturbance areas within off-pavement project footprint areas to determine if special-status wildlife species are present prior to the start of construction. The biologist will conduct these surveys no more than two weeks prior to the beginning of construction.	City responsible for hiring qualified biologist to conduct surveys.	Pre-construction survey: Two weeks prior to initiation of construction activities.
✓	**MM BIO-6: Exclusionary Fencing (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** High-visibility fencing for Environmentally Sensitive Areas shall be installed around all adjacent special-status species identified during the preconstruction surveys, which shall be retained and not disturbed by the Project, to preclude encroachment within the root-zone of these plants by construction crews or vehicles. A biological monitor shall also accompany the work crew during excavation and installation of exclusion fencing to prevent harm to species that may be active present and moving along the fence route. Buffers that are established around active bird nests and special-status species (including potentially active woodrat nests) to be avoided shall be delineated with flagging. Buffers and fencing for nesting birds shall be maintained until the biological monitor verifies that the birds have fledged. All other fencing shall be maintained in good repair throughout the entire construction period.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for installing and maintaining fencing. City responsible for hiring qualified biologist to monitor work crew during installation of fencing, delineate buffers with flagging around active bird nest and special-status species, and verify that birds have fledged.	Include measure in construction specifications and contracts: Prior to construction. Installation of fencing: Prior to construction Delineating buffers: Prior to construction. Maintaining fencing: During construction. Fencing removal: After birds have fledged.
✓	**MM BIO-7: Biological Construction Monitoring (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** A qualified biologist shall monitor vegetation removal and ground disturbing activities during all work hours for off-pavement work or once a week for all other construction activities. The monitor shall check the exclusion fencing and buffers for active nesting birds once a week, and shall verify when birds have fledged if found present before	City responsible for hiring qualified biologist to conduct construction monitoring.	Conduct construction monitoring: During construction.

Santa Cruz Water Rights Project Mitigation Monitoring and Reporting Program

Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	construction. The biologist shall have stop-work authority in the event that a protected species is found within the active construction footprint. During construction, the biological monitor shall keep a daily observation log and a photo log to describe monitoring activities, remedial actions, non-compliance, and other issues and actions taken. These logs shall be kept on-site and made available for inspection by agency personnel.		
✓	**MM BIO-8: Species Relocation (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** If special-status wildlife species are observed within the construction area prior to or during construction activities, the biologist shall capture and relocate such individuals out of the area affected by construction activities to nearby habitat that has equivalent value to support the species. The biologist shall identify suitable habitats as potential release sites prior to start of construction activities. If the special-status species is a federally- or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval.	City responsible for hiring qualified biologist to conduct surveys, identify potential release sites, monitor project activities, relocate individuals, and notify noted resource agencies if a special-status species is identified prior to relocation.	Surveys and identification of potential release sites: Prior to construction. Monitoring and species relocation: During construction.
✓	**MM BIO-9: Entrapment Avoidance (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** The construction contractor shall cover all construction-related holes in the ground overnight to prevent entrapment of any native wildlife species. The monitoring biologist shall inspect all construction pipes, culverts, or similar structures that are stored at the work area for one or more nights before the pipe is used or moved. If wildlife species are present, they shall be allowed to exit on their own or a qualified biologist shall move them out of the construction area to nearby habitat that has equivalent value to support the species. If special-status species are present and are federally or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for covering construction-related holes. Biologist responsible for inspection of work area.	Include measure in construction specifications and contracts: Prior to construction. Cover holes and inspect work area: During construction.

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	Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval.		
✓	**MM BIO-10: Preconstruction Special-Status Plant Surveys and Compensation (Applies to New Aquifer Storage and Recovery Facilities and Intertie Improvements).** If ground-disturbing activities associated with staging and work areas occur outside existing developed areas and maintained rights-of-way, a qualified biologist shall conduct a focused botanical survey for special-status plants during the appropriate bloom period for each species. If special-status species are not detected, no further surveys or mitigation would be necessary. If any individuals or populations are detected, the location(s) shall be mapped, and a plan focused on compensating for impacts to special-status plants shall be developed and include the following elements and criteria. This plan shall be a component of the project's Habitat Mitigation and Monitoring Plan described in MM BIO-11: a. A description of any areas of habitat occupied by special-status plants to be preserved and/or removed by the project; b. Identification and evaluation of the suitability of on-site or off-site areas for preservation, restoration, enhancement or translocation; c. Analysis of species-specific requirements and considerations and specific criteria for success relative to the project's impact on this species and restoration, enhancement or translocation; d. A description of proposed methods of preservation, restoration, enhancement, and/or translocation; e. A description of specific performance standards, including a required replacement ratio and minimum success standard of 1:1 for impacted individuals or populations; f. A monitoring and reporting program to ensure mitigation success; and	City responsible for hiring qualified biologist to conduct surveys, prepare plan and implement rehabilitation and monitoring.	Conduct focused plant survey: Prior to construction and during appropriate bloom period. Plan preparation if special-status species are found: Prior to construction. Plan implementation: During construction.

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	g. A description of adaptive management and associated remedial measures to be implemented in the event that performance standards are not achieved.		
✓	**MM BIO-11: Sensitive Vegetation Communities Compensation (Applies to New Aquifer Storage and Recovery Facilities, Intertie Improvements, and Tait Diversion and Coast Pump Station Improvements).** Direct impacts to sensitive vegetation communities shall be mitigated via a combination of on-site and off-site measures. On-site measures shall include rehabilitation for areas temporarily impacted at a 1:1 mitigation ratio, and enhancement for areas permanently impacted at a 2:1 mitigation ratio. Areas temporarily impacted shall be returned to conditions similar to those that existed prior to grading and/or ground-disturbing activities. It is anticipated that a one-time restoration effort at the completion of the project followed by monitoring and invasive weed removal for a minimum of 3 years would adequately compensate for the direct temporary impacts to these vegetation communities. Areas permanently impacted shall be mitigated through on-site enhancement activities including removal of non-native and invasive species for a minimum of 3 years. If additional area is needed to compensate for permanent impacts at a 2:1 ratio, then an off-site location will be identified and evaluated. A Habitat Mitigation and Monitoring Plan shall be prepared and implemented to compensate for the loss of all sensitive vegetation communities (see below). Rehabilitation and enhancement activities with Zayante soils, such as along the City/Scotts Valley Water District intertie, will be revegetated with plants native to the Zayante Sandhills, such as sticky monkeyflower (*Mimulus aurantiacus*), deer weed (*Lotus scoparius*), and silver bush lupine (*Lupinus albifrons* var. *albifrons*). These native plants will provide suitable habitat conditions for special-status species that might eventually colonize the temporarily impacted portion of the impact area. These revegetated areas will not include any landscape	City responsible for hiring qualified biologist to prepare plan and implement rehabilitation and monitoring.	Plan preparation: Prior to construction. Rehabilitation and plan implementation: After completion of construction activities. Monitoring/weed removal: At least 3 years following rehabilitation.

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	elements that degrade habitat for the special-status species, including mulch, bark, weed matting, rock, aggregate, or turf grass. The Habitat Mitigation and Monitoring Plan shall detail the habitat restoration activities and shall specify the criteria and standards by which the revegetation and restoration actions will compensate for impacts of the Proposed Project on sensitive vegetation communities and shall at a minimum include discussion of the following: a. The rehabilitation and enhancement objectives, type, and amount of revegetation to be implemented taking into account enhanced areas where non-native invasive vegetation is removed and replanting specifications that take into natural regeneration of native species when applicable. b. The specific methods to be employed for revegetation. c. Success criteria and monitoring requirements to ensure vegetation community restoration success. d. Remedial measures to be implemented in the event that performance standards are not achieved.		
	MM BIO-12: Preconstruction Jurisdictional Delineation (Applies to New Aquifer Storage and Recovery Facilities and Tait Diversion and Coast Pump Station Improvements). If ground disturbing activities associated with staging and work areas will occur outside existing developed areas and maintained rights-of-way, a qualified biologist shall conduct a formal jurisdictional delineation to determine the extent of jurisdictional aquatic resources regulated by the U.S. Army Corps of Engineers, Regional Water Control Board, and/or California Department of Fish and Wildlife within the impact area.	City responsible for hiring qualified biologist to perform jurisdictional delineation.	Conduct delineation: Prior to construction.
	MM BIO-13: Jurisdictional Aquatic Resources Avoidance (Applies to New Aquifer Storage and Recovery Facilities and Tait Diversion and Coast Pump Station Improvements). Future refinements to the Proposed Project shall endeavor to avoid jurisdictional aquatic resources regulated by the U.S. Army Corps of Engineers, Regional	City responsible for hiring qualified biologist to establish fencing or flagging to identify aquatic resources to be avoided.	Establish fencing and flagging: Prior to construction.

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	Water Control Board, and California Department of Fish and Wildlife, to the extent practicable, through design changes or implementation of alternative construction methodologies. Where feasible and appropriate, all jurisdictional aquatic resources not directly affected by construction activities will be avoided and protected by establishing staking, flagging, or fencing between the identified construction areas and aquatic resources to be avoided/preserved.		
	MM BIO-14: Jurisdictional Aquatic Resources Compensation (Applies to New Aquifer Storage and Recovery Facilities and Tait Diversion and Coast Pump Station Improvements). For unavoidable impacts to jurisdictional aquatic resources, a project-specific mitigation plan shall be developed, approved by the U.S. Army Corps of Engineers, Regional Water Control Board, and/or California Department of Fish and Wildlife, as appropriate, through their respective regulatory permitting processes, and implemented. The mitigation plan shall specify the criteria and standards by which the mitigation will compensate for impacts of the Proposed Project and include discussion of the following: a. The mitigation objectives and type and amount of mitigation to be implemented (in-kind mitigation at a minimum mitigation ratio of 1:1); b. The location of the proposed mitigation site(s) (within the San Lorenzo River watershed, if possible); c. The methods to be employed for mitigation implementation (jurisdictional aquatic resource establishment, re-establishment, enhancement, and/or preservation); d. Success criteria and a monitoring program to ensure mitigation success; and e. Adaptive management and remedial measures in the event that performance stands are not achieved.	City responsible for hiring qualified biologist to prepare plan. City responsible for implementing plan.	Plan preparation: Prior to construction. Plan implementation: After completion of construction activities, or as specified in the plan.

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Cultural and Tribal Cultural Resources			
	MM CUL-1: Historic-Era Built Environment Resources. Potentially significant impacts to historic built environmental resources on the infrastructure component sites shall be addressed through the following measures: a. **Identify Potential Historic Built Environment Resources (Applies to New Aquifer Storage and Recovery Facilities and the Felton Diversion).** When new or upgraded facilities move into project-level design and those developments are being pursued by the City of Santa Cruz (City), a qualified cultural resource specialist shall review the project site and conduct a California Historical Resources Information System (CHRIS) records search. If there are no previously recorded resources or historic era buildings or structures located on the site, no further action is warranted. If these project site review efforts indicate a potential for California Environmental Quality Act (CEQA) historical resources, all buildings and structures within the component site that are 45 years or older, shall be identified and measure b shall be implemented. b. **Evaluate Potential Built Environment Resources (Applies to New ASR Facilities, City/Soquel Creek Water District/Central Water District Intertie – Soquel Village and Park Avenue Pipelines, and the Felton Diversion).** Should potential CEQA historical resources be identified within the above programmatic infrastructure component sites, prior to project implementation, the City or other lead agency overseeing the Proposed Project shall retain a qualified architectural historian, meeting the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations Part 61), to record such potential resources based on professional standards, to formally assess their significance under CEQA Guidelines Section 15064.5. A Historic Resources Evaluation Report (HRER) shall be prepared by the architectural historian to evaluate properties over 45 years of age	City responsible for hiring a qualified cultural resource specialist and architectural historian to conduct records search and evaluate potential historic built environment resources.	Conduct records search and evaluate resources: Prior to construction.

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	under all applicable significance criteria. In consideration of the historic context for the existing water management systems in the region there is a low-likelihood that water management structures that postdate the late 1800s or early 1900s (pioneering water system era) will be found historically significant. Therefore, for existing infrastructure component sites it is likely that the HRER will find that no properties meet the significance criteria and therefore, no CEQA historical resources are likely to be present. No further work shall be required for historic era-built environment properties, buildings, or structures 45 years old or older at these sites that are not found to meet the CEQA historical significance criteria as historical resources. If a property is found to be eligible for listing under the applicable significance criteria and therefore considered a CEQA historical resource, the resource shall be avoided or preserved in place. If avoidance or preservation in place is not feasible, and the historical resource will be modified through design such that it may not be able to convey its historic significance, the City will retain a qualified architectural historian to prepare a subsequent technical report. This required report will assess the proposed project design plans and/or schematics in conjunction with the subject CEQA historical resource and determine whether the Proposed Project conforms with the Secretary of the Interior's Standards for the Treatment of Historic Properties, specifically, the Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Structures). The City shall modify the Proposed Project, as needed, to ensure that the Secretary of the Interior's Standards are met such that the historical resource continues to convey its historical significance.		

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
✓	**MM CUL-2: Historic or Unique Archaeological Resources.** Unique Archaeological Resources, Historical Resources of Archaeological Nature, and Subsurface Tribal Cultural Resources. Potentially significant impacts to unique archaeological resources, historical resources of an archaeological nature, or subsurface tribal cultural resources on the infrastructure component sites shall be addressed through the following measures: a. **Identify Potential Unique Archaeological Resources, Historical Resources of Archaeological Nature, and Subsurface Tribal Cultural Resources (Applies to New Aquifer Storage and Recovery [ASR] Facilities and Other Components where Five Years Have Elapsed).** When new ASR facilities sites are identified and those components are being pursued by the City of Santa Cruz (City), a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, shall conduct a California Historical Resources Information System (CHRIS) records search, a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search and perform an intensive surface reconnaissance within a specifically defined Area of Direct Impact (ADI). Based on the above, all archaeological sites within or near the component site or area of potential effect shall be identified. The sensitivity of the site for discovering unknown resources, shall also be identified. The qualified archaeologist will prepare a technical report with the results of the above. The qualified archaeologist shall attempt to ascertain whether the archaeological sites qualify as unique archaeological resources, historical resources of an archaeological nature, or subsurface tribal cultural resources. If known or identified resources of these kinds are present on the site, measure c shall be implemented. This measure shall also be implemented for any other project or programmatic components that are implemented more than five years after the CHRIS records search and NAHC SLF search were conducted.	City responsible for hiring a qualified archaeologist to conduct records search, prepare cultural resources technical report, evaluate identified resources, and prepare and implement data recovery plan, as warranted City responsible for inclusion of inadvertent discovery clause in construction specifications and contracts. Contractor responsible for implementation of inadvertent discovery clause, which includes cultural resource sensitivity training for workers.	Include measure in construction specifications and contracts: Prior to construction. Identifying and evaluate cultural resources: Prior to construction. Training: Prior to construction and prior to new work crews coming onto the site. Evaluate potential cultural resources: Prior to and during construction, as warranted. Data recovery plan preparation and implementation: During construction if identified resource is determined to be significant.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	b. **Standard Sensitivity Training and Inadvertent Discovery Clauses (Applies to all Components).** The City or other lead agency shall include a standard clause in every construction contract for the Proposed Project, which requires cultural resource sensitivity training for workers prior to conducting earth disturbance in the vicinity of a documented cultural-resource-sensitive area, should one be identified in the future. Prior to site mobilization or construction activities on the project site, a qualified archaeologist with training and experience in California prehistory and historical period archaeology shall conduct the cultural resources awareness training for all project construction personnel. The training shall address the identification of buried cultural deposits, including Native American and historical period archaeological deposits and potential tribal cultural resources, and cover identification of typical prehistoric archaeological site components including midden soil, lithic debris, and dietary remains as well as typical historical period remains such as glass and ceramics. The training must also explain procedures for stopping work if suspected resources are encountered. Any personnel joining the work crew subsequent to the training shall also receive the same training before beginning work. Consistent with Standard Construction Practice #24, standard inadvertent discovery clauses shall also be included in every construction contract for the Proposed Project by the City or other lead agency, which requires that in the event that an archaeological resource is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease until a qualified archaeologist can evaluate the find and make a recommendation for how to proceed, as specified in measure c.		

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	c. **Evaluate Potential Unique Archaeological Resources, Historical Resources of Archaeological Nature, and Subsurface Tribal Cultural Resources (Applies to all Components).** For an archaeological resource that is discovered during initial site review (measure a) or during construction (measure b), the City or other lead agency shall: ▪ Retain a qualified archaeologist to determine whether the resource has potential to qualify as either a unique archaeological resource, a historical resource of an archaeological nature, or a subsurface tribal cultural resource under Public Resources Code section 21074, California Environmental Quality Act (CEQA) Guidelines Section 15064.5, or Section 106 of the National Historic Preservation Act. ▪ If the resource has potential to be a unique archaeological resource, a historical resource of an archaeological nature, or a subsurface tribal cultural resource, the qualified archaeologist, in consultation with the lead agency, shall prepare a research design and archaeological evaluation plan to assess whether the resource should be considered significant under CEQA criteria. ▪ If the resource is determined significant, the lead agency shall provide for preservation in place, if feasible. If preservation in place is not feasible, the qualified archaeologist, in consultation with the lead agency, will prepare a data recovery plan for retrieving data relevant to the site's significance. The data recovery plan shall be implemented prior to, or during site development (with a 100-foot buffer around the resource). The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the Northwest Information Center, and provide for the permanent curation of recovered materials. The written report will provide new recommendations, which could include, but would not be		

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	limited to, archaeological and Native American monitoring for the remaining duration of project construction.		
Geology and Soils			
	MM GEO-1: Operation of New Aquifer Storage and Recovery (ASR) Facilities in Liquefaction-Prone Areas (Applies to New ASR Facilities). To avoid increasing the potential for liquefaction, ASR injections in new wells located in potential liquefaction zones, as depicted on Figure 4.5-3, shall be maintained and operated such that existing shallow groundwater (i.e., depth generally less than 100 feet) does not rise to within 40 feet of the ground surface. Similarly, ASR injections in potential liquefaction zones shall be maintained and operated such that existing groundwater within a depth of 40 feet or less does not rise closer to the ground surface.	City responsible for monitoring operations to achieve this measure.	Monitoring: During operation of ASR facilities located in potential liquefaction zones.
✓	**MM GEO-2: Paleontological Resources Impact Mitigation Program and Paleontological Monitoring.** Potentially significant impacts to paleontological resources on the project and programmatic infrastructure component sites shall be addressed through the following measures: a. **Identify Potential Paleontological Resources (Applies to New Aquifer Storage and Recovery [ASR] Facilities).** When new ASR facilities sites are identified and those components are being pursued by the City or other lead agency, a qualified a qualified paleontologist pursuant to the Society of Vertebrate Paleontology (SVP) 2010 guidelines, shall conduct a paleontological records search from the Natural History Museum of Los Angeles County (LACM) and conduct a desktop geological and paleontological research. Based on the above, all paleontological sites within or near the programmatic component site shall be identified. The sensitivity of the site for discovering unknown paleontological resources, shall also be identified. The qualified paleontologist will prepare a brief technical report with the results of the above. If known or identified resources are present on the site, or if the	City responsible for hiring qualified paleontologist to prepare the PRIMP and conduct worker training and monitoring. City responsible for inclusion of paleontological resource protection clauses in construction specifications and contracts.	Include measure in construction specifications and contracts: Prior to construction. Identifying potential paleontological resources: Prior to construction. PRIMP preparation and worker training: Prior to site grading or excavation. Monitoring: During grading and ground disturbance as specified in the PRIMP.

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	site has moderate to high sensitivity for paleontological resources, measures b and c shall be implemented. b. **Develop Paleontological Resources Impact Mitigation Program (Applies to all Known Infrastructure Components and May Apply to New ASR Facilities).** Prior to commencement of any grading activity on infrastructure component sites with moderate to high paleontological sensitivity or that may have such sensitivity at depth, the City or other lead agency shall retain a qualified paleontologist pursuant to the SVP (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Proposed Project. The PRIMP can be written to include all infrastructure components located in sites with moderate to high paleontological sensitivity. The PRIMP shall be consistent with the SVP (2010) guidelines and shall, at a minimum, contain the following elements: ▪ Introduction to the project, including project location, description of grading activities with the potential to impact paleontological resources, and underlying geologic units. ▪ Description of the relevant laws, ordinances, regulations, and standards pertinent to the project and potential paleontological resources. ▪ Requirements for preconstruction meeting attendance by the qualified paleontologist and/or their designee and worker environmental awareness training for grading contractors that outlines laws protecting paleontological resources and the types of resources that may be encountered on site. ▪ Identification of locations where full-time paleontological monitoring within geological units with high paleontological sensitivity is required within the project or programmatic sites based on construction plans and/or geotechnical reports.		

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	▪ Requirements and frequency of paleontological monitoring spot-checks below a depth of five feet below the ground surface in areas underlain by Holocene sedimentary deposits. ▪ The types of paleontological field equipment the paleontological monitor shall have on-hand during monitoring. ▪ Discoveries treatment protocols and paleontological methods (including sediment sampling for microinvertebrate and microvertebrate fossils). ▪ Requirements for adequate reporting and collections management, including daily logs, monthly reports, and a final paleontological monitoring report that details the monitoring program and includes analyses of recovered fossils and their significance and the stratigraphy exposed during construction. ▪ Requirements for collection and complete documentation of fossils identified within the project site prior to construction and during construction, including procedures for temporarily halting construction within a 50-foot radius of the find while documentation and salvage occurs and allowing construction to resume once collection and documentation of the find is completed. Prepared fossils along with copies of all pertinent field notes, photos, maps, and the final paleontological monitoring report shall be deposited in a scientific institution with paleontological collections. Any curation costs shall be paid for by the City. c. **Standard Paleontological Clauses in Construction Contracts (Applies to all Infrastructure Components).** The City or other lead agency shall include standard clauses in construction contracts for infrastructure components located in areas with moderate to high paleontological sensitivity. A standard clause shall be included that requires paleontological resource sensitivity training for workers prior to conducting earth disturbance activities. A standard inadvertent discovery clause shall also be		

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	included that indicates that in the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the monitor will allow grading to recommence in the area of the find.		
Hazards, Hazardous Materials, and Wildfire			
	MM HAZ-1: Review of Hazardous Materials Site Databases (Applies to New Aquifer Storage and Recovery Facilities). Prior to construction where ground disturbance is required, a review of hazardous materials site databases will be conducted within 0.5 miles of the project site where the construction is proposed (project site). A search shall be conducted no more than six months prior to construction. In addition to sites identified in this environmental impact report, each new site identified within 0.5 miles of the project site will be reviewed for environmental contamination that could impact the project site, including soil, soil vapor, and groundwater contamination. If soil, soil vapor, and/or groundwater contamination is identified in the review, MM HAZ-2 will be implemented.	City responsible for review of hazardous site databases, or for hiring a qualified technician to conduct such a database review.	Review of hazardous materials site databases: Prior to construction.
	MM HAZ-2: Hazardous Materials Contingency Plan (Applies to New Aquifer Storage and Recovery Facilities and City of Santa Cruz/Soquel Creek Water District/Central Water District Intertie – Soquel Village Pipeline). Prior to commencement of any construction activities, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses known and suspected impacts in soil, soil vapor, and groundwater from releases on or near the project sites. The HMCP shall include training procedures for identification of contamination. The HMCP shall describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, in accordance with all applicable state and local regulations. Contaminated soils and/or groundwater	City responsible for hiring a qualified engineer to develop plan. City responsible for inclusion of plan implementation in construction specifications and contracts. Contractor to implement plan during construction.	Include measure in construction specifications and contracts if required by MM HAZ-2: Prior to construction. Development of plan: Prior to initiation of construction activities. Implementation of plan: During construction.

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	shall be managed and disposed of in accordance with local and state regulations. These regulations, as further described in Section 4.7.2, Regulatory Framework (Section 4.7, Hazards, Hazardous Materials, and Wildfire), include hazardous material transportation (California Department of Transportation and Department of Toxic Substances Control [DTSC]), hazardous waste regulations (U.S. Environmental Protection Agency and DTSC), worker health and safety during excavation of contaminated materials (California Division of Occupational Safety and Health Administration), and local disposal requirements (DTSC and landfill-specific). The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities.		
Hydrology and Water Quality			
	MM HYD-1: Ammonia Monitoring (Applies to Beltz 12 Aquifer Storage and Recovery [ASR] Facility). Consistent with groundwater monitoring completed for the Beltz 12 ASR Pilot Test Project (Pueblo Water Resources 2020), monitoring for ammonia shall be completed in the Beltz 12 well and the Soquel Creek Water District (SqCWD) O'Neill Ranch well during future Beltz 12 ASR pilot tests and ASR operations. The City shall establish ammonia concentrations beginning at least 12 months prior to commencement of Beltz 12 ASR operations, by conducting quarterly sampling, and obtaining similar sampling data for the SqCWD's O'Neill Ranch well, as provided by SqCWD. During the first year of Beltz 12 ASR injection and extraction operations, the City shall conduct monthly monitoring of ammonia concentrations in groundwater. Following the first year of operations, monitoring of ammonia shall be quarterly. In the event that over a two-year sampling period after initiation of Beltz 12 ASR operations, City ammonia monitoring data, in combination with ammonia monitoring data from the SqCWD O'Neill Ranch well, indicates Beltz 12 ASR operations are not resulting in changes to ammonia concentrations that could	City responsible for specified ammonia monitoring at Beltz 12 ASR. City and SqCWD responsible for cooperatively implementing hydrogeologic investigation, as warranted. City responsible for modifying ASR injection and/or extraction operations if hydrogeologic investigation indicates that Beltz 12 ASR operations are resulting in ammonia concentrations above baseline concentrations.	Establish baseline ammonia concentrations: at least 12 months prior to operations. Conduct monthly monitoring of ammonia concentrations: during first year of operations. Conduct quarterly monitoring of ammonia concentrations: after first year of operations. Discontinue monitoring: if two-year sampling period of City and SqCWD ammonia monitoring data indicates operations are not resulting in changes to ammonia concentrations that could

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	adversely affect operations at the SqCWD's O'Neill Ranch well, ammonia sampling shall be discontinued in the Beltz 12 ASR well. The City ammonia monitoring data, in combination with ammonia monitoring data from the SqCWD O'Neill Ranch well, shall be evaluated to determine if Beltz 12 ASR operations are resulting in changes to ammonia concentrations that could adversely affect operations at the SqCWD's O'Neill Ranch well. If ammonia levels increase above baseline, the City and SqCWD shall cooperatively develop, fund, and implement a hydrogeologic investigation to evaluate the source(s) and distribution of ammonia in the aquifer system and potential causes of the observed ammonia increases. The investigation shall include, if applicable, installation of a monitoring well cluster between the Beltz 12 ASR well and the O'Neill Ranch well to evaluate the gap in data between these two wells. To the extent that the results of the hydrogeologic investigation indicate that Beltz 12 ASR operations are resulting in ammonia concentrations above baseline concentrations, ASR injection and/or extraction operations shall be modified until ammonia concentrations decrease to baseline (or lower) levels, as demonstrated with monthly (during the first year of operations) or quarterly monitoring data from the Beltz 12 ASR well, and the SqCWD's O'Neill Ranch well, as provided by SqCWD. The Beltz 12 ASR modifications shall be proportional to the degree of impact being caused by Beltz 12 ASR operations (versus O'Neill Ranch well operations). Quarterly monitoring reports shall be prepared to document monitoring results. Additionally, during the next Mid-County Groundwater Sustainability Plan update process, the City shall work with other member agencies of the Mid-County Groundwater Sustainability Agency to address ammonia as a groundwater quality issue in the basin if warranted based on the outcome of monitoring and any hydrogeologic investigation performed, and incorporate the City's Beltz 12 ASR well and the SqCWD's O'Neill Ranch well into the plan update to allow for the ongoing assessment and monitoring of ammonia concentrations.		adversely affect operations at SqCWD's O'Neill Ranch well.

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	MM HYD-2: Groundwater Level Monitoring (Applies to Beltz 12 Aquifer Storage and Recovery [ASR] Facility). Consistent with restrictive effects criteria established in private well baseline assessment reports (Hydro Metrics 2015a, 2015b, 2015c, 2015d, 2015e), the private well monitoring program currently in place under the April 2015 cooperative monitoring/adaptive groundwater management agreement (cooperative groundwater management agreement) and the April 2015 stream flow and well monitoring agreement, between the City of Santa Cruz (City) and Soquel Creek Water District (SqCWD), shall be continued with respect to groundwater levels, and the City will contact and enroll any additional residents with private domestic wells within a 3,300-foot radius of the City's Beltz 12 ASR facility who want to join the program. Consistent with the existing cooperative groundwater management agreement, the City and SqCWD shall share monitoring and mitigating for impacts to third parties, such as private wells found in the area of overlap of 3,300-foot radius around SqCWD's O'Neill Ranch Well and 3,300-foot radius around the City's Beltz 12 well. Monitoring expenses shall be shared equally while mitigation expenses shall be shared proportionately. If private well monitoring reveals impacts to private wells due to the presence of restrictive effects, pump tests shall be conducted to determine proportionality. Monitoring and mitigation of impacts to private wells within a 3,300-foot radius of either the O'Neill Ranch well or Beltz 12 well, but not located in the overlap area, shall be the sole responsibility of the agency whose 3,300-foot radius encompasses the private well. If demonstrated restrictive effects to nearby private domestic wells occur during ASR pilot testing or operations, the City and SqCWD shall cooperatively develop, fund, and implement a hydrogeologic investigation to evaluate the potential causes of the observed restricted effects in private wells. To the extent that the results of the hydrogeologic investigation indicates that Beltz 12 ASR operations are resulting in restrictive effects, ASR injection and/or extraction	City and SqCWD are responsible for groundwater level monitoring and implementing a hydrogeologic investigation, as necessary. City is responsible to contact and enroll additional residents with private domestic wells within 3,300 of the Beltz 12 ASR facility. City responsible for modifying ASR injection and/or extraction operations if hydrogeologic investigation indicates that Beltz 12 ASR operations are resulting in restrictive effects.	Contact and enroll additional residents: Prior to Beltz 12 ASR operations. Monitoring of private wells: During Beltz 12 ASR operations. Discontinue monitoring: five years after initiation of Beltz 12 ASR operations, unless monitoring period is extended, as specified.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	operations shall be modified until the corresponding undesirable effects are eliminated, as demonstrated with biannual monitoring data from the private wells. The Beltz 12 ASR modifications shall be proportional to the degree of impact being caused by Beltz 12 ASR operations (versus O'Neill Ranch well operations). Biannual and annual monitoring reports shall be prepared to document monitoring results. In the event that restrictive effects to nearby private domestic wells does not occur during ASR pilot testing or operations, for a period of five years after initiation of Beltz 12 ASR operations, the City's participation in the private well monitoring program will be discontinued. However, the five-year monitoring period will be extended, if necessary, to account for multi-year drought conditions. The determination as to whether to extend the monitoring period will be based on an evaluation of the groundwater monitoring data collected over the five-year monitoring period, in combination with a review of any drought conditions present during that period. Results of this evaluation will be shared with SqCWD and any associated comments by SqCWD will be considered in determining the need for extension of the monitoring program beyond the five-year period. Additionally, during the next Mid-County Groundwater Sustainability Plan (GSP) update process, the City shall work with other member agencies of the Mid-County Groundwater Sustainability Agency to update information in the GSP related to private wells and the ongoing assessment and monitoring of groundwater levels at these wells, if warranted based on the outcome of monitoring and any hydrogeologic investigation performed. However, the five-year monitoring period will be extended, if necessary, to account for multi-year drought conditions. The determination as to whether to extend the monitoring period will be based on an evaluation of the groundwater monitoring data collected over the five-year monitoring period, in combination with a review of any drought conditions present during that period. Results of this evaluation will be shared with SqCWD and any associated comments by SqCWD will be		

Santa Cruz Water Rights Project Mitigation Monitoring and Reporting Program

Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	considered in determining the need for extension of the monitoring program beyond the five-year period.		
✓	**MM HYD-3: Drainage Improvements (Applies to City of Santa Cruz/Scotts Valley Water District Intertie Pump Station and City of Santa Cruz/Soquel Creek Water District/Center Water District New Intertie Pump Stations).** Final pump station designs shall include Low Impact Development features, which would: (1) reduce post-construction stormwater runoff rates to be less than or equal to existing conditions, for a 24-hour, 25-year storm event; and (2) minimize off-site runoff of stormwater pollutants through filtration features, such oil-water separators, vegetated swales, and bioretention basins. These features shall be inspected monthly to ensure functionality.	City responsible for hiring qualified engineer to design Low Impact Development (LID) features. City responsible for inclusion of LID requirements in design and construction specifications and contracts. Contractor to implement LID designs during construction. City responsible for monthly inspections.	Include measure in design and construction specifications and contracts: Prior to construction. Development of LID designs: Prior to construction. Implementation of LID designs: During construction. Inspections: During operations.
Land Use, Agriculture and Forestry, and Mineral Resources			
	MM LU-1: Avoidance of Agricultural and Forest Lands (Applies to New Aquifer Storage and Recovery [ASR] Facilities). The following measures shall be implemented to avoid conversion of Farmland or forest/timberland, and/or conflicts with agricultural zoning in the coastal zone: ▪ Locate new ASR facilities on sites that do not contain Farmland (i.e., prime, unique, or important farmland under the State Farmland Mapping and Monitoring Program) unless site-specific application of the Land Evaluation and Site Assessment model determines that the site would not result in a significant impact to agricultural lands. ▪ Locate new ASR facilities on sites that do not contain forest/timber land. ▪ Locate new ASR facilities on sites that are not zoned for agricultural uses in the coastal zone.	City to implement measure during site selection for new ASR facilities.	Avoid agricultural and forest lands: Prior to construction.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
Noise			
	MM NOI-1: Operational Noise Levels (Applies to Coast Pump Station Improvements). The Proposed Project shall implement the following measures to reduce the potential for exposure of nearby noise-sensitive receptors to excessive noise levels: ▪ Where feasible, a primary element for the selection of proposed noise-generating equipment (e.g., pumps, motors, transformers, etc.) shall be equipment that inherently does not generate an increase of +3 dB in the ambient noise levels where the existing ambient is below 60 dBA L_{dn}, or a +5 dB increase in the ambient noise levels where the existing ambient is above 65 dBA L_{dn}, as measured at the nearest sensitive receptor. ▪ Where this is not feasible, noise-generating equipment shall be located within a full or partial noise reduction enclosure. The effectiveness of the equipment enclosure to reduce noise level exposure to within the applicable noise level threshold shall be demonstrated through submittal of a focused acoustical assessment.	City responsible for inclusion of operational noise requirements in design and construction specifications and contracts. Contractor responsible for selecting equipment or locating equipment within enclosure and providing focused acoustical assessment. City responsible for review of equipment and focused acoustical assessment.	Include measure in design and construction specifications and contracts: Prior to construction. Review of equipment and focused acoustical assessment: Prior to design approval.
✓	**MM NOI-2: Construction Noise (Applies to all Infrastructure Components).** The Proposed Project shall implement the following measures related to construction noise: ▪ Restrict construction activities and use of equipment that have the potential to generate significant noise levels (e.g., use of concrete saw, mounted impact hammer, jackhammer, rock drill, etc.) to between the hours of 8:00 a.m. and 5:00 p.m., unless specifically identified work outside these hours is authorized by the City's Water Director as necessary to allow for safe access to a construction site, safe construction operations, efficient construction progress,	City responsible for inclusion of construction noise requirements in construction specifications and contracts. Contractor responsible for implementation during construction.	Include measure in construction specifications and contracts: Prior to construction. Implementation of measure: During construction.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	and/or to account for prior construction delays outside of a contractor's control (e.g., weather delays). ▪ Construction activities requiring operations continuing outside of the standard work hours of 8:00 a.m. and 5:00 p.m. (e.g., borehole drilling operations) shall locate noise generating equipment as far as possible from noise-sensitive receptors, and/or within an acoustically rated enclosure (meeting or exceeding Sound Transmission Class [STC] 27), shroud or temporary barrier as needed to prevent the propagation of sound into the surrounding areas in excess of the 60 dBA nighttime (10:00 p.m. to 8:00 a.m.) and 75 dBA daytime (8:00 a.m. to 10:00 p.m.) criteria at the nearest sensitive receptor. Noisy construction equipment, such as temporary pumps that are not submerged, aboveground conveyor systems, and impact tools will likely require location within such an acoustically rated enclosure, shroud or barrier to meet these above criteria. Impact tools, in particular, shall have the working area/impact area shrouded or shielded whenever possible, with intake and exhaust ports on power equipment muffled or suppressed. Impact tools may necessitate the use of temporary or portable, application-specific noise shields or barriers to achieve compliance. ▪ Portable and stationary site support equipment (e.g., generators, compressors, and cement mixers) shall be located as far as possible from nearby noise-sensitive receptors.		

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	▪ Construction equipment and vehicles shall be fitted with efficient, well-maintained mufflers that reduce equipment noise emission levels at the project site. Internal-combustion-powered equipment shall be equipped with properly operating noise suppression devices (e.g., mufflers, silencers, wraps) that meet or exceed the manufacturer's specifications. Mufflers and noise suppressors shall be properly maintained and tuned to ensure proper fit, function, and minimization of noise. ▪ Construction equipment shall not be idled for extended periods of time (i.e., 5 minutes or longer) in the immediate vicinity of noise-sensitive receptors.		
✓	**MM NOI-3: Construction Vibration (Applies to New Aquifer Storage and Recovery Facilities and all Intertie Improvements).** The Proposed Project shall implement the following measures to reduce the potential for structural damage from groundborne noise and vibration: ▪ Vibratory rollers or compactors shall not be used within 15 feet of sensitive receptors. ▪ Heavy equipment required to operate within 9 feet of sensitive receptors shall be limited to rubber-tired equipment.	City responsible for inclusion of construction vibration requirements in construction specifications and contracts. Contractor responsible for implementation during construction.	Include measure in construction specifications and contracts: Prior to construction. Implementation of measure: During construction.
STANDARD OPERATIONAL PRACTICES INCLUDED IN THE SANTA CRUZ WATER RIGHTS PROJECT			
	1. Ramping rates[1] developed during the pending ASHCP process and agreed to by CDFW and NMFS will be implemented at all City diversion facilities as follows: ▪ During changes in diversion rates, a ramping rate will be implemented at the Laguna Diversion, Liddell Diversion, Majors Diversion, and Tait Diversion to limit downstream flow	City responsible for implementing all operational practices, including ramping rates.	Throughout operation of all City diversion facilities.

[1] Ramping rates are diversion rates that gradually alter diversions from a stream channel to limit the downstream rate of change to stream stage. Stage is the water level in a stream or river defined in reference to a certain height.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	reductions below the diversions such that the change in stage is no greater than 0.16 feet per hour when fry may be present (January 15 through May 31) and no greater than 0.3 feet per hour at all other times. ▪ During changes in bypass rates downstream of Newell Creek Dam, a ramping rate will be implemented to limit flow reductions in Newell Creek such that the change in stage is no greater than 0.16 feet per hour when fry may be present (January 15 through May 31) and no greater than 0.3 feet per hour at all other times. ▪ During inflation and deflation of the dam at Felton Diversion, a ramping rate will be implemented such that during inflation of the dam, downstream stage decreases will be limited to no more than 0.55 feet per hour, and during deflation of the dam, downstream stage increases below the diversion will be limited to no more than 1.68 feet per hour.		
	2. Operation of the ASR injections and extractions anticipated by the Proposed Project will be consistent with the sustainable management criteria, and will avoid any undesirable results identified in the adopted Santa Cruz Mid-County Groundwater Basin GSP and in any future revisions to the GSP. ASR facilities and associated injections and extractions in the Santa Margarita Groundwater Basin will be planned to be installed and operated after the Santa Margarita Groundwater Basin GSP is prepared, adopted, and submitted to the Department of Water Resources in January 2022. The proposed timing will allow ASR injections and extractions to be consistent with the sustainable management criteria, and avoid any undesirable results identified, in the adopted Santa Margarita Groundwater Basin GSP and in any future revisions to the GSP. To avoid any undesirable results in both groundwater basins, minimum thresholds identified in both GSPs will not be exceeded during operation of ASR, as measured at representative monitoring	City responsible for implementing all operational practices, including operation of ASR injections and extractions consistent with the applicable GSP.	Throughout operation of ASR injections and extractions. Monitoring minimum thresholds: During operations based on a five-year running average. Monitoring early management action triggers: During operations based on short-term data (e.g., 30-day running average).

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	points based on a five-year average, which under the Sustainable Groundwater Management Act will provide for avoidance of undesirable effects and achievement and maintenance of groundwater basin sustainability. To support the achievement of minimum thresholds in the long-term, any early management action triggers identified in the GSPs (e.g., chloride concentration and groundwater elevation triggers in the Mid-County GSP) will also be used in the short-term during ASR operations to identify the need for implementation of early management actions, if any such actions are identified in the GSPs.		
	3. ASR facilities will be permitted, constructed, and operated in accordance with the SWRCB Water Quality Order 2012-0010, General Waste Discharge Requirements for Aquifer Storage and Recovery Projects that Inject Drinking Water into Groundwater. This Order provides consistent regulation of ASR projects state-wide; provides a streamlined review and permitting process for ASR projects; and ensures compliance with applicable regulations and policies, including the RWQCB Basin Plans and State Water Board Resolution 68-18 (the Antidegradation Policy). The Order addresses possible elevated concentrations of naturally occurring or anthropogenic constituents in the aquifer, as well as the potential effects of mixing water from different sources, which may cause geochemical reactions in the aquifer that can improve or degrade groundwater quality. The Order requires groundwater monitoring of the injection/extraction wells and monitoring wells to evaluate the potential for groundwater quality changes. In accordance with this Order, a technical report will be required in association with ASR permitting, including a hydrogeologic evaluation (e.g., injected aquifer characteristics) and water quality evaluation (e.g., potential impact to ongoing remediation efforts, mobilization of contaminants). A Monitoring and Reporting Program will be required, including requirements for monitoring of	City responsible for implementing all operational practices, including compliance with SWRCB Water Quality Order 2012-0010. City responsible for preparation of a hydrogeologic evaluation and water quality evaluation, and Monitoring and Reporting Program.	Throughout project operations.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	injected water quality, groundwater quality, and groundwater elevation/gradient.		
	4. Diversions from surface streams to provide water for ASR injections will be limited by the following: ▪ No diversions to provide water for ASR injections will occur in months classified as Hydrologic Condition 5 (driest) as defined in the Agreed Flows (Table 3-5a).	City responsible for implementing all operational practices, including water diversions from surface streams for ASR injections.	Throughout project operations.
✓	5. Diversions by the City from surface streams to support City water transfers and/or exchanges to neighboring agencies will be limited by the following: ▪ The City will not divert water from surface streams to transfer to neighboring agencies pursuant to the Proposed Project in months classified as Hydrologic Condition 4 (dry) or Hydrologic Condition 5 (driest) as defined in the Agreed Flows (Table 3-5a).	City responsible for implementing all operational practices, including water diversions from surface streams for water transfers and/or exchanges.	Throughout project operations.
	6. At times when the Loch Lomond Reservoir is spilling during late spring and summer when surface temperatures in the reservoir are warmer and the cooler 1 cfs fish release below the dam (generally between 11°C and 14°C) may not be sufficient to maintain temperatures in Newell Creek below 21°C, which is within the suitable range for steelhead and coho, the City will release additional flow through the fish release to achieve a maximum instantaneous temperature of less than 21°C as measured in the anadromous reach of Newell Creek and verified at the City stream gage in Newell Creek below the dam.	City responsible for releasing additional flow to achieve specified water temperature at the City stream gage in Newell Creek below the dam.	Throughout project operations.
STANDARD CONSTRUCTION PRACTICES INCLUDED IN THE SANTA CRUZ WATER RIGHTS PROJECT			
Erosion and Air Quality Control			
✓	1. Implement erosion control best management practices for all construction activities occurring in or adjacent to jurisdictional aquatic resources (resources subject to permitting under Clean Water Act Section 404, Clean Water Act Section 401, Porter-Cologne Water Quality Act Section 13000 et seq., and/or California Fish and	City responsible for inclusion of measure in construction specifications and contracts and periodic inspection.	Prior to construction, include measure in construction specifications and contracts.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	Game Code Section 1600). These measures may include, but are not limited to, (1) installation of silt fences, fiber or straw rolls, and/or bales along limits of work/construction areas and from the edge of the water course; (2) covering of stockpiled spoils; (3) revegetation and physical stabilization of disturbed graded and staging areas; and (4) sediment control including fencing, dams, barriers, berms, traps, and associated basins.	Contractor responsible for implementation.	Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	2. Provide stockpile containment and exposed soil stabilization structures (e.g., Visqueen plastic sheeting, fiber or straw rolls, gravel bags, and/or hydroseed).	City responsible for inclusion of measure in construction specifications and contracts and periodic inspection. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	3. Provide runoff control devices (e.g., fiber or straw rolls, gravel bag barriers/chevrons) used during construction phases conducted during the rainy season. Following all rain events, runoff control devices shall be inspected for their performance and repaired immediately if they are found to be deficient.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	4. Implement wind erosion (dust) controls, including the following: ▪ Use a water truck; ▪ Water active construction areas as necessary to control fugitive dust; ▪ Hydro seed and/or apply non-toxic soil binders to exposed areas after cut and fill operations; ▪ Cover inactive storage piles;	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	▪ Cover all trucks hauling dirt, sand, or loose materials off site; and ▪ Install appropriately effective track-out capture methods at the construction site for all exiting trucks.		Periodic inspection during construction to ensure no violations.
Water Quality Protection			
✓	5. Locate and stabilize spoil disposal sites and other debris areas such as concrete wash sites. Sediment control measures shall be implemented so that sediment is not conveyed to waterways or jurisdictional resources (resources subject to permitting under Clean Water Act Section 404, Clean Water Act Section 401, and/or California Fish and Game Code Section 1600).	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	6. Minimize potential for hazardous spills from heavy equipment by not storing equipment or fueling within a minimum of 65 feet of any active stream channel or water body unless approved by permitting agencies along with implementation of additional spill prevention methods such as secondary containment and inspection.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	7. Ensure that gas, oil, or any other substances that could be hazardous to aquatic life or pollute habitat are prevented from contaminating the soil or entering waters of the state or of the United States by storing these types of materials within an established containment area. Vehicles and equipment will have spill kits available, be checked daily for leaks, and will be properly maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Any gas, oil, or other substance that could be considered	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.

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	hazardous shall be stored in water-tight containers with secondary containment. Emergency spill kits shall be on site at all times.		
✓	8. Prevent equipment fluid leaks through regular equipment inspections.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	9. Implement proper waste/trash management.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
In-Channel Work and Fish Species Protection			
✓	10. For facilities that are in or adjacent to streams and drainages, avoid activities in the active (i.e., flowing) channel whenever possible. New ASR facilities shall avoid streams and drainages.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
✓	11. Isolate work areas as needed and bypass flowing water around work site (see dewatering measures below).	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	12. Personnel shall use the appropriate equipment for the job that minimizes disturbance to the channel bed and banks. Appropriately tired vehicles, either tracked or wheeled, shall be used depending on the situation.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
General Habitat Protection			
✓	13. Avoid disturbance of retained riparian vegetation to the maximum extent feasible when working in or adjacent to an active stream channel.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	14. Restore all temporarily disturbed natural communities/areas by replanting native vegetation using a vegetation mix appropriate for the site.	City responsible for replanting.	Upon completion of construction.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
✓	15. Require decontamination of any used tools and equipment prior to entering water ways.	City responsible for inclusion of measure in construction specifications and contracts, and periodic inspections. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. Periodic inspection during construction to ensure no violations.
✓	16. A qualified biologist shall conduct a training-educational session for project construction personnel prior to any mobilization-construction activities within the project sites to inform personnel about species that may be present on site. The training shall consist of basic identification of special-status species that may occur on or near the project site, their habitat, their basic habits, how they may be encountered in the work area, and procedures to follow when they are encountered. The training will include a description of the project boundaries; general provisions of the Migratory Bird Treaty Act, California Fish and Game Code, and federal and state Endangered Species Acts; the necessity for adhering to the provision of these regulations; and general measures for the protection of special-status species, including breeding birds and their nests. Any personnel joining the work crew later shall receive the same training before beginning work.	City responsible for hiring qualified biologist or trained designee to conduct training.	Training: Prior to construction and prior to new work crews coming onto the site.
Dewatering			
	17. Prior to the start of work or during the installation of temporary water diversion structures, capture native aquatic vertebrates in the work area and transfer them to another reach as determined by a qualified biologist. Capture and relocation of aquatic native vertebrates is not required at individual project sites when site conditions preclude reasonably effective operation of capture gear and equipment, or when the safety of the biologist conducting the capture may be compromised.	City responsible for hiring qualified biologist to be present during dewatering and to implement capture and relocation plan if needed. (Coordinate with the provisions of MM BIO-3 and MM BIO-8.)	Biologist to be present during installation of coffer dam and dewatering. (Coordinate with the provisions of MM BIO-3 and MM BIO-8.)

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	18. When work in a flowing stream is unavoidable, isolate the work area from the stream. This may be achieved by diverting the entire streamflow around the work area by a pipe or open channel. Coffer dams shall be installed upstream and downstream, if needed, of the work areas at locations determined suitable based on site-specific conditions, including proximity to the construction zone and type of construction activities being conducted. Coffer dam construction shall be adequate to prevent seepage to the maximum extent feasible into or from the work area. Where feasible, water diversion techniques shall allow stream flows to flow by gravity around or through the work site. If gravity flow is not feasible, stream flows may be pumped around the work site using pumps and screened intake hoses. Sumps or basins may also be used to collect water, where appropriate (e.g., in channels with low flows). The work area will remain isolated from flowing water until any necessary erosion protection is in place. All water shall be discharged in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic, on concrete, or in storm drains when equipped with filtering devices).	City responsible for inclusion of measure in construction specifications and contracts and periodic inspection during implementation. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction when work in flowing stream is unavoidable. Periodic inspection during construction to ensure no violations.
	19. If a bypass will be of open channel design, the berm confining the channel may be constructed of material from the channel.	City responsible for inclusion of measure in construction specifications and contracts and periodic inspection during implementation. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction when work in flowing stream is unavoidable. Periodic inspection during construction to ensure no violations.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
	20. Diversions shall maintain ambient flows below the diversion, and waters discharged below the project site shall not be diminished or degraded by the diversion. All imported materials placed in the channel to dewater the channel shall be removed when the work is completed. Dirt, dust, or other potential discharge material in the work area will be contained and prevented from entering the flowing channel. Normal flows shall be restored to the affected stream as soon as is feasible and safe after completion of work at that location.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation. City responsible for periodic and post-construction inspection to ensure all imported materials are removed.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction when work in flowing stream is unavoidable. Periodic inspection to confirm compliance with the measure. Post-construction inspection.
	21. To the extent that streambed design changes are not part of the Proposed Project, return the streambed, including the low-flow channel, to as close to pre-project condition as possible unless the pre-existing condition was detrimental to channel condition as determined by a qualified biologist or hydrologist.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation. City responsible for post-construction inspection.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction when work in flowing stream is unavoidable. Post-construction inspection.
	22. Remove all temporary diversion structures and the supportive material as soon as reasonably possible, but no more than 72 hours after work is completed.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation. City responsible for post-construction inspection to ensure all imported materials are removed.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction when work in flowing stream is unavoidable. Post-construction inspection.

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	23. Completely remove temporary fills, such as for access ramps, diversion structures, or coffer dams upon finishing the work.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation. City responsible for post-construction inspection to ensure all imported materials are removed.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction when work in flowing stream is unavoidable. Post-construction inspection.
Other Practices			
✓	24. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Proposed Project, immediately stop all construction work occurring within 100 feet of the find until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find, and whether the archaeological resources qualify as unique archaeological resources, historical resources of an archaeological nature, or subsurface tribal cultural resources. The archaeologist will determine whether additional study is warranted. Should it be required, the archaeologist may install temporary flagging around a resource to avoid any disturbances from construction equipment. Depending upon the significance of the find under CEQA (14 CCR 15064.5[f]; California Public Resources Code, Section 21082), the archaeologist may record the find to appropriate standards (thereby addressing any data potential) and allow work to continue. If the archaeologist observes the discovery to be potentially significant under CEQA, preservation in place or additional treatment may be required.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation. (Coordinate with the provisions of MM CUL-2.)	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction. (Coordinate with the provisions of MM CUL-2.)

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
✓	25. In accordance with Section 7050.5 of the California Health and Safety Code, if potential human remains are found, immediately notify the lead agency staff and the County Coroner of the discovery. The coroner will provide a determination within 48 hours of notification. No further excavation or disturbance of the identified material, or any area reasonably suspected to overlie additional remains, can occur until a determination has been made. If the County Coroner determines that the remains are, or are believed to be, Native American, the coroner will notify the Native American Heritage Commission within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the Most Likely Descendant from the deceased Native American. Within 48 hours of this notification, the Most Likely Descendant will recommend to the lead agency her/his preferred treatment of the remains and associated grave goods.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction.
	26. Notify adjacent property owners of nighttime construction schedules. A Construction Noise Coordinator will be identified. The contact number for the Construction Noise Coordinator will be included on notices distributed to neighbors regarding planned nighttime construction activities. The Construction Noise Coordinator will be responsible for responding to any local complaints about construction noise. When a complaint is received, the Construction Noise Coordinator shall notify the City within 48 hours of the complaint, determine the cause of the noise complaint, and implement as possible reasonable measures to resolve the complaint, as deemed acceptable by the City.	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction.

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Applicable to Intertie-1 Project	Mitigation Measures and Standard Practices	Party Responsible for Implementation	Implementation Timing
✓	27. For construction on undeveloped sites or sites with surrounding trees and other vegetation, internal combustion engine equipment shall include spark arrestors, fire suppression equipment (e.g., fire extinguishers and shovels) must be stored onsite during use of such mechanical equipment, and construction activities may not be conducted during red flag warnings issued by the California Department of Forestry and Fire Protection (CAL FIRE). Red flag warnings and fire weather watches are issued by CAL FIRE based on weather patterns (low humidity, strong winds, dry fuels, etc.) and listed on their website (https://www.fire.ca.gov/programs/communications/red-flag-warnings-fire-weather-watches/).	City responsible for inclusion of measure in construction specifications and contracts. Contractor responsible for implementation.	Prior to construction, include measure in construction specifications and contracts. Implement measure during construction.

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Appendix B
Biological Resources Assessment

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MEMORANDUM

To:	Sarah Easley Perez, City of Santa Cruz
From:	Kelsey Higney, Biologist, Dudek
Subject:	Biological Resources Assessment for the City of Santa Cruz/Scotts Valley Water District Intertie-1 Project
Date:	May 19, 2023
cc:	Catherine Wade, Project Manager, Dudek Matt Ricketts, Senior Biologist, Dudek
Attachments:	A – Figures B – Representative Photographs of the Project Site C – Plant and Wildlife Species Observed D – Special-Status Species Potential to Occur

1 Introduction

This biological resources technical memorandum summarizes Dudek's findings from a reconnaissance-level biological field survey for the City of Santa Cruz (City)/Scotts Valley Water District (SVWD) Intertie-1 Project (Proposed Project) in Santa Cruz County, California. The Proposed Project was recently evaluated at a program level in the Santa Cruz Water Rights Project Environmental Impact Report (EIR) (City of Santa Cruz 2021), certified by the City in December 2021. The proposed alignment is the same as that contemplated by the EIR, with the exception that an additional segment is now proposed. The Proposed Project consists of a new 12-inch-diameter bi-directional intertie pipeline and pump station between the City and SVWD distribution systems to facilitate transfers of water supply during wet seasons, and from SVWD to the City during dry seasons or drought years. The pipeline would run from the City's Pasatiempo tanks in the south along Firehouse Lane to Sims Road, and then along La Madrona Drive to the north to the City of Scotts Valley where a new pump station would be constructed. This pump station is expected to be a single-story building with outdoor paved area surrounded by security fencing. It would also include security lighting that would be limited to low-wattage, shielded outdoor lighting, directed onto the site. The Proposed Project would also include installation of appurtenances that are required for pipeline operation, monitoring, and maintenance, including the line valves, air release valves, isolation valves, sample stations, and hydrants. The additional pipeline segment now being considered, that was not evaluated in the Santa Cruz Water Rights Project EIR, would run from Sims Road to the City's Pasatiempo tanks.

Construction of the Proposed Project would occur within the existing public rights-of-way of Sims Road and La Madrona Drive, privately owned Firehouse Lane, and at the City-owned Pasatiempo tank site. Construction would include excavation of an approximately 3-foot-wide trench, primarily limited to one of the two lanes of both La

Madrona Drive and Sims Road, but and along the single lane of Firehouse Lane. Maximum excavation depth, including for pump station construction, would be 15 feet.

Construction methods for the pipeline would consist of open-cut trenching, which would generally consist of utility clearance/mark-out activities, site preparation, excavation, shoring where necessary, pipe installation, backfilling, and work area/street restoration. Typical construction would progress with vegetation clearing in undeveloped areas, and sawcutting and removing existing asphalt concrete in paved areas, excavation, placement of bedding materials as required, placement of new sections of piping (typically 20-foot to 60-foot sections), backfilling and compaction of the trench, installation of temporary traffic plates over the backfilled trench, and restoration of the disturbed area. Pipeline construction would necessitate the removal of existing underbrush and tree limbs and trunks that overhang the alignment and conflict with excavation equipment. Construction may require limited areas of temporary regrading to provide ground surfaces suitable for construction. Once construction is complete, all surfaces temporarily disturbed would be restored to be similar to conditions existing prior to construction. The proposed pump station site would require regrading to provide a level area for the pump station and may require removal of the existing shrubs.

An approximately 30,800-square-foot temporary construction staging area would be located immediately north of the proposed pump station location on Scotts Valley Fire District (SVFD) property. The City's Pasatiempo tank site property may also be used for temporary construction staging as needed.

This memorandum details findings from Dudek's biological field evaluation of the newly proposed segment of the intertie pipeline, as well as inspection of the intertie locations evaluated during Dudek's 2021 visit to confirm existing conditions remain consistent with those reported in the Santa Cruz Water Rights Project EIR. For this analysis, Dudek established a biological study area (BSA) to evaluate potential biological resources, which includes the pipeline alignment and a 500-foot buffer of the alignment.

1.1 Project Location

The BSA is located in the City of Scotts Valley and unincorporated Santa Cruz County, California within the *Felton* U.S. Geological Survey (USGS) 7.5-minute quadrangle map within Sections 38 and 39 of Township 10 South, Range 02 West (Attachment A; Figure 1, Project Location). The section of the Proposed Project evaluated for the 2021 Santa Cruz Water Rights Project EIR extends from La Madrona Drive in the City of Scotts Valley near the intersection with Highway 17 south to approximately the intersection of Sims Road and Firehouse Lane (Attachment A; Figure 2, Project Site). The newly added pipeline segment extends from Firehouse Lane to the City's Pasatiempo tanks.

Topography of the BSA varies with an elevation range of approximately 450 to 750 feet above mean sea level. Santa Cruz County experiences a Mediterranean climate with warm, dry summers and cool, wet winters. The region surrounding the site receives an annual average of approximately 29.33 inches of precipitation. Average temperatures range from approximate 45°F to 68.9°F (WRCC 2023).

2 Methodology

2.1 Literature Review

To identify special-status species that could potentially occur in the BSA, Dudek queried the following online sources: U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online tool (USFWS 2023a), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2023), and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2023a). The CNDDB and CNPS queries included the following U.S. Geological Survey 7.5-minute quadrangles: Felton, Laurel, Los Gatos, Soquel, Santa Cruz, Davenport, Castle Rock Ridge, and Big Basin.

For this memorandum, special-status plant and wildlife species are defined as those that are (1) listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act; (2) listed or candidates for listing as threatened or endangered under the California Endangered Species Act; (3) designated as Fully Protected under the California Fish and Game Code; (4) designated as a California Species of Special Concern by CDFW; and/or (5) assigned a California Rare Plant Rank of 1 or 2 by the CNPS.

2.2 Field Visit

On February 3, 2023, Dudek biologists Kelsey Higney and Tara Johnson-Kelly conducted a reconnaissance-level field assessment of the BSA. The purpose of the site assessment was to identify and describe existing biological resources, including natural vegetation communities, aquatic resources (e.g., wetlands), and sensitive natural resources such as vegetation communities considered sensitive by state and/or federal agencies and potential habitat for special-status plant and wildlife species. Determinations for the potential of special-status species to occur were based on a review of habitat types, soils, and elevation preferences, as well as the known geographic range of each species and nearby documented occurrences. Species were considered "not expected to occur" when the study area was clearly outside the known geographic range of the species or when potential habitat was absent from the BSA.

Dudek conducted the field assessment from approximately 1:30 p.m. to 4:15 p.m. Weather during the site visit was overcast with periods of light rain. The visit was conducted on foot to ensure visual coverage of the entire BSA. Digital maps with an overlay of the BSA boundary accessible on handheld devices (ESRI 2022) were used for navigation and to map vegetation communities, as well as to note any sensitive biological resources while in the field. Observations were recorded in field notebooks and handheld devices. Representative site photographs are included in Attachment B.

All plant and wildlife species observed were recorded. Plant species were identified to the lowest taxonomic group possible. Nomenclature for plant species follow the Jepson Manual, Vascular Plants of California, Second Edition (Jepson Flora Project 2023). Wildlife species detected by sight, calls, tracks, scat, or other signs were recorded into a field notebook. The BSA was scanned with and without binoculars to aid in the identification of wildlife. Wildlife species not observed but expected to use the BSA were identified based on known habitat preferences and regional distribution.

No formal wetland delineation or focused special-status species surveys were conducted. The field visit was sufficient to generally describe aquatic features within the BSA that could be subject to regulation by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW under Sections 404 of the federal Clean Water Act, the Porter-Cologne Water Quality Control Act, and Section 1602 of the California Fish and Game Code, respectively.

3 Results

3.1 Vegetation Communities and Land Cover Types

Six (6) vegetation communities and one (1) land cover type were identified within the BSA: annual grassland, coastal scrub, coastal oak woodland, eucalyptus, montane hardwood-conifer, redwood, and urban land. These vegetation communities were categorized and mapped consistent with the Santa Cruz Water Rights Project EIR, which followed the California Department of Forestry and Fire Protection's (CAL FIRE's) Fire and Resource Assessment Program (FRAP) vegetation dataset. This dataset is based on CDFW's Wildlife Habitat Relationship (CWHR) classification scheme for wildlife habitat types in California (Mayer and Laudenslayer 1988). For the purposes of this memorandum, the term "habitat type" is synonymous with "vegetation community" or "land cover type." The distribution of vegetation communities, land cover types, and aquatic features within the BSA is shown in Attachment A; Figure 3, Vegetation Communities, Land Cover Types, and Aquatic Features.

3.1.1 Annual Grassland

The annual grassland vegetation community is composed primarily of annual herbaceous plant species. Vegetation composition and structure in annual grasslands depend largely on weather patterns and livestock grazing, where present. Fall rains cause germination of annual plant seeds. Plants grow slowly during the cool winter months, remaining low in stature until spring, when temperatures increase and stimulate more rapid growth. Large amounts of standing dead plant material can be found during summer in years of abundant rainfall and light to moderate grazing pressure. Introduced annual grasses are the dominant plant species in this habitat. Common grass species may include canary grass (*Phalaris* spp.) barley (*Hordeum* spp.), fescue (*Festuca* spp.), medusa head (*Elymus caputmedusae*), soft chess (*Bromus hordeaceus*), red brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*), wild oats (*Avena* spp.). Common forb species may include bur clover (*Medicago polymorpha*), clovers (*Trifolium* spp.), filaree (*Erodium* spp.), turkey mullein (*Croton setiger*), and many others (Mayer and Laudenslayer 1988).

This vegetation community occurs at the northern extent of the BSA at the location of the proposed pump station. Observed plant species at this location include rye grass (*Festuca perennis*), wild oats, barley, bromes, and clovers.

3.1.2 Coastal Oak Woodland

Coastal oak woodland is extremely variable. The overstory of this community consists of deciduous and evergreen hardwoods. In mesic sites, the trees are dense and form a closed canopy. In drier sites, the trees are widely spaced, forming an open woodland or savannah. The understory is equally variable. In some instances, it is composed of shrubs from adjacent chaparral or coastal scrub vegetation communities, which form a dense and impenetrable understory. More commonly, shrubs are scattered under and between trees. Where trees form a closed canopy, the understory varies from a lush cover of shade-tolerant shrubs, ferns, and herbs to sparse cover with a thick carpet

of litter. When trees are scattered and form an open woodland, the understory is grassland, sometimes with scattered shrubs. The interrelationships of slope, soil, precipitation, moisture availability, and air temperature cause variations in structure of coastal oak woodlands. These factors vary along the latitudinal, longitudinal, and elevation gradients over which coastal oak woodlands are found. Common species may include arroyo willow (*Salix lasiolepis*), big-leaf maple (*Acer macrophyllum*), black oak (*Quercus kelloggii*), boxelder (*Acer negundo*), and California bay laurel (*Umbellularia californica*), California sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), Fremont's cottonwood (*Populus fremontii*), Pacific madrone (*Arbutus menziesii*), and valley oak (*Quercus lobata*) (Mayer and Laudenslayer 1988).

This vegetation community occurs at both the northern and southern extents of the BSA. The northern stands are drier and dominated by widely spaced coast live oak trees with an understory of annual grasses such as rattlesnake grass (*Briza maxima*) and foxtail barley (*Hordeum jubatum* ssp. *jubatum*). The southern stands near the Pasatiempo tanks include areas dominated by California bay that would be classified as California bay forest and woodland under CDFW's statewide vegetation classification system, which is codified in the Manual of California Vegetation (MCV) (CNPS 2023b) (see Section 3.3.4, Sensitive Vegetation Communities).

3.1.3 Coastal Scrub

The coastal scrub vegetation community can be found at river mouths, stream sides, terraces, stabilized dunes of coastal bars, spits along the coastline, coastal bluffs, open slopes, ridges. No single species is typical of all the coastal scrub vegetation communities in the central coast region. Structure of the plant species that comprise coastal scrub vegetation communities is typified by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Structure differs among stands, mostly along a gradient that parallels the coastline. Specifically, species composition changes most markedly with progressively more xeric conditions from north to south along the coastline. With the change from mesic to xeric sites, dominance appears to shift from evergreen species in the north to drought-deciduous species in the south. Variation in coastal influence at a given latitude produces less pronounced composition changes. Common species may include blue blossom (*Ceanothus thyrsiflorus* var. *thyrsiflorus*), California coffeeberry (*Frangula californica*), common cowparsnip (*Heracleum maximum*), coyote brush (*Baccharis pilularis*), Himalayan blackberry (*Rubus armeniacus*), Indian paintbrush (*Castilleja affinis* ssp. *affinis*), monkeyflower (*Diplacus* spp.), oat grasses, poison oak, salal (*Gaultheria shallon*), wooly sunflower (*Eriophyllum lanatum*), silver bush lupine (*Lupinus albifrons*), and yerba buena (*Clinopodium douglasii*) (Mayer and Laudenslayer 1988).

This vegetation community occurs towards the northern portion of the BSA, as well as in a small patch towards the south. Both areas are dominated by coyote brush and lack the diversity of native species that characterizes larger and less disturbed patches occurring along the immediate coast.

3.1.4 Eucalyptus

Eucalyptus vegetation communities range from single-species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Stand structure for this vegetation community may vary considerably because most eucalyptus tree species have been planted into either rows for wind protection or dense groves for hardwood production and harvesting. Overstory composition is typically limited to one species of the genus, or mixed stands composed of other species of the same genus; few native overstory species are present within eucalyptus planted

areas, except in small cleared pockets. The most common species may include blue gum (*Eucalyptus globulus*) and red gum (*Eucalyptus camaldulensis*) (Mayer and Laudenslayer 1988).

This vegetation community occurs in one stand at the southern extent of the BSA. Blue gum is the dominant species in this area.

3.1.5 Montane Hardwood-Conifer

The montane hardwood conifer vegetation community includes both conifers and hardwoods, often as a closed forest. To be classified as a montane hardwood vegetation community, at least one-third of the trees must be conifer and at least one-third must be broad-leaved. This vegetation community often occurs in a mosaic-like pattern with small pure stands of conifers interspersed with small stands of broad-leaved trees. Species diversity consists of a broad spectrum of mixed, vigorously growing conifer and hardwood species. Most of the broad-leaved trees are evergreen, but winter deciduous species also occur. Relatively little understory occurs under the dense, layered canopy of this vegetation community. However, considerable ground and shrub cover can occur in ecotones or following disturbance such as fire or logging. Steeper slopes are normally devoid of litter; however, gentle slopes often contain considerable accumulations of leaf and branch litter. Common species may include black oak, big-leaf maple, canyon live oak (*Quercus chrysolepis*), coast redwood (*Sequoia sempervirens*), Douglas fir (*Pseudotsuga menziesii*), Pacific madrone, ponderosa pine (*Pinus ponderosa*), tanoak (*Notholithocarpus densiflorus*), and other localized species (Mayer and Laudenslayer 1988).

This vegetation community occurs intermittently throughout the BSA. Douglas fir, Pacific madrone, and tanoak were observed in this community within the BSA.

3.1.6 Redwood

The redwood vegetation community is characterized by even-aged structure with an open parklike appearance. Redwood and associated conifers also reproduce well by seed. The redwood habitat is a composite name for a variety or mix of conifer species that grow within the coastal influence zone (i.e., from the coast to approximately 31 miles inland). The redwood vegetation community occurs along raised stream terraces, benches, all slopes and aspects, and ridges. Coast redwood is the dominant species in the coastal zone, while further inland Douglas fir becomes dominant with tanoak and madrone as the major associates. Common species may include Bishop pine (*Pinus muricata*), big-leaf maple, California bay, California huckleberry (*Vaccinium ovatum*), California red huckleberry (*Vaccinium parvifolium*), coast rhododendron (*Rhododendron macrophyllum*), oceanspray (*Holodiscus discolor*), Oregon ash (*Fraxinus latifolia*), poison oak, salmonberry (*Rubus spectabilis*), thimbleberry (*Rubus parviflorus*), western chain fern (*Woodwardia fimbriata*), and western sword fern (*Polystichum munitum*) (Mayer and Laudenslayer 1988).

This vegetation community occurs intermittently throughout the BSA. Observed plants besides coast redwood include California buckeye (*Aesculus californica*), California bay, big-leaf maple, and arroyo willow (*Salix lasiolepis*).

3.1.7 Urban

The urban land cover type includes areas that have been constructed on or otherwise physically altered to the point where natural vegetation is no longer present. Urban areas are characterized by permanent or semipermanent structures, hardscapes, and landscaped areas that require irrigation. Species composition in urban habitats varies

with planting design and climate. Monoculture is commonly observed in tree groves and street tree strips. The juxtaposition of urban vegetation types within cities produces a rich mosaic with considerable edge areas. The overall mosaic may be more valuable as wildlife habitat than the individual units in that mosaic. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Both native and exotic species are valuable, with exotic species providing a good source of additional food in the form of fruits and berries (Mayer and Laudenslayer 1988).

This land cover type is abundant throughout the BSA.

3.2 Plant and Wildlife Species Observed

3.2.1 Plants

A total of 24 species of native or naturalized plants—13 native (54%) and 11 non-native (46%)—were observed within the BSA during the biological field survey (Attachment C, Plant and Wildlife Species Observed). Large portions of the BSA are already developed and contain mostly herbaceous weeds and non-native grasses characteristic of disturbed habitats. No special-status plant species were identified during the site visit. The biological field survey was conducted outside of the blooming season for special-status plants with high or moderate potential to occur within the BSA (Attachment D-1, Special Status Plant Species Potential to Occur.)

3.2.2 Wildlife

A total of nine bird species were detected during the biological field surveys (Attachment C). No special-status wildlife species were observed. No nests (active or inactive), nor any nesting behavior such as courtship, nest-building, food deliveries, or territorial displays were observed during surveys, although trees within the BSA provide suitable nesting habitat for native bird species protected under the federal Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code. The survey was conducted outside of the typical nesting period for many birds in Santa Cruz County.

3.3 Sensitive and/or Regulated Resources

3.3.1 Special-Status Plants

Results of the CNDDB and CNPS database searches revealed 60 special-status plant species as occurring within the region around the BSA (Attachment D, Special-Status Species Potential to Occur). Twenty-four (24) of these species have a moderate or high potential to occur within the BSA based on the presence of suitable habitat, the BSA's location within the species' known range, and known occurrences of the species within 5 miles of the BSA (see Table 1). The remainder of the species are not expected to occur or have a low potential to occur within the BSA, and are not further discussed in this memorandum. No special-status plant species were observed in the BSA during the biological field survey. Attachment A; Figure 4a, Special-Status Species Occurrences – Plants, shows documented CNDDB occurrences of special-status plant species within 2 miles of the BSA.

Table 1. Special-Status Plants with Moderate to High Potential to Occur

Species	Vegetation Type		
	Grassland or Scrub[1]	Chaparral or Woodland[2]	Coniferous Forest[3]
Anderson's manzanita		X	X
Bonny Doon manzanita		X	X
Ben Lomond spineflower			X
Monterey spineflower	X	X	
Scotts Valley spineflower	X		
robust spineflower	X	X	
tear drop moss			X
western leatherwood		X	X
Ben Lomond buckwheat	X	X	X
Santa Cruz wallflower		X	X
minute pocket moss			X
Santa Cruz tarplant	X		
Kellogg's horkelia	X	X	X
Point Reyes horkelia	X		
marsh microseris	X	X	X
northern curly-leaved monardella	X	X	X
woodland woollythreads	X	X	X
white-rayed pentachaeta	X	X	
white-flowered rein orchid		X	X
Choris' popcornflower	X	X	
San Francisco popcornflower	X		
Scotts Valley polygonum	X		
Santa Cruz microseris	X	X	X
Santa Cruz clover	X	X	

Notes: Scientific names are provided in Attachment D.

1 Grassland vegetation in the biological study area (BSA) includes the wild oat and annual brome grasslands vegetation community, which is present in the northern part of the BSA. Scrub vegetation in the BSA includes the coyote brush and poison oak vegetation community which is present in the northern and southern parts of the BSA.

2 Chaparral and woodland vegetation in the BSA includes the coastal oak woodland vegetation community which is present throughout the BSA.

3 Coniferous forest vegetation in the BSA includes redwood forest and montane hardwood-conifer forest communities, which are present throughout the BSA.

3.3.2 Special-Status Wildlife

Results of the CNDDB and IPaC database searches revealed that 43 special-status wildlife species occur within the region around the BSA (Attachment D). Of these, 10 special-status wildlife species have a moderate or high potential to occur within the BSA based on the presence of suitable habitat, the site's location within the species' known range, and known occurrences of the species within 5 miles of the BSA (see Table 2). These species are described in more detail below. Attachment A; Figure 4b, Special-Status Species Occurrences – Wildlife, shows documented CNDDB occurrences of special-status wildlife species within 2 miles of the BSA.

Table 2. Special-Status Wildlife with Moderate to High Potential to Occur

Species	Habitat Type		
	Grassland or Scrub	Upland Forest or Woodland	Aquatic or Riparian
Santa Cruz black salamander	X	X	X
California giant salamander		X	X
white-tailed kite (nesting)	X	X	
Smith's blue butterfly	X	X	
Mount Hermon June beetle*	X		
Zayante band-winged grasshopper*	X		
monarch		X	X
pallid bat	X	X	X
Townsend's big-eared bat		X	X
San Francisco dusky-footed woodrat	X	X	X

Notes: Scientific names are provided in Attachment D. See notes from Table 1 for description of habitat types as they are found within the BSA.
* Mount Hermon June beetle and Zayante band-winged grasshopper are endemic to Sandhills habitat.

California Giant Salamander

California giant salamander (*Dicamptodon ensatus*) is a California Species of Special Concern occurring in wet coastal forests near streams and seeps. This species' range is limited to Mendocino County, south to Monterey County and east to Napa County. Aquatic larvae are found in cold, clear streams and occasionally occur in lakes and ponds. Adults occur in wet forests under rocks and woody debris in the vicinity of streams or lakes (CDFW 2023).

California giant salamander has a high potential to occur in the BSA. The BSA has suitable coastal forest present, as well as multiple streams with potential for breeding. The nearest documented occurrence is approximately 1.8 miles from the BSA near Henry Cowell Redwoods and Highway 9, a historical occurrence from 1972 (Occ. No. 137). Numerous other documented occurrences are recorded within 5 miles of the BSA, spanning from 1930 through 2016 (CDFW 2023). California giant salamander was not detected during the 2023 Dudek field assessment.

Santa Cruz Black Salamander

Santa Cruz black salamander (*Aneides flavipunctatus niger*) is a California Species of Special Concern and is restricted to mesic deciduous or coniferous forests in the fog belt of the outer Coast Range of San Mateo, Santa Cruz, and Santa Clara Counties. It occurs in moist streamside microhabitats and is typically found under rocks near streams, in talus, and under damp woody debris (CDFW 2023).

Santa Cruz black salamander has a moderate potential to occur in the BSA. The BSA contains suitable forest habitat, but moist, rocky streamside microhabitats preferred by this species are limited. The nearest documented occurrence is approximately 0.72 miles from the BSA near Glen Canyon Road, a historical occurrence from 1972 (Occ. No. 72). There are numerous other documented occurrences within 5 miles of the BSA, spanning from 1946 through 2015 (CDFW 2023). Santa Cruz black salamander was not detected during the 2023 Dudek field assessment.

Smith's Blue Butterfly

Smith's blue butterfly (*Euphilotes enoptes smithi*) is a federally endangered species occurring in sand dunes, scrub, chaparral, and grassland habitats of the central California coast (CDFW 2023). The range of the species is restricted to Monterey and historically Santa Cruz Counties, within coastal sand dunes that extend from Salinas River south through the Carmel Valley (USFWS 2020). This butterfly uniquely relies on two species of buckwheat (*Eriogonum latifolium* and *E. parvifolium*) for all life stages (USFWS 2020).

Smith's blue butterfly has a low potential to occur within the BSA. The nearest documented occurrence is approximately 2 miles from the BSA, a historical occurrence from 1983 (Occ. No. 12) (CDFW 2023). Marginal sand dune habitat exists within the BSA for this species, however, it is believed that the present day species' distribution is restricted to regions south of Salinas along the coast (USFWS 2020). Smith's blue butterfly, or its buckwheat host plant, was not detected during the 2023 Dudek field assessment.

Mount Hermon June Beetle

Mount Hermon June beetle (*Polyphylla barbata*) is a federally endangered species endemic (i.e., found nowhere else in the world) to the Zayante sandhills of Santa Cruz County (CDFW 2023).

Mount Hermon June beetle has a moderate potential to occur within the sandhill portions of the BSA. The nearest documented occurrence is approximately 800 feet from the BSA off of Graham Hill Road, an occurrence from 2004 (Occ. No. 13) There are numerous other occurrences within 5 miles of the BSA, spanning from 1993 to 2006 (CDFW 2023). Mount Hermon June beetle was not detected during the 2023 Dudek field assessment.

Zayante Band-Winged Grasshopper

Zayante band-winged grasshopper (*Trimerotropis infantilis*) is a federally endangered species endemic to the Zayante sandhills of Santa Cruz County (CDFW 2023). The species occurs in open sandy areas with sparse herbaceous vegetation and ponderosa pines.

Zayante band-winged grasshopper has a moderate potential to occur within the sandhill portions of the BSA. The nearest documented occurrence is a non-specific detection area extending from Scotts Valley to Santa Cruz that overlaps the BSA, a historical occurrence from 1941 (Occ. No. 6) There are multiple other documented occurrences within 5 miles of the BSA, spanning from 1977 through 2006 (CDFW 2023). Zayante band-winged grasshopper was not detected during the 2023 Dudek field assessment.

Monarch Butterfly

The monarch butterfly (*Danaus plexippus plexippus*) is a California Species of Special Concern and is a candidate for federal Endangered Species Act listing. Winter roosting sites for the monarch commonly occur in large trees between October and March. Eucalyptus groves are commonly used by monarch butterflies for overwintering in the region of the BSA.

Monarch butterfly has a moderate potential to occur in the BSA. A eucalyptus grove suitable for overwintering monarchs is present in the southern portion of the BSA. However, no monarchs were present at the time of the biological reconnaissance survey which occurred during the overwintering season for monarchs in the county. The nearest documented occurrence is approximately 1.5 from the BSA towards the City of Santa Cruz, a historical occurrence from 1984 (Occ. No. 102). There are numerous other documented occurrences within

5 miles of the BSA, spanning from 1984 to 2015 (CDFW 2023). Monarch butterfly was not detected during the 2023 Dudek field assessment.

Pallid Bat

Pallid bat (*Antrozous pallidus*) is a California Species of Special Concern that occurs in open, dry areas within grassland, shrubland, forest, and woodland habitats, often roosting within rocky outcrops. The species is also known to roost within trees and human-built structures (CDFW 2023).

Pallid bat has moderate potential to occur within the BSA. The BSA contains suitable trees and human-built structures for pallid bat to roost, as well as suitable foraging habitat throughout the BSA in abundant grassland, shrubland, and forest clearings. The nearest documented occurrence is approximately 3 miles from the BSA, a historical occurrence from 1928 (Occ. No. 258). There is one other documented occurrence from 2003 approximately 5 miles from the BSA (Occ. No. 113) (CDFW 2023). Pallid bat was not detected during the 2023 Dudek field assessment.

San Francisco Dusky-Footed Woodrat

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) is a California Species of Special Concern that occurs in forest habitats with a moderate canopy and moderate to dense understory. It constructs large structures, known as houses or middens, made of sticks and other vegetation on the ground or in trees, some of which can persist for 20 or more years (CDFW 2023).

San Francisco dusky-footed woodrat has a high potential to occur within the forested habitat that is abundant throughout the BSA. The nearest documented occurrence is approximately 3.8 miles from the BSA, an occurrence from 2014 (Occ. No. 15). There are no other CNDDB documented occurrences within 5 miles of the BSA, however positive detections of the species are difficult due to the inability to distinguish this sensitive subspecies from other dusky-footed woodrats. Woodrat middens are common in the region. No San Francisco dusky-footed woodrats, nor any woodrat middens, were detected during the 2023 Dudek field assessment.

Townsend's Big-Eared Bat

Townsend's big-eared bat (*Corynorhinus townsendii*) is a California Species of Special Concern that occurs within mesic coniferous and deciduous forests and riparian areas, as well as xeric habitats. The species roosts within caves, tunnels, and human-built structures (CDFW 2023).

Townsend's big-eared bat has moderate potential to occur within the BSA. The BSA contains suitable human-built structures for Townsend's big-eared bat to roost, as well as suitable foraging habitat throughout the forested habitat. The nearest documented occurrence is approximately 2.75 miles from the BSA, a historical occurrence from 1945 (Occ. No. 361). There is one additional occurrence from 1945 within 5 miles of the BSA (CDFW 2023). Townsend's big-eared bat was not detected during the 2023 Dudek field survey.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is a California Fully Protected species that typically occurs in open habitats such as grassland, marsh, and savanna, however, it will also use more disturbed habitats, such as freeway edges and medians, when foraging for voles and mice. Nests are constructed in a variety of trees, with coast live oak

(*Quercus agrifolia*) perhaps the most common tree species, with nests placed high in the crown on thin branches (Peeters and Peeters 2005).

White-tailed kite has a moderate potential to nest within the BSA. The grassland within the site provides suitable foraging habitat for this species, and trees along the edges surrounding the grassland provide suitable nesting habitat for this species. The nearest documented occurrence is approximately 1.7 miles from the BSA towards the University of California Santa Cruz campus, an occurrence from 2004 (Occ. No. 83). White-tailed kite was not detected during the 2023 Dudek assessment.

3.3.3 Aquatic Resources

One perennial drainage and four intermittent streams intersect the BSA. Four of these drainages bisect the BSA from west to east, and one of these drainages intersects the BSA at the southernmost boundary. The southern intermittent stream originates just south of the Pasatiempo tanks off of Kite Hill Road and flows south towards the junction of Highway 17 and Highway 1 in Santa Cruz. This feature is classified by the National Wetlands Inventory (NWI) as an Intermittent Riverine System that was and is seasonally flooded (USFWS 2023b), The three northern intermittent drainages flow into Carbonera Creek which runs approximately parallel to the BSA to the east. These drainages are classified by the NWI as seasonally flooded Intermittent Riverine Systems. The perennial drainage runs along Via Vinca Drive and flows into Carbonera Creek. The drainage by the NWI as an Upper Perennial Riverine System (USFWS 2023b). Drainages that were observed all contained discrete bed and bank features, Ordinary High Water Marks lines, and are potentially jurisdictional.

Aquatic features within the BSA are shown in Attachment A; Figure 3. The BSA lies within the Carbonera Creek – San Lorenzo River Hydrologic Unit (HUC 11161300) (Attachment A; Figure 5, Hydrologic Setting).

3.3.4 Sensitive Vegetation Communities

Sensitive natural communities are vegetation communities that (1) support concentrations of special-status plant or wildlife species, (2) are of particular value to wildlife, and/or (3) are of limited distribution statewide or within a county or region. A list of sensitive natural communities in California is maintained by CDFW (2022) based on the rarity of, and potential threats to, these communities in California. Communities with a state rarity ranking of S1 through S3 in CDFW's Natural Community list (CDFW 2022) are considered highly imperiled, and project impacts on high-quality occurrences of these communities are typically considered significant under the California Environmental Quality Act (CEQA). Riparian plant communities (e.g., arroyo willow thickets, red alder forest) are also generally considered sensitive by CDFW because of their habitat value for native wildlife. For the purposes of this report, sensitive vegetation communities also include "sensitive habitat types" mapped by the County of Santa Cruz (County) and protected under County Code 16.32: Special Forests and Sandhills Habitat.

There are two vegetation communities that would be considered sensitive within the context of CEQA (e.g., riparian vegetation, native grassland) within the BSA: redwood and coastal oak woodland. Because the FRAP dataset (CAL FIRE 2020) is based on a different vegetation classification standard (CWHR habitat types [Mayer and Laundenslayer 1988]) and larger mapping scale from the CDFW sensitive natural communities (MCV alliances and associations), a translation between the systems that allowed for a "crosswalk" (side-by-side comparison) was compiled by Dudek for the Santa Cruz Water Rights Project EIR. The crosswalk was used to extrapolate potential sensitive natural communities that could occur within the BSA for that project. Table 3 provides an updated crosswalk between current CDFW natural communities (i.e., MCV alliance names) and the redwood and coastal oak woodland

communities mapped for the Santa Cruz Water Rights Project EIR and this memorandum. Redwood forest and woodland along the drainages described in Section 3.3.3 would also be considered riparian vegetation by CDFW.

Table 3. Sensitive Natural Vegetation Communities within the Biological Study Area

MCV Vegetation Alliance (CDFW Code)	FRAP/CWHR Vegetation Community/ Habitat Type	State Rarity
California bay forest and woodland (74.100.00)	Coastal oak woodland	S3
Redwood forest and woodland (86.100.00)	Redwood	S3.2

Notes: CWHR = California Wildlife Habitat Relationship; FRAP = Fire and Resource Assessment Program; MCV = Manual of California Vegetation.
State Rarity Ranks: S2 = Imperiled; S3 = Vulnerable.
Threat Ranks: 0.2 = threatened.

Parts of the BSA are underlain by Zayante soils and are therefore mapped as Sandhills Habitat by the County (Attachment A; Figure 3). In these locations, Zayante soils provide habitat for several special-status species endemic to this area, such as the Mount Hermon June beetle, Zayante band-winged grasshopper, Santa Cruz kangaroo rat (*Dipodomys venustus venustus*), Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegii*), Ben Lomond buckwheat (*Eriogonum nudum* var. *decurrens*), Santa Cruz wallflower (*Erysimum teretifolium*), and silver-leaved manzanita (*Arctostaphylos silvicola*). As shown in Attachment A; Figure 3, most Sandhills Habitat in the BSA is comprised of urban land cover and therefore has low habitat value for these species. Redwood and coastal oak woodland that coincide with Sandhills Habitat have higher habitat value and increased potential to support sandhills species. These two sensitive vegetation communities intersect with Sandhills habitat in both areas where Sandhills habitat occurs within the BSA (Figure 3).

3.3.5 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat "islands" that function as "stepping stones" for dispersal. Linkages can be small and even man made (e.g., highway underpasses, culverts, bridges), narrow linear habitat areas (e.g., riparian strips, hedgerows), or wider landscape-level extensions of habitat that ultimately connect even larger core habitat areas.

Within the BSA, most of the patches of coastal oak woodland and redwood or montane hardwood-conifer forest are contiguous with larger patches outside the BSA that serve as wildlife corridors for resident wildlife traveling up and down Carbonera Creek and its tributaries. The BSA does not overlap with any wildlife corridors or habitat linkages designated as important for regional wildlife movement at the landscape scale, however. The "Santa Cruz Mountains" large landscape block mapped by Penrod et al. (2013) is approximately 9.5 miles northeast of the BSA. This area was deemed important for mountain lion, mule deer, bobcat, American badger, ringtail, and avian species. As discussed in Penrod (2013), large landscape blocks are areas of high ecological integrity that

"build upon the existing conservation network in the region" upon which critical linkages were delineated by Penrod et al. (2013). The large landscape block is also part of the Santa Cruz Mountains-Diablo Range critical linkage mapped in the same study.

4 Impact Analysis

Based on the results of the assessment, Dudek has identified the following mitigation measures from the Santa Cruz Water Rights Project EIR as applicable to the Proposed Project. Additional discussion of how the measures apply to each resource type is provided afterwards.

MM BIO-1: Project Siting. The City shall locate construction activities, including staging, on and adjacent to current development to the maximum extent feasible. All worker parking, equipment storage, and laydown areas should occur within developed areas and maintained rights-of-way, to the extent possible. Dirt or gravel pull-offs to the side of existing roads shall not be used except for temporary staging areas. To minimize temporary disturbances, the City shall restrict all vehicle traffic to established roads, construction areas, and other designated area.

If ground disturbing activities associated with staging and work areas will occur outside existing developed areas and maintained rights-of-way, avoidance and minimization of impacts to special-status species and their habitats, sensitive vegetation communities, and jurisdictional aquatic resources shall be prioritized during the site selection process. Other Proposed Project mitigation measures will provide for compensatory mitigation to address potentially significant impacts to special-status species and their habitats (MM BIO-4 through MM-BIO-10), sensitive vegetation communities (MM BIO-11), and jurisdictional aquatic resources (MM BIO-12 through MM BIO-14).

MM BIO-4: Preconstruction Nesting Bird Survey. During the nesting season (February 1 – August 31), no more than two weeks prior to any ground disturbing activities, including removal of vegetation and clearing and grubbing activities, a nesting bird survey shall be completed by a qualified biologist to determine if any native birds are nesting in or adjacent to the study area (including within a 50-foot buffer for passerine species and a 250-foot buffer for raptors). If any active nests of native birds are observed during surveys, an avoidance buffer around the nests shall be established in the field to ensure compliance with California Fish and Game Code Section 3503. The avoidance buffer shall be determined by a qualified biologist in coordination with City staff, based on species, location, and extent and type of planned construction activity. Impacts to active nests shall be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist.

MM BIO-5: Preconstruction Wildlife Surveys. A qualified biologist shall conduct preconstruction surveys of all ground disturbance areas within off-pavement project footprint areas to determine if special-status wildlife species are present prior to the start of construction. The biologist will conduct these surveys no more than 2 weeks prior to the beginning of construction.

MM BIO-6: Exclusionary Fencing. High-visibility fencing for Environmentally Sensitive Areas shall be installed around all adjacent special-status species identified during the preconstruction surveys, which shall be retained and not disturbed by the Project, to preclude encroachment within the root-zone of these plants by construction crews or vehicles. A biological monitor shall also accompany the

work crew during excavation and installation of exclusion fencing to prevent harm to species that may be active present and moving along the fence route. Buffers that are established around active bird nests and special-status species (including potentially active woodrat nests) to be avoided shall be delineated with flagging. Buffers and fencing for nesting birds shall be maintained until the biological monitor verifies that the birds have fledged. All other fencing shall be maintained in good repair throughout the entire construction period.

MM BIO-7: Biological Construction Monitoring. A qualified biologist shall monitor vegetation removal and ground disturbing activities during all work hours for off-pavement work or once a week for all other construction activities. The monitor shall check the exclusion fencing and buffers for active nesting birds once a week, and shall verify when birds have fledged if found present before construction. The biologist shall have stop-work authority in the event that a protected species is found within the active construction footprint. During construction, the biological monitor shall keep a daily observation log and a photo log to describe monitoring activities, remedial actions, non-compliance, and other issues and actions taken. These logs shall be kept on site and made available for inspection by agency personnel.

MM BIO-8: Species Relocation. If special-status wildlife species are observed within the construction area prior to or during construction activities, the biologist shall capture and relocate such individuals out of the area affected by construction activities to nearby habitat that has equivalent value to support the species. The biologist shall identify suitable habitats as potential release sites prior to start of construction activities. If the special-status species is a federally- or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval.

MM BIO-9: Entrapment Avoidance. The construction contractor shall cover all construction-related holes in the ground overnight to prevent entrapment of any native wildlife species. The monitoring biologist shall inspect all construction pipes, culverts, or similar structures that are stored at the work area for one or more nights before the pipe is used or moved. If wildlife species are present, they shall be allowed to exit on their own or a qualified biologist shall move them out of the construction area to nearby habitat that has equivalent value to support the species. If special-status species are present and are federally or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval.

MM BIO-10: Preconstruction Special-Status Plant Surveys and Compensation. If ground-disturbing activities associated with staging and work areas occur outside existing developed areas and maintained rights-of-way, a qualified biologist shall conduct a focused botanical survey for special-status plants during the appropriate bloom period for each species. If special-status species are not detected, no further surveys or mitigation would be necessary. If any individuals or populations are detected, the location(s) shall be mapped, and a plan focused on compensating for impacts to special-status plants shall be developed and include the following elements and criteria. This plan shall be a component of the project's Habitat Mitigation and Monitoring Plan described in MM BIO-11:

a. A description of any areas of habitat occupied by special-status plants to be preserved and/or removed by the project;
b. Identification and evaluation of the suitability of on-site or off-site areas for preservation, restoration, enhancement or translocation;
c. Analysis of species-specific requirements and considerations and specific criteria for success relative to the project's impact on this species and restoration, enhancement or translocation;
d. A description of proposed methods of preservation, restoration, enhancement, and/or translocation;
e. A description of specific performance standards, including a required replacement ratio and minimum success standard of 1:1 for impacted individuals or populations;
f. A monitoring and reporting program to ensure mitigation success; and
g. A description of adaptive management and associated remedial measures to be implemented in the event that performance standards are not achieved.

MM BIO-11: Sensitive Vegetation Communities Compensation. Direct impacts to sensitive vegetation communities shall be mitigated via a combination of on-site and off-site measures. On-site measures shall include rehabilitation for areas temporarily impacted at a 1:1 mitigation ratio, and enhancement for areas permanently impacted at a 2:1 mitigation ratio. Areas temporarily impacted shall be returned to conditions similar to those that existed prior to grading and/or ground-disturbing activities. It is anticipated that a one-time restoration effort at the completion of the project followed by monitoring and invasive weed removal for a minimum of 3 years would adequately compensate for the direct temporary impacts to these vegetation communities. Areas permanently impacted shall be mitigated through on-site enhancement activities including removal of non-native and invasive species for a minimum of 3 years. If additional area is needed to compensate for permanent impacts at a 2:1 ratio, then an off-site location will be identified and evaluated. A Habitat Mitigation and Monitoring Plan shall be prepared and implemented to compensate for the loss of all sensitive vegetation communities (see below).

Rehabilitation and enhancement activities with Zayante soils, such as along the City/Scotts Valley Water District intertie, will be revegetated with plants native to the Zayante Sandhills, such as sticky monkeyflower (*Mimulus aurantiacus*), deer weed (*Lotus scoparius*), and silver bush lupine (*Lupinus albifrons* var. *albifrons*). These native plants will provide suitable habitat conditions for special-status species that might eventually colonize the temporarily impacted portion of the impact area. These revegetated areas will not include any landscape elements that degrade habitat for the special-status species, including mulch, bark, weed matting, rock, aggregate, or turf grass.

The Habitat Mitigation and Monitoring Plan shall detail the habitat restoration activities and shall specify the criteria and standards by which the revegetation and restoration actions will compensate for impacts of the Proposed Project on sensitive vegetation communities and shall at a minimum include discussion of the following:

a. The rehabilitation and enhancement objectives, type, and amount of revegetation to be implemented taking into account enhanced areas where non-native invasive vegetation is removed and replanting specifications that take into natural regeneration of native species when applicable.
b. The specific methods to be employed for revegetation.
c. Success criteria and monitoring requirements to ensure vegetation community restoration success.
d. Remedial measures to be implemented in the event that performance standards are not achieved.

4.1 Special-Status Plants and Wildlife

Numerous special-status plant and wildlife species have a moderate to high potential to occur within the BSA. Construction activities associated with Project implementation could directly impact these species, if present within the Proposed Project envelope, or indirectly if present within the remaining areas of the BSA. In accordance with MM BIO-1 (Project Siting) of the Santa Cruz Water Rights EIR (City of Santa Cruz 2021), construction activities, including staging, shall be located on and adjacent to current development to the maximum extent feasible. If ground-disturbing activities associated with staging and work areas will occur outside existing developed areas and maintained rights-of-way, avoidance and minimization of impacts to special-status species and their habitats, sensitive vegetation communities, and jurisdictional aquatic resources shall be prioritized during the site selection process, as described below.

4.1.1 Special-Status Plants

Twenty-four (24) - special-status plant species could occur within the grassland, scrub, chaparral, woodland, and/or coniferous forest areas of the BSA (See Table 1). Project construction-related ground disturbance such as open-cut trench excavation, vegetation removal, and placement of materials could directly impact these species, if present. Temporary regrading, staging, and project completion restoration may also directly impact special-status plants, if present. Implementation of MM BIO-1 (Project Siting) and MM BIO-10 (Preconstruction Special-Status Plant Surveys and Compensation), described above, would avoid substantial adverse effect on special-status plants by limiting construction disturbance, requiring focused botanical surveys for special-status plants and the mapping and implementation of a mitigation plan if individuals or populations are detected during these surveys. The mitigation plan shall focus on compensating for impacts to special-status plants, and shall be developed to include all of the elements of MM BIO-11 (Sensitive Vegetation Communities Compensation). With the implementation of these mitigation measures, potential adverse effects on special-status plants would be avoided.

4.1.2 Special-Status Wildlife

Ten (10) - special-status wildlife species could occur within various habitat areas of the BSA. The Proposed Project would not result in the permanent conversion or degradation of habitat for these species, but project activities could still result in direct injury or mortality of individuals (including young and/or eggs of special-status birds) that may be within an area proposed for construction disturbance or vegetation removal. Project activities could also cause disturbance of nesting white-tailed kites, causing them to abandon eggs or recently hatched young. Potential indirect impacts to these wildlife species include chemical pollutants, noise, increased human activity, and the

presence of trash and garbage that could attract predators of some of these species. Potential impacts and recommended mitigation measures for these species are further described below.

Special-Status Amphibians – Santa Cruz Black Salamander, California Giant Salamander

Suitable habitat for Santa Cruz black salamander and California giant salamander exists within the BSA within the perennial and intermittent drainages that intersect the BSA, and the surrounding damp upland areas. These species are not expected to occur within the developed areas of the BSA, where most Proposed Project activities will occur, however, project-related activities may still indirectly impact these species, if present in adjacent suitable habitat areas.

Implementation of MM BIO-1 (Project Siting), MM-BIO-5 (Preconstruction Wildlife Surveys), MM-BIO-6 (Exclusionary Fencing), MM-BIO-7 (Biological Construction Monitoring), MM-BIO-8 (Species Relocation), and MM-BIO-9 (Entrapment Avoidance), described above, would ensure that any potential adverse effects on special-status amphibians would be avoided.

Special-Status Invertebrates – Mount Hermon June Beetle, Zayante Band-Winged Grasshopper, and Monarch Butterfly

Suitable habitat for Mount Hermon June beetle and Zayante band-winged grasshopper exists within the Sandhill portions of the BSA. These species are not expected to occur within the developed areas of the BSA, where most Proposed Project activities will occur, however, Project-related activities that occur adjacent to suitable Sandhill habitat may still indirectly impact these species, if present.

Implementation of MM BIO-1 (Project Siting), MM BIO-5 (Preconstruction Wildlife Surveys), and MM BIO-7 (Biological Construction Monitoring), described above and implemented in suitable Sandhill habitat (Mount Hermon June beetle and Zayante band-winged grasshopper) or eucalyptus habitat (monarch), would ensure that any potential adverse effects on special-status invertebrates would be avoided.

Special-Status Mammals – Pallid Bat, Townsend's Big-Eared Bat, and San Francisco Dusky-Footed Woodrat

Suitable roosting habitat for pallid bat, Townsend's big-eared bat, and common bat species exists within hollow trees, tree foliage, and human-built structures throughout the BSA. Suitable habitat for San Francisco dusky-footed woodrat exists within the forested habitat that is abundant throughout the BSA. Project-related tree removal and vegetation removal may directly result in the permanent loss of any active bat roosts, if present. Vegetation removal activities could result in destruction of San Francisco dusky-footed woodrat middens or direct mortality or injury of individual woodrats, if present. Increased noise from construction activities could cause temporary disturbance-related impacts on any bats roosting within the BSA if they perceive such noise as a threat, particularly during the peak summer activity period (June to August). However, implementation of MM BIO-1 (Project Siting), MM BIO-5 (Preconstruction Wildlife Surveys), MM BIO-6 (Exclusionary Fencing), MM BIO-7 (Biological Construction Monitoring), MM BIO-8 (Species Relocation), and MM BIO-9 (Entrapment Avoidance), would ensure that any potential adverse effects on special-status mammals would be avoided.

Special-Status Birds – White-Tailed Kite

Suitable nesting and foraging habitat for white-tailed kite, and common bird species, exists within the grassland areas and trees throughout the BSA. Potential project-related impacts to white-tailed kite and common bird species are further discussed below.

4.2 Nesting Birds

In California, all native birds and active bird nests (with eggs or young) are protected by Sections 3503 and 3503.5 of the California Fish and Game Code. The trees and shrubs within the BSA provide suitable nesting habitat for several native resident and migratory bird species, including white-tailed kite. These species could potentially be directly impacted by project-related construction such as tree and vegetation removal, and from project-related construction noise, if such activities causes adults to abandon eggs or recently hatched young. In accordance with MM BIO-4 of the City of Santa Cruz Water Rights Project EIR, preconstruction nesting bird surveys will be required no more than two weeks prior to any ground disturbance or vegetation removal within the Project site. If active nests are found during these surveys, an avoidance buffer will be established based on the species, location, and extent of the planned construction activity, and impacts to the nests will be avoided until chicks have fledged or nests are no longer active. Nests should be checked weekly by a qualified biologist during construction monitoring to verify when birds have fledged (MM BIO-7). Implementation of MM BIO-4, listed below, and MM BIO-7, described above, would avoid substantial adverse effects on white-tailed kite and nesting bird species.

4.3 Roosting Bats

Roosting bats are protected by Section 4150 of the California Fish and Game Code. The trees and urban environments within and adjacent to the BSA contain suitable roosting habitat for foliage-roosting bats and those that roost in human-made structures, as previously described. Implementation of MM BIO-5 (Preconstruction Wildlife Surveys), MM BIO-6 (Exclusionary Fencing), and MM BIO-7 (Biological Construction Monitoring), all described above, would avoid substantial adverse effects on roosting bats.

4.4 Potentially Jurisdictional Aquatic Resources

The BSA supports several potentially jurisdictional drainage features that may be regulated by USACE under Section 404 of the Clean Water Act, Central Coast RWQCB under Section 401 of the Clean Water Act or California Porter-Cologne Act (Porter-Cologne), and/or CDFW under Section 1602 of the California Fish and Game Code.

The Proposed Project will not directly impact drainage features within the BSA. The Proposed Project will be designed to locate construction activities, including staging and other temporary activities, on and adjacent to current development and outside potentially jurisdictional resources.

4.5 Sensitive Natural Communities

The coastal oak woodland and redwood communities that are present within the BSA are considered sensitive natural communities by CDFW (2022) and parts of the mapped communities are also designated as Sandhills Habitat by the County. The coastal oak woodland community within the BSA (mapped under CWHR mapping conventions) represents both the *Quercus agrifolia* Forest and Woodland Alliance and *Umbellularia californica*

Forest and Woodland Alliance which have state rarity rankings of S4 and S3 respectively. The portions of the BSA mapped to the redwood community represent the *Sequoia sempervirens* Forest and Woodland Alliance which has a state rarity ranking of S3 (CDFW 2022).

The Proposed Project includes vegetation clearing throughout the pipeline construction work area, as well as removing existing underbrush and tree limbs and trunks that overhang the alignment. Pump station construction will include vegetation clearing and regrading. Sandhills Habitat and coastal oak woodland communities occurs within these areas, and may be directly impacted by vegetation removal and grading activities. However, implementation MM BIO-11 from the City of Santa Cruz Water Rights Project EIR, described above, would avoid substantial adverse effects on sensitive natural communities.

4.6 Wildlife Movement

Wooded portions of the BSA have value as a habitat linkage for local resident wildlife movement along Carbonera Creek and its tributaries. Carbonera Creek eventually flows into the San Lorenzo River and is part of its watershed. Streams and adjacent woodland and forest in this watershed are used by common and special-status wildlife species as cover and foraging habitat, and to move between adjacent similar habitats. However, there are no federally or state-designated regionally important wildlife corridors that overlap the BSA.

The Proposed Project would not have any long-term impacts on wildlife movement. The Proposed Project would not build any new structures in woodland patches that provide movement habitat. Construction activities may temporarily disrupt local wildlife movement in adjacent habitat but would not create any new movement barriers to wildlife. Wildlife that currently move through the BSA and along its drainages would continue to do so after construction is completed. Therefore, the Proposed Project would not interfere substantially with fish or wildlife movement or established wildlife corridors.

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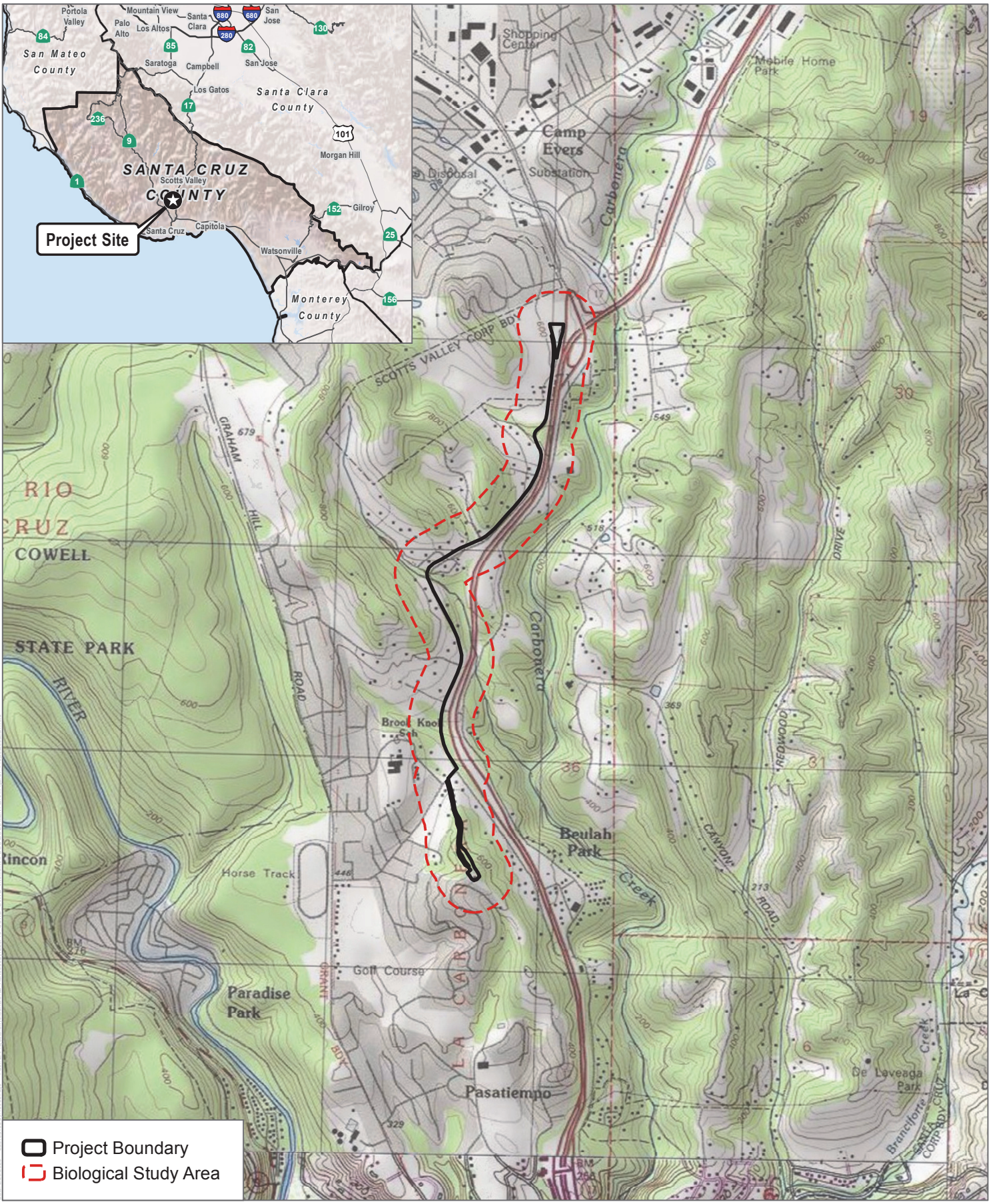
Attachment A
Figures



SOURCE: USGS 7.5-minute Series Felton Quadrangle

FIGURE 1

Project Location

Biological Resource Assessment for the City of Santa Cruz and SVWD Intertie Project, Santa Cruz County, California

DUDEK

0 1,000 2,000 Feet

SOURCE: Bing Maps 2022

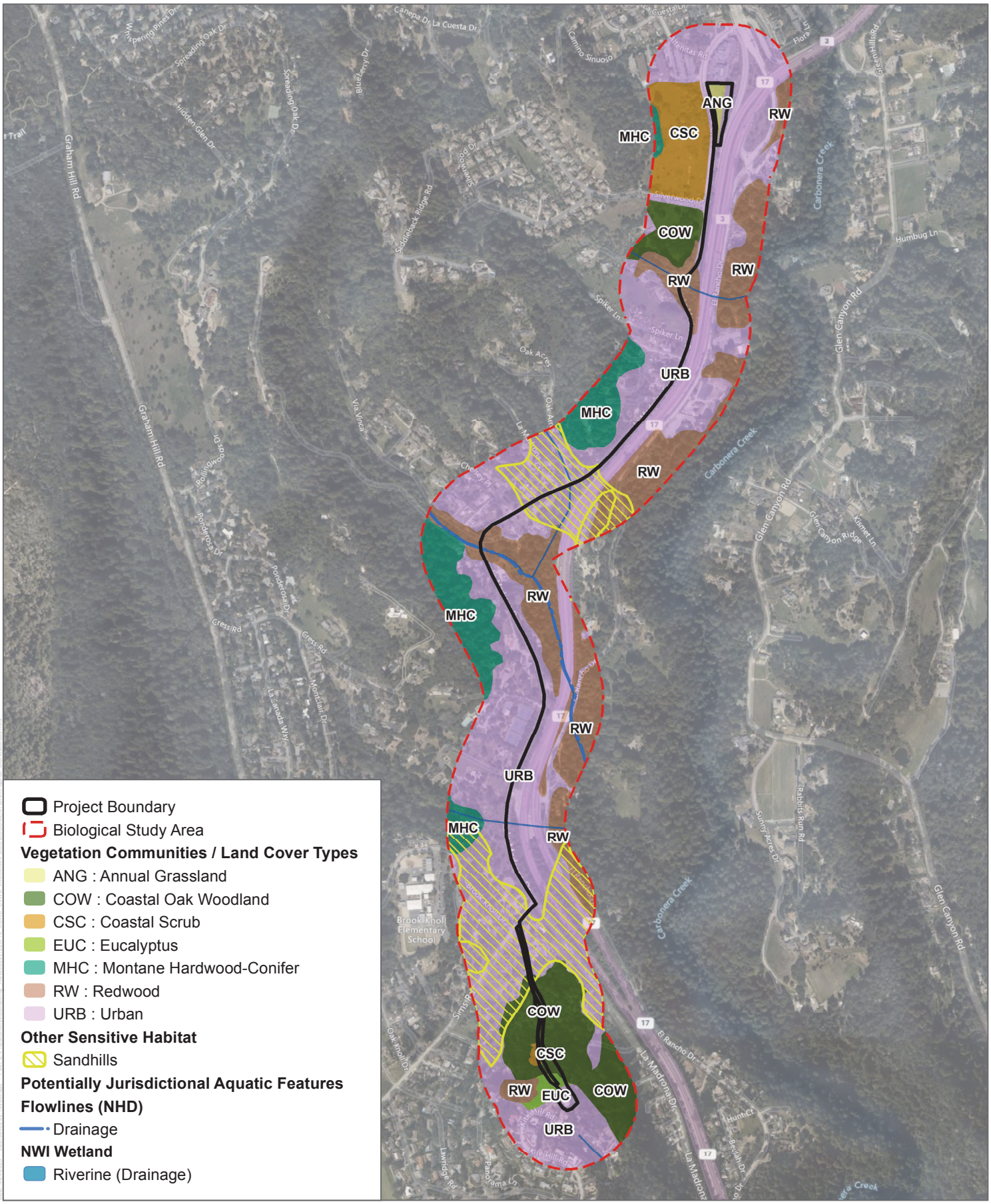
FIGURE 2

Project Site

Biological Resource Assessment for the City of Santa Cruz and SVWD Intertie Project, Santa Cruz County, California

DUDEK

0 550 1,100 Feet



SOURCE: Bing Maps 2022, County of Santa Cruz 2020, NHD, USFWS

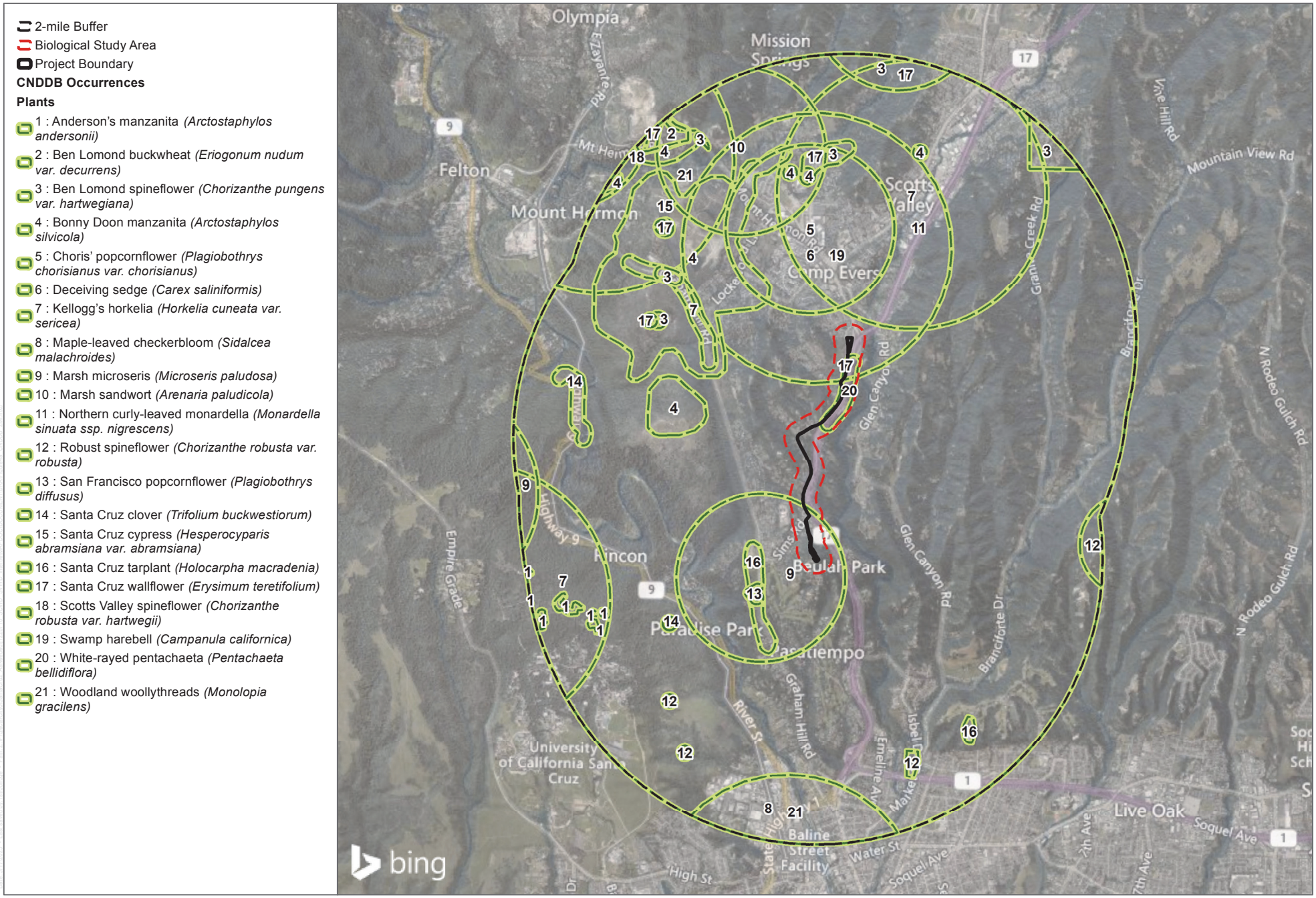
FIGURE 3

Vegetation Communities, Land Cover Types, and Aquatic Features

Biological Resource Assessment for the City of Santa Cruz and SVWD Intertie Project, Santa Cruz County, California

DUDEK

0 550 1,100 Feet



SOURCE: Bing Maps 2022, County of Santa Cruz 2020, CDFW 2023

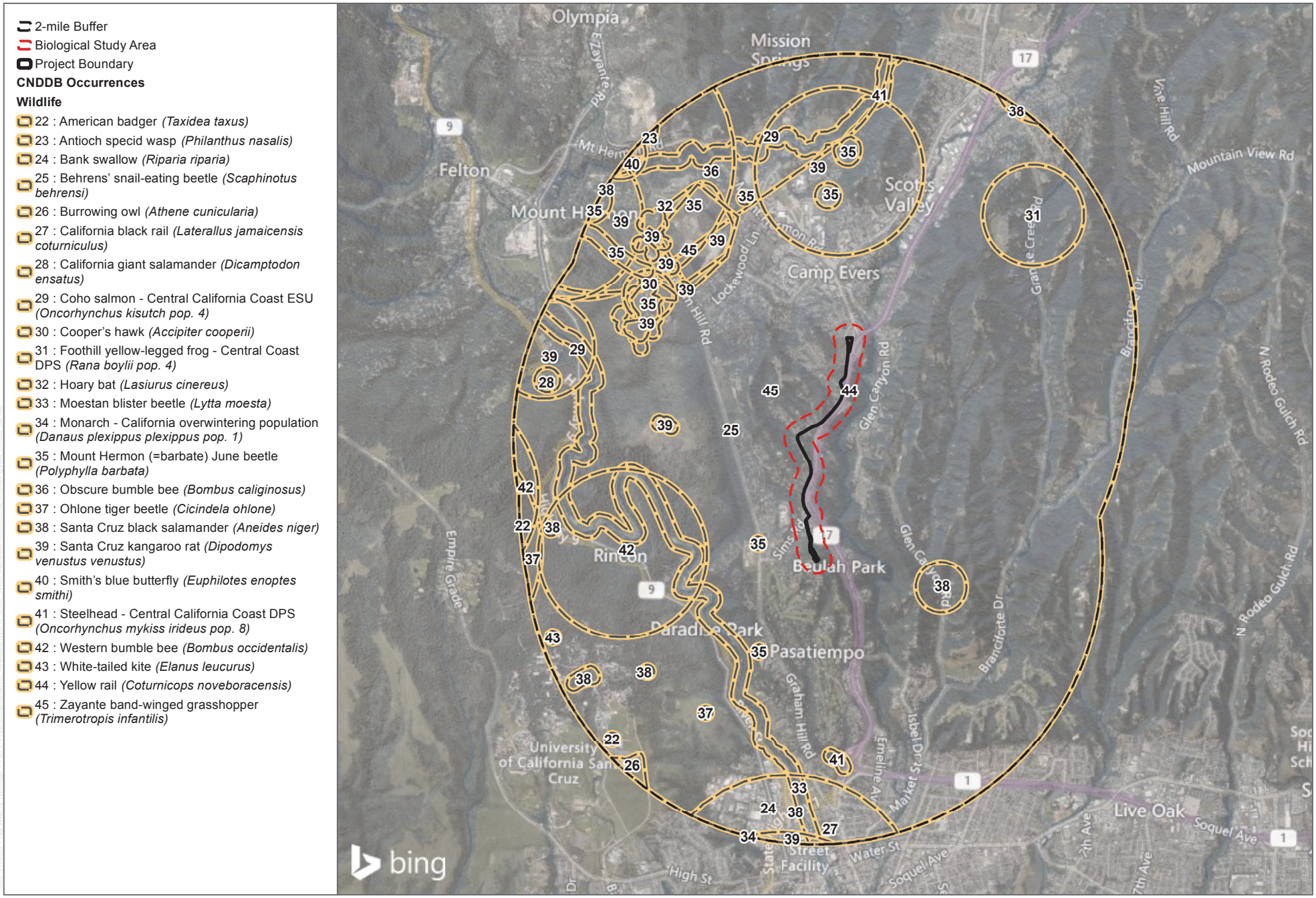
DUDEK

0 2,500 5,000 Feet

FIGURE 4A

Special-Status Species Occurrences - Plants

Biological Resource Assessment for the City of Santa Cruz and SVWD Intertie Project, Santa Cruz County, California



SOURCE: Bing Maps 2022, County of Santa Cruz 2020, CDFW 2023

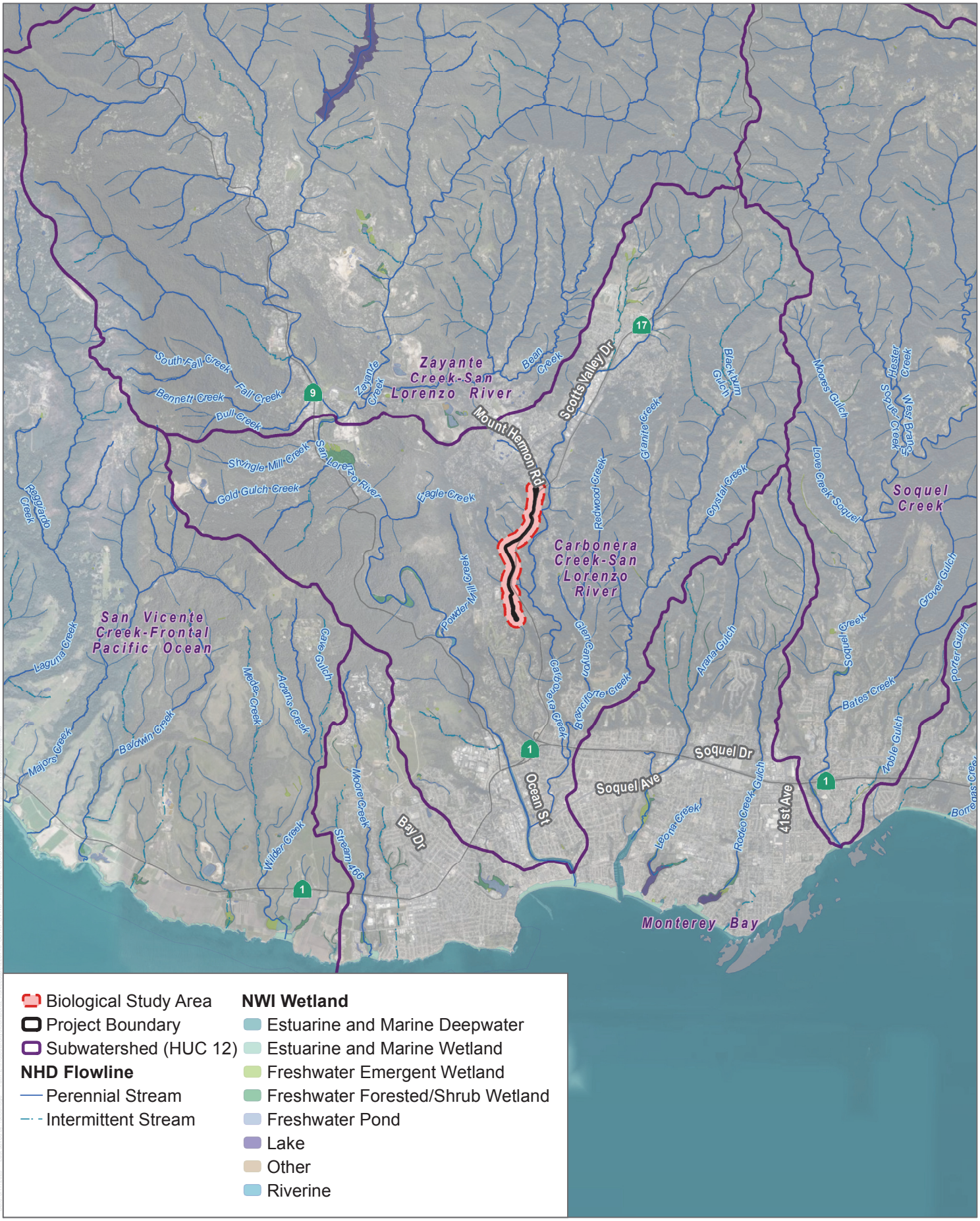
DUDEK

0 2,500 5,000 Feet

FIGURE 4B

Special-Status Species Occurrences - Wildlife

Biological Resource Assessment for the City of Santa Cruz and SVWD Intertie Project, Santa Cruz County, California



SOURCE: Bing Maps 2021, CALWATER 2021

DUDEK

0 4,250 8,500 Feet

FIGURE 5

Hydrologic Setting

Biological Resource Assessment for the City of Santa Cruz and SVWD Intertie Project, Santa Cruz County, California

Attachment B

Representative Photographs of the Project Site

Photo Number 1. Eucalyptus grove located towards the south of the BSA.

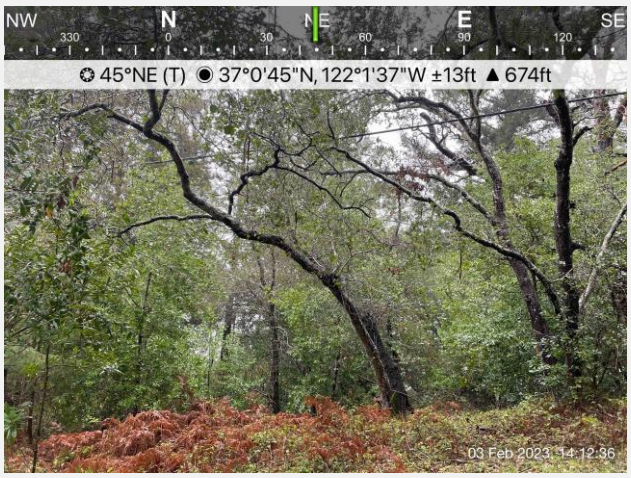


Photo Number 2. Representative photo of the coastal oak woodland community within the BSA.

Photo Number 3. Grassland habitat at the proposed pump station site.

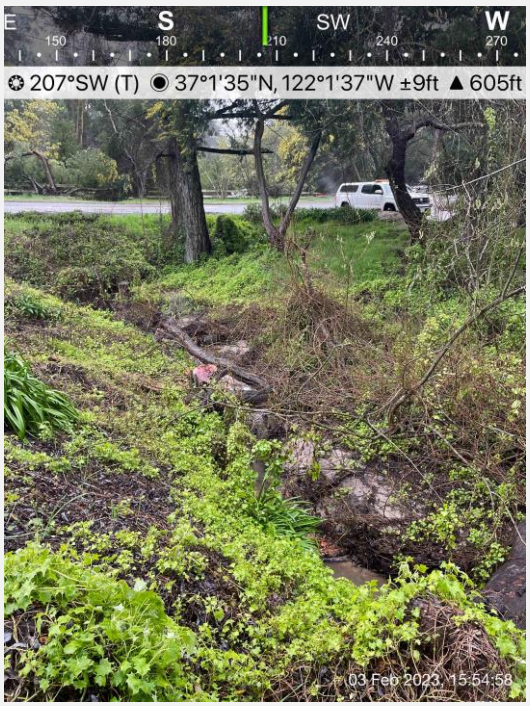


Photo Number 4. Intermittent stream near Oak Acres with potential habitat for aquatic species.

Photo Number 5. Perennial stream and the associated redwood vegetation community at Via Vinca.

Photo Number 6. Pasatiempo tank site.

Attachment C

Plant and Wildlife Species Observed

Plant Species

Angiosperms (Dicots)

EUDICOTS

ANACARDIACEAE—Sumac Or Cashew Family

Toxicodendron diversilobum—poison oak

APIACEAE—Carrot Family

Anthriscus caucalis—bur chervil*

ASTERACEAE—Sunflower Family

Ambrosia trifida—great ragweed*

Baccharis pilularis—coyote brush

Carduus pycnocephalus—Italian plumeless thistle*

Delairea odorata—Cape-ivy*

BETULACEAE—Birch Family

Corylus cornuta—beaked hazelnut

ERICACEAE—Heath Family

Arbutus menziesii—madrone

FABACEAE—Legume Family

Acacia pycnantha—golden wattle*

Cytisus scoparius—broom*

Vicia sativa—garden vetch*

FAGACEAE—Oak Family

Quercus agrifolia—coast live oak

LAURACEAE—Laurel Family

Umbellularia californica—California bay

MONTIACEAE—Montia Family

Claytonia perfoliata—miner's lettuce

MYRTACEAE—Myrtle Family

Eucalyptus camaldulensis —Red gum*

Eucalyptus globulus —Blue gum*

OXALIDACEAE—Oxalis Family

Oxalis pes-caprae—Bermuda buttercup*

PLANTAGINACEAE—Plantain Family

Plantago erecta—dwarf plantain

ROSACEAE—Rose Family

Cotoneaster pannosus—silverleaf cotoneaster*

Rubus ursinus—California blackberry

FERNS AND FERN ALLIES

DRYOPTERIDACEAE—Wood Fern Family

Dryopteris arguta—coastal woodfern

GYMNOSPERMS AND GNETOPHYTES

CUPRESSACEAE—Cypress Family

Sequoia sempervirens—redwood

PINACEAE—Pine Family

Pseudotsuga menziesii—Douglas fir

Monocots

ARACEAE—Arum Family

Arum italicum—Italian lords and ladies*

JUNCACEAE—Rush Family

Juncus sp.—rush

Wildlife Species

Birds

HAWKS

ACCIPITRIDAE—HAWKS, KITES, EAGLES, & ALLIES

Buteo lineatus—red-shouldered hawk

HUMMINGBIRDS

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

JAYS, MAGPIES & CROWS

CORVIDAE—CROWS & JAYS

Aphelocoma californica—California scrub-jay

Corvus brachyrhynchos—American crow

KINGLETS

REGULIDAE—KINGLETS

Corthylio calendula—ruby-crowned kinglet

NUTHATCHES

SITTIDAE—NUTHATCHES

Sitta pygmaea—pygmy nuthatch

PIGEONS & DOVES

COLUMBIDAE—PIGEONS & DOVES

Patagioenas fasciata—band-tailed pigeon

TITMICE

PARIDAE—CHICKADEES & TITMICE

Poecile rufescens—chestnut-backed chickadee

NEW WORLD SPARROWS

PASSERELLIDAE—NEW WORLD SPARROWS

Junco hyemalis—dark-eyed junco

* signifies introduced (non-native) species

Attachment D

Special-Status Plant and Wildlife Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Agrostis blasdalei	Blasdale's bent grass	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie/perennial rhizomatous herb/May–July/0–490	**Low potential to occur.** The BSA contains only a small amount of coastal scrub habitat of which is marginal suitability for the species. There are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Amsinckia lunaris	bent-flowered fiddleneck	None/None/1B.2	Cismontane woodland, Coastal bluff scrub, Valley and foothill grassland/annual herb/Mar–June/10–1,640	**Low potential to occur.** There is marginal suitable habitat present for this species within the BSA. There are no recent occurrences of the species within 5 miles of the BSA and 1 historical occurrence (CDFW 2023) approximately 2.7 miles from the BSA.
Arctostaphylos andersonii	Anderson's manzanita	None/None/1B.2	Broad-leafed upland forest, Chaparral, North Coast coniferous forest; Edges, Openings/perennial evergreen shrub/Nov–May/195–2,490	**High potential to occur.** There is suitable forest habitat present within the BSA and there are multiple CNDDB occurrences within 5 miles, with the closest recent occurrence approximately 1.5 miles east of the BSA (CDFW 2023).
Arctostaphylos glutinosa	Schreiber's manzanita	None/None/1B.2	Chaparral, Closed-cone coniferous forest/perennial evergreen shrub/Mar–Apr(Nov)/560–2,245	**Not expected to occur.** The BSA is outside of the known distribution of this species and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Arctostaphylos ohloneana	Ohlone manzanita	None/None/1B.1	Closed-cone coniferous forest, Coastal scrub/evergreen shrub/Feb–Mar/1,475–1,735	**Not expected to occur.** The BSA is outside of the known distribution of this species and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Arctostaphylos regismontana	Kings Mountain manzanita	None/None/1B.2	Broad-leafed upland forest, Chaparral, North Coast coniferous forest; Granitic, Sandstone/perennial evergreen shrub/Dec–Apr/1,000–2,395	**Not expected to occur.** The BSA is outside of the species' known elevation range and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Arctostaphylos silvicola	Bonny Doon manzanita	None/None/1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest/perennial evergreen shrub/Jan–Mar/395–1,965	**High potential to occur.** There is suitable forest habitat present within the BSA and there are 11 CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps; Openings, Sandy/perennial stoloniferous herb/May–Aug/10–560	**Not expected to occur.** There is no suitable marsh or swamp habitat present within the BSA.

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Astragalus agnicidus	Humboldt County milk-vetch	None/SE/1B.1	Broad-leafed upland forest, North Coast coniferous forest; Disturbed areas, Openings, Roadsides (sometimes)/perennial herb/Apr–Sep/395–2,620	**Not expected to occur.** There are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023). This species is presumed extant by CNPS within the region of the BSA (CNPS 2023a).
Calyptridium parryi var. *hesseae*	Santa Cruz Mountains pussypaws	None/None/1B.1	Chaparral, Cismontane woodland; Gravelly (sometimes), Openings, Sandy (sometimes)/annual herb/May–Aug/1,000–5,015	**Not expected to occur.** The BSA is below the elevational range of this species. There is only 1 historical CNDDB occurrence within 5 miles of the BSA (CDFW 2023).
Campanula californica	swamp harebell	None/None/1B.2	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Marshes and swamps, Meadows and seeps, North Coast coniferous forest; Mesic/perennial rhizomatous herb/June–Oct/5–1,325	**Not expected to occur.** The BSA does not support suitable habitat for this species. There is only 1 historical occurrence of the species within 5 miles of the BSA, and the occurrence has since been extirpated (CDFW 2023).
Carex comosa	bristly sedge	None/None/2B.1	Coastal prairie, Marshes and swamps, Valley and foothill grassland/perennial rhizomatous herb/May–Sep/0–2,050	**Not expected to occur.** The BSA does not contain suitable habitat for this species. There are no CNDDB occurrences within 5 miles of the BSA.
Carex saliniformis	deceiving sedge	None/None/1B.2	Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps; Mesic/perennial rhizomatous herb/June(July)/10–755	**Low potential to occur.** The BSA contains a small amount of coastal scrub habitat of which is marginally suitable for this species. There are two historical CNDDB occurrences within 5 miles of the BSA, but one has been extirpated (CNDDB 2023).
Centromadia parryi ssp. *congdonii*	Congdon's tarplant	None/None/1B.1	Valley and foothill grassland/annual herb/May–Oct(Nov)/0–755	**Low potential to occur.** There is marginally suitable grassland habitat present within the BSA but there are no CNDDB occurrences of this species within 5 miles (CDFW 2023).
Chorizanthe pungens var. *hartwegiana*	Ben Lomond spineflower	FE/None/1B.1	Lower montane coniferous forest/annual herb/Apr–July/295–2,000	**High potential to occur.** There is suitable habitat present for this species within the BSA, and 12 CNDDB occurrences within 5 miles (CDFW 2023).
Chorizanthe pungens var. *pungens*	Monterey spineflower	FT/None/1B.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill	**High potential to occur.** There is suitable habitat present for this species within the BSA

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			grassland; Sandy/annual herb/Apr–June(July–Aug)/10–1,475	and a 2006 CNDDB occurrence within 5 miles (CDFW 2023).
Chorizanthe robusta var. *hartwegii*	Scotts Valley spineflower	FE/None/1B.1	Meadows and seeps, Valley and foothill grassland/annual herb/Apr–July/755–805	**High potential to occur.** There is suitable habitat present for this species within the BSA and 4 CNDDB occurrence within 5 miles (CDFW 2023).
Chorizanthe robusta var. *robusta*	robust spineflower	FE/None/1B.1	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–Sep/10–985	**High potential to occur.** There is suitable habitat present for this species within the BSA and 6 CNDDB occurrence within 5 miles (CDFW 2023).
Cirsium fontinale var. *campylon*	Mt. Hamilton thistle	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; Seeps, Serpentinite/perennial herb/(Feb)Apr–Oct/330–2,915	**Not expected to occur.** There are no occurrences of this species within Santa Cruz County, serpentine soils are absent from the BSA, and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Collinsia multicolor	San Francisco collinsia	None/None/1B.2	Closed-cone coniferous forest, Coastal scrub; Serpentinite (sometimes)/annual herb/(Feb)Mar–May/100–900	**Not expected to occur.** The BSA is outside is outside the known distribution of this species and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Dacryophyllum falcifolium	tear drop moss	None/None/1B.3	North Coast coniferous forest; Carbonate/moss//165–900	**Low potential to occur.** There is marginally suitable habitat present within the BSA and there are 2 CNDDB occurrences within 5 miles (CDFW 2023).
Dirca occidentalis	western leatherwood	None/None/1B.2	Broad-leafed upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, North Coast coniferous forest, Riparian forest, Riparian woodland; Mesic/perennial deciduous shrub/Jan–Mar(Apr)/80–1,390	**Moderate potential to occur.** There is suitable habitat present for this species, the species is known to occur within the BSA region, but there are no CNDDB occurrences within 5 miles (CDFW 2023).
Dudleya abramsii ssp. *setchellii*	Santa Clara Valley dudleya	FE/None/1B.1	Cismontane woodland, Valley and foothill grassland; Rocky, Serpentinite/perennial herb/Apr–Oct/195–1,755	**Not expected to occur.** There are no occurrences of this species in Santa Cruz County, serpentine soils are absent, and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Eriogonum nudum var. *decurrens*	Ben Lomond buckwheat	None/None/1B.1	Chaparral, Cismontane woodland, Lower montane coniferous forest; Sandy/perennial herb/June–Oct/165–2,620	**High potential to occur.** There is suitable habitat present for this species within the BSA and 7 CNDDB occurrences within 5 miles (CDFW 2023).
Erysimum teretifolium	Santa Cruz wallflower	FE/SE/1B.1	Chaparral, Lower montane coniferous forest/perennial herb/Mar–July/395–2,000	**High potential to occur.** There is suitable habitat present for this species within the BSA and 13 CNDDB occurrences within 5 miles (CDFW 2023).
Fissidens pauperculus	minute pocket moss	None/None/1B.2	North Coast coniferous forest/moss//35–3,355	**Moderate potential to occur.** There is habitat present within the BSA and 1 CNDDB occurrence within 5 miles (CDFW 2023).
Fritillaria liliacea	fragrant fritillary	None/None/1B.2	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland; Serpentinite (often)/perennial bulbiferous herb/Feb–Apr/10–1,345	**Moderate potential to occur.** There is suitable habitat present for this species within the BSA, and the species is known to occur within the BSA region, however, there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Grimmia torenii	Toren's grimmia	None/None/1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest; Carbonate, Openings, Rocky, Volcanic/moss//1,065–3,805	**Not expected to occur.** The BSA is outside of the elevation range for this species.
Grimmia vaginulata	vaginulate grimmia	None/None/1B.1	Chaparral; Carbonate, Rocky/moss//2,245	**Not expected to occur.** The BSA is outside of the elevation range for this species and there is no suitable habitat present.
Hesperevax sparsiflora var. *brevifolia*	short-leaved evax	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie/annual herb/Mar–June/0–705	**Not expected to occur.** The BSA does not support suitable habitat for this species and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Hesperocyparis abramsiana var. *abramsiana*	Santa Cruz cypress	FT/SE/1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest; Granitic (sometimes), Sandstone (sometimes)/perennial evergreen tree//920–2,620	**Not expected to occur.** The BSA is outside of the known elevation range for this species.

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Hesperocyparis abramsiana var. *butanoensis*	Butano Ridge cypress	FT/SE/1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest; Sandstone/perennial evergreen tree/Oct/1,310–1,605	**Not expected to occur.** The BSA is outside of the elevation range for this species and there are no CNDDB occurrences within 5 miles (CDFW 2023).
Hoita strobilina	Loma Prieta hoita	None/None/1B.1	Chaparral, Cismontane woodland, Riparian woodland; Mesic, Serpentinite (usually)/perennial herb/May–July(Aug–Oct)/100–2,820	**Not expected to occur.** There are no CNDDB occurrences within 5 miles of the BSA and minimal suitable habitat within the BSA (CDFW 2023).
Holocarpha macradenia	Santa Cruz tarplant	FT/SE/1B.1	Coastal prairie, Coastal scrub, Valley and foothill grassland; Clay (often), Sandy/annual herb/June–Oct/35–720	**High potential to occur.** There is suitable habitat present for this species within the BSA and 8 CNDDB occurrences within 5 miles (CDFW 2023).
Horkelia cuneata var. *sericea*	Kellogg's horkelia	None/None/1B.1	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub; Gravelly (sometimes), Openings, Sandy (sometimes)/perennial herb/Apr–Sep/35–655	**Moderate potential to occur.** There is suitable habitat for this species within the BSA and 4 CNDDB occurrences within 5 miles, but only 1 relatively recent occurrence from 2008 (CDFW 2023).
Horkelia marinensis	Point Reyes horkelia	None/None/1B.2	Coastal dunes, Coastal prairie, Coastal scrub; Sandy/perennial herb/May–Sep/15–2,475	**Moderate potential to occur.** There is some suitable scrub habitat for this species within the BSA and 2 CNDDB occurrences within 5 miles, but only 1 relatively recent occurrence from 2015 (CDFW 2023).
Lasthenia californica ssp. *macrantha*	perennial goldfields	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub/perennial herb/Jan–Nov/15–1,705	**Low potential to occur.** There is a small amount of suitable scrub habitat present within the BSA. There are no CNDDB occurrences within 5 miles (CDFW 2023).
Lessingia micradenia var. *glabrata*	smooth lessingia	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; Roadsides (often), Serpentinite/annual herb/(Apr–June)July–Nov/395–1,375	**Not expected to occur.** There are no CNDDB occurrences within 5 miles of the BSA and minimal suitable habitat (CDFW 2023).
Malacothamnus arcuatus	arcuate bush-mallow	None/None/1B.2	Chaparral, Cismontane woodland/perennial deciduous shrub/Apr–Sep/50–1,160	**Not expected to occur.** There are no CNDDB occurrences within 5 miles of the BSA and minimal suitable habitat (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Micropus amphibolus	Mt. Diablo cottonweed	None/None/3.2	Broad-leafed upland forest, Chaparral, Cismontane woodland, Valley and foothill grassland; Rocky/annual herb/Mar–May/150–2,705	**Not expected to occur.** There are no CNDDB occurrences within 5 miles of the BSA and minimal suitable habitat (CDFW 2023).
Microseris paludosa	marsh microseris	None/None/1B.2	Cismontane woodland, Closed-cone coniferous forest, Coastal scrub, Valley and foothill grassland/perennial herb/Apr–June(July)/15–1,160	**Moderate potential to occur.** There is suitable habitat for this species within the BSA but only 2 historic CNDDB occurrences within 5 miles, one without reliable location information (CDFW 2023).
Monardella sinuata ssp. *nigrescens*	northern curly-leaved monardella	None/None/1B.2	Chaparral, Coastal dunes, Coastal scrub, Lower montane coniferous forest; Sandy/annual herb/(Apr)May–July(Aug–Sep)/0–985	**High potential to occur.** There is suitable habitat present within the BSA for this species, including sandhill soils, and 4 CNDDB occurrences within 5 miles, one relatively recent from 2011 (CDFW 2023).
Monolopia gracilens	woodland woollythreads	None/None/1B.2	Broad-leafed upland forest, Chaparral, Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland; Serpentinite/annual herb/(Feb)Mar–July/330–3,935	**High potential to occur.** There is suitable habitat present for this species within the BSA and 4 CNDDB occurrences within 5 miles, one relatively recent from 2016 (CDFW 2023).
Orthotrichum kellmanii	Kellman's bristle moss	None/None/1B.2	Chaparral, Cismontane woodland; Carbonate, Sandstone/moss/Jan–Feb/1,125–2,245	**Not expected to occur.** The BSA is outside of the elevation range for this species.
Pedicularis dudleyi	Dudley's lousewort	None/SR/1B.2	Chaparral, Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland/perennial herb/Apr–June/195–2,950	**Low potential to occur.** There is marginally suitable habitat present for this species and it occurs within the BSA region, but there are no CNDDB occurrences within 5 miles (CDFW 2023).
Penstemon rattanii var. *kleei*	Santa Cruz Mountains beardtongue	None/None/1B.2	Chaparral, Lower montane coniferous forest, North Coast coniferous forest/perennial herb/May–June/1,310–3,605	**Not expected to occur.** The BSA is outside of the elevation range for this species.
Pentachaeta bellidiflora	white-rayed pentachaeta	FE/SE/1B.1	Cismontane woodland, Valley and foothill grassland/annual herb/Mar–May/115–2,030	**Moderate potential to occur.** There is suitable habitat for this species present within the BSA but only 1 historic CNDDB occurrence within 5 miles, which has been potentially extirpated (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Pinus radiata	Monterey pine	None/None/1B.1	Cismontane woodland, Closed-cone coniferous forest/perennial evergreen tree//80–605	**Low potential to occur.** This species occurs within Santa Cruz County, but suitable habitat is absent from the BSA.
Piperia candida	white-flowered rein orchid	None/None/1B.2	Broad-leafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; Serpentinite (sometimes)/perennial herb/(Mar)May–Sep/100–4,295	**Moderate potential to occur.** There is suitable habitat for this species present within the BSA, and it is known to occur in the region, but there are no CNDDB occurrences within 5 miles (CDFW 2023).
Plagiobothrys chorisianus var. *chorisianus*	Choris' popcornflower	None/None/1B.2	Chaparral, Coastal prairie, Coastal scrub; Mesic/annual herb/Mar–June/10–525	**Moderate potential to occur.** There is a small amount of suitable scrub habitat for this species present within the BSA and 2 CNDDB occurrences within 5 miles (CDFW 2023).
Plagiobothrys diffusus	San Francisco popcornflower	None/SE/1B.1	Coastal prairie, Valley and foothill grassland/annual herb/Mar–June/195–1,180	**High potential to occur.** There is suitable habitat present for this species within the BSA and 10 CNDDB occurrences within 5 miles (CDFW 2023).
Plagiobothrys glaber	hairless popcornflower	None/None/1A	Marshes and swamps, Meadows and seeps/annual herb/Mar–May/50–590	**Not expected to occur.** There are no CNDDB occurrences within 5 miles of the BSA or within Santa Cruz County (CDFW 2023).
Polygonum hickmanii	Scotts Valley polygonum	FE/SE/1B.1	Valley and foothill grassland/annual herb/May–Aug/690–820	**Moderate potential to occur.** There is a small amount of suitable grassland habitat for this species present within the BSA and 2 CNDDB occurrences within 5 miles (CDFW 2023).
Sagittaria sanfordii	Sanford's arrowhead	None/None/1B.2	Marshes and swamps/perennial rhizomatous herb (emergent)/May–Oct(Nov)/0–2,130	**Not expected to occur.** There is no suitable habitat present within the BSA and there are no CNDDB occurrences within 5 miles (CDFW 2023).
Sanicula saxatilis	rock sanicle	None/SR/1B.2	Broad-leafed upland forest, Chaparral, Valley and foothill grassland; Rocky, Scree, Talus/perennial herb/Apr–May/2,030–3,850	**Not expected to occur.** The BSA is outside of the elevation range for this species, and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Senecio aphanactis	chaparral ragwort	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub; Alkaline (sometimes)/annual herb/Jan–Apr(May)/50–2,620	**Not expected to occur.** Suitable chaparral habitat is absent from the BSA for this species, and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Stebbinsoseris decipiens	Santa Cruz microseris	None/None/1B.2	Broad-leafed upland forest, Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Valley and foothill grassland; Openings, Serpentinite (sometimes)/annual herb/Apr–May/35–1,640	**Moderate potential to occur.** There is suitable habitat for this species present within the BSA, but only 1 historic CNDDB occurrence within 5 miles (CDFW 2023).
Streptanthus albidus ssp. *peramoenus*	most beautiful jewelflower	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; Serpentinite/annual herb/(Mar)Apr–Sep(Oct)/310–3,280	**Not expected to occur.** There are no occurrences of the species within Santa Cruz County and there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Trifolium buckwestiorum	Santa Cruz clover	None/None/1B.1	Broad-leafed upland forest, Cismontane woodland, Coastal prairie; Gravelly/annual herb/Apr–Oct/345–2,000	**High potential to occur.** There is suitable habitat present for this species within the BSA and 6 CNDDB occurrences within 5 miles (CDFW 2023).
Trifolium polyodon	Pacific Grove clover	None/SR/1B.1	Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Valley and foothill grassland; Granitic (sometimes), Mesic/annual herb/Apr–June(July)/15–1,390	**Not expected to occur.** There is no suitable wetland habitat present for this species within the BSA. There are 2 CNDDB occurrences within 5 miles of the BSA (CDFW 2023).

Status Legend

Federal
FE: Federally endangered
FT: Federally listed as threatened
State
SE: State listed as endangered
SR: State listed as rare
CRPR (California Rare Plant Rank)
1A: Plants presumed extirpated in California and either rare or extinct elsewhere
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere
Threat Rank:
.1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 Fairly endangered in California (20% to 80% of occurrences threatened)
.3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Amphibians				
Ambystoma californiense pop. 1	California tiger salamander - central California DPS	FT/ST, WL	Annual grassland, valley–foothill hardwood, and valley–foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and man-made pools if predatory fishes are absent.	**Not expected to occur.** The BSA does not support suitable habitat for this species.
Ambystoma macrodactylum croceum	Santa Cruz long-toed salamander	FE/FP, SE	Dense riparian vegetation, thick coastal scrub, and oak woodland.	**Low potential to occur.** The BSA supports marginally suitable habitat for this species. There are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Aneides flavipunctatus niger	Santa Cruz black salamander	None/SSC	Restricted to mesic forests in the fog belt of the outer Coast Range of San Mateo, Santa Cruz, and Santa Clara counties. Mixed deciduous and coniferous woodlands and coastal grasslands. Occurs in moist streamside microhabitats and is found under rocks, talus, and damp woody debris.	**High potential to occur.** The BSA supports moist streamside habitat within deciduous and coniferous woodlands that is suitable for this species. There are 15 CNDDB occurrences within 5 miles of the BSA (CDFW 2023). The nearest CNDDB occurrence is a 1972 observation near Glen Canyon Road, 0.92 miles east of the BSA (CDFW 2023). Another occurrence was documented in 2013 in Pogonip Open Space Preserve, 1.4 miles southwest of the BSA (CDFW 2023).
Dicamptodon ensatus	California giant salamander	None/SSC	Known from wet coastal forests and chaparral near streams and seeps from Mendocino Co. south to Monterey Co. and east to Napa Co. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	**High potential to occur.** The BSA supports moist streamside habitat within deciduous and coniferous woodlands that is suitable for this species. There are 13 CNDDB occurrences within 5 miles of the BSA (CDFW 2023). The closest CNDDB occurrence is a 2014 observation of one adult in Cave Gulch, 2.7 miles southwest of the BSA (CDFW 2023). Another occurrence was a collection made in 1984 near Henry Cowell Redwoods State Park, 2.75 miles northwest of the BSA (CDFW 2023).
Rana boylii pop. 4	foothill yellow-legged frog - central coast DPS	FPT/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland.	**Low potential to occur.** The BSA supports potential suitable dispersal habitat for this species. The perennial drainage and intermittent streams of the BSA have low potential as breeding habitat, but juvenile and adult frogs could disperse along these features from downstream creek habitat. There are 7

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				CNDDB occurrences within 5 miles of the BSA (CDFW 2023). The nearest occurrence is a 1946 observation near Granite Creek Road, 2.9 miles northeast of the BSA (CDFW 2023) The most recent occurrence was from 2021 in Soquel Creek, 5.9 miles east of the BSA, where all life stages of this species were observed in a rocky stream channel (CDFW 2023).
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	**Low potential to occur.** The BSA supports potential suitable dispersal habitat for this species. The perennial drainage and intermittent streams of the BSA have low potential as breeding habitat, but juvenile and adult frogs could disperse along these features from downstream habitat. There are 12 CNDDB occurrences within 5 miles of the BSA (CDFW 2023). The nearest occurrence was a 1992 observation in seasonal pools in the upper headwaters of Moore Creek, 3.2 miles southwest of the BSA (CDFW 2023).
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Aquila chrysaetos (nesting & wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	**Not expected to nest or forage.** The BSA contains poor habitat for this species. Open, grassy areas in the BSA lack suitable burrows and are isolated from larger expanses of quality grassland habitat.

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Brachyramphus marmoratus (nesting)	marbled murrelet	FT/SE	Nests in old-growth coastal forests, forages in subtidal and pelagic habitats.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories.	**Not expected to nest or forage.** The BSA is outside of the known distribution of this species and dense riparian habitat is absent.
Coturnicops noveboracensis	yellow rail	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species. A historic occurrence of this species was documented near the BSA as a specimen collection from a wetland near Graham Hill Road in 1905 (CDFW 2023).
Cypseloides niger (nesting)	black swift	BCC/SSC	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.	**Moderate potential to nest and forage.** The BSA contains suitable trees for this species to nest as well as open foraging habitat. The CNDDB lists one occurrence of an active nest in 2004 on UC Santa Cruz reserve lands, 2 miles west of the BSA (CDFW 2023).
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	**Not expected to nest or forage.** The BSA is within the range of the species (USWFS 2023), but suitable habitat is absent from the BSA.
Falco peregrinus anatum (nesting)	American peregrine falcon	FPD/FP, SCD	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present.	**Low potential to nest and forage.** The BSA contains suitable nesting substrate but lacks suitable wetlands for foraging. The CNDDB lists one occurrence from 2006 in the general vicinity of Castle Rock Ridge (CDFW 2023).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	BCC/SSC	Nests and forages in emergent wetlands including woody swamp, brackish marsh, and freshwater marsh.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Gymnogyps californianus	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees (Sequoiadendron giganteus); forages in relatively open habitats where large animal carcasses can be detected.	**Not expected to nest or forage.** The BSA falls within the range of the species (USFWS 2023), but suitable nesting and foraging habitat is absent due to the proximity of the BSA to urban development.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations.	**Not expected to nest or forage.** The BSA does not support suitable habitat for this species.
Progne subis (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	**Low potential to nest and forage.** The BSA supports marginal suitable habitat for this species and the species occurs in the region, however, there are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration.	**Low potential to nest and forage**. The BSA does not support suitable nesting habitat for this species. There is one historic CNDDB occurrence but no recent occurrences within 5 miles of the BSA (CDFW 2023).
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats.	**Not expected to nest or forage.** The BSA is outside of the known distribution of this species and suitable habitat is absent.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	**Not expected to nest or forage.** The BSA is outside of the known distribution of this species and suitable habitat is absent.
Fishes				
Eucyclogobius newberryi	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River.	**Not expected to occur.** The BSA does not contain suitable habitat for this species. There are 8 CNDDB occurrences within 5 miles of the BSA where suitable habitat is present (CDFW 2023).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	FE/SE	Streams and small freshwater tributaries during first half of life cycle and estuarine and marine waters of the Pacific Ocean during the second half of life cycle. Spawns in small streams with stable gravel substrates.	**Low potential to occur.** The BSA supports limited suitable habitat for this species. There is one historic CNDDB occurrence within 5 miles (CDFW 2023). The nearest occurrence is in the San Lorenzo River and associated tributaries west of the BSA (CDFW 2023).
Oncorhynchus mykiss irideus pop. 8	steelhead - central California coast DPS	FE/SCE	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn.	**Low potential to occur.** The BSA supports limited suitable habitat for this species. There is one historic CNDDB occurrence within 5 miles (CDFW 2023). The nearest occurrence is in the San Lorenzo River and associated tributaries west of the BSA (CDFW 2023).
Thaleichthys pacificus	eulachon	FT/None	Found in Klamath River, Mad River, and Redwood Creek and in small numbers in Smith River and Humboldt Bay tributaries.	**Not expected to occur.** The BSA is outside of the known distribution of this species.
Invertebrates				
Bombus crotchii	Crotch bumble bee	None/SCE	Open grassland and scrub communities supporting suitable floral resources.	**Not expected to occur.** Suitable habitat and floral resources are absent from the BSA**.** There are no CNDDB occurrences within 5 miles (CDFW 2023).
Bombus occidentalis	western bumble bee	None/SCE	Once common and widespread, species has declined precipitously from central California to southern British Columbia, perhaps from disease.	**Low potential to occur.** This species is no longer common in central California due to population declines. There are 10 CNDDB occurrences within 5 miles of the BSA, but no occurrences more recent than 1998 (CDFW 2023).
Cicindela ohlone	Ohlone tiger beetle	FE/None	Remnant native grasslands with California oatgrass (Danthonia californica) and purple needlegrass (Stipa pulchra) in Santa Cruz County.	**Not expected to occur.** The BSA does not support suitable native grassland for this species.
Euphilotes enoptes smithi	Smith's blue butterfly	FE/None	Coastal sand dunes and coastal sage scrub plant communities; chaparral, grassland, and their ecotones.	**Low potential to occur.** The BSA is outside the known distribution of the species (USFWS 2023; USWFS 2020), but marginal sand dune habitat for this species is present within the BSA. There is 1 historic CNDDB occurrence within 5 miles of the BSA from a 1983 observation in sand dune habitat just north of Mt. Hermon (CDFW 2023).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Polyphylla barbata	Mount Hermon (=barbate) June beetle	FE/None	Known only from sand hills in vicinity of Mount Hermon, Santa Cruz County.	**Moderate potential to occur.** The BSA supports marginal sandhill habitat required for the species. There are 11 CNDDB occurrences within 5 miles of the BSA, the most recent from 2006 (CDFW 2023).
Trimerotropis infantilis	Zayante band-winged grasshopper	FE/None	Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem).	**Moderate potential to occur.** The BSA supports marginal sandhill habitat required for the species. There are 5 CNDDB occurrences within 5 miles, the most recent from 2006 (CDFW 2023).
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources.	**Moderate potential to occur.** The BSA supports a suitable eucalyptus grove for the species near the Pasatiempo tank sites. There are 19 CNDDB occurrences within 5 miles of the BSA (CDFW 2023). No monarchs were observed during the 2023 reconnaissance site visit.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees.	**Moderate potential to occur.** The BSA supports suitable habitat for this species to roost. There are two historic CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Bassariscus astutus	Ringtail	FP	Dense riparian growth in montane evergreen forest, oak woodland, pinyon juniper, chaparral, and desert. Nursery sites located in hollow logs, rock piles, and large trees (>12 in dbh) with deep cavities (>3 in diameter, 12 in deep).	**Low potential to occur.** The BSA supports marginal riparian habitat for this species but does not support suitable nursery habitat.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels.	**Moderate potential to occur.** The BSA supports marginal suitable habitat for this species to roost. There are two historic CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	None/SSC	Forest habitats with a moderate canopy and moderate to dense understory.	**High potential to occur.** The BSA supports suitable habitat for this species. There is 1 recent CNDDB occurrence of this species within 5 miles of the BSA (CDFW 2023).

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Puma concolor	Puma	CT/SP	Large expanses of forest, woodland, shrubland, and desert with adequate cover and an abundance of large prey. Nursery sites include caves, large natural cavities within rocky areas, abandoned mines, or dense brush.	**Low potential to occur.** The BSA is located within the range of the species and may be used from time to time by foraging or dispersing individuals, but the BSA does not support suitable denning habitat due to its proximity to urban development.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils.	**Low potential to occur.** The BSA supports marginal open grassland habitat for this species. There are 2 historic CNDDB occurrences within 5 miles of the BSA, the most recent from 2004 (CDFW 2023).
Reptiles				
Emys marmorata	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	**Low potential to occur**. The BSA supports marginal suitable aquatic habitat for this species, and emergent basking sites are limited. There are no CNDDB occurrences within 5 miles of the BSA (CDFW 2023).
Thamnophis sirtalis tetrataenia	San Francisco garter snake	FE/FP, SE	Wide range of habitats including grasslands or wetlands adjacent to ponds, marshes, and sloughs.	**Not expected to occur.** The BSA is within the range of the species (USFWS 2023), but suitable habitat is absent from the BSA.

Status Legend:

Federal
FE: Federally endangered
FT: Federally listed as threatened
C: Candidate for listing

State
SE: State listed as endangered
SR: State listed as rare
FP: Fully Protected
SP: Specially Protected by the California Fish and Game Commission
SSC: Species of Special Concern

Sources:
https://www.fws.gov/species/california-condor-gymnogyps-californianus
https://www.fws.gov/species/southwestern-willow-flycatcher-empidonax-traillii-extimus
https://www.fws.gov/species/san-francisco-garter-snake-thamnophis-sirtalis-tetrataenia
https://www.fws.gov/species/smith-blue-euphilotes-enoptes-smithi
https://ecos.fws.gov/ServCat/DownloadFile/183160

Appendix C
Cultural Resources Assessment

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MEMORANDUM

To:	Sarah Easley Perez, City of Santa Cruz
From:	John Schlagheck, MA, RPA, Archaeologist, Dudek Monte Kim, PhD, Senior Architectural Historian, Dudek
Subject:	Cultural Resources Assessment for the City of Santa Cruz/Scotts Valley Water District Intertie-1 Project
Date:	April 26, 2023
cc:	Catherine Wade, Project Manager, Dudek Ryan Brady, Archaeologist, Dudek
Attachment(s):	1) National Archaeological Database Information 2) Records Search Results

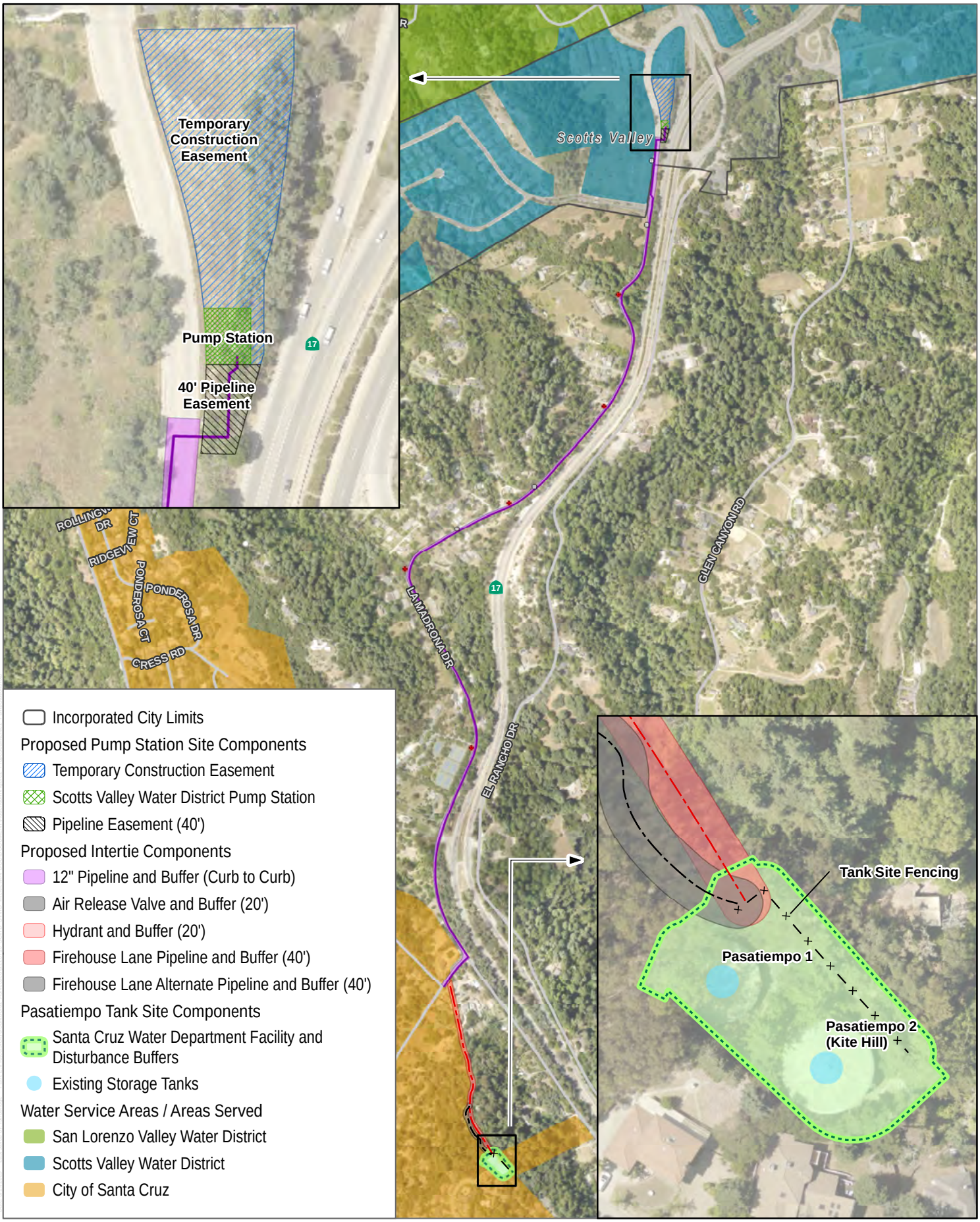
This memorandum provides the results of a supplemental cultural resources study for the City of Santa Cruz (City)/Scotts Valley Water District (SVWD) Intertie-1 Project (Proposed Project). The Proposed Project includes approximately 9,600 linear feet of new piping extending south to north from the City's Pasatiempo tank facility near the terminus of Firehouse Lane, along Sims Road and La Madrona Drive in unincorporated Santa Cruz County to a new pump station in the City of Scotts Valley (see Figure 1). The Proposed Project was previously analyzed in the Santa Cruz Water Rights Project EIR (City of Santa Cruz 2021) and originally did not include the segment of pipeline along Firehouse Lane connecting from Sims Road to the City's Pasatiempo tanks. This technical memorandum evaluates the potential for cultural resources along the currently proposed pipeline alignment, including the new Firehouse Lane segment, and is supplemental to the Cultural Resources Inventory and Evaluation Report (Steffen et al. 2021) completed for the Santa Cruz Water Rights Project EIR pursuant to the California Environmental Quality Act (CEQA).

This assessment included (1) a review of the California Historical Resources Information Systems (CHRIS) records search that was conducted for the Santa Cruz Water Rights Project EIR; and (2) a pedestrian survey by qualified cultural resources specialists of the additional areas of the Proposed Project not surveyed for the Santa Cruz Water Rights Project EIR.

1 Records Research

1.1 NWIC Records Search

The present work included review of a records search provided by the Northwest Information Center (NWIC) of the CHRIS at Sonoma State University on April 27, 2020 (NWIC File No. 19-1728) for the Santa Cruz Water Rights Project EIR. Information from the records search related to the Proposed Project is summarized in this section and includes previously conducted technical studies and recorded resources. All of the current configuration of the proposed intertie alignment is within the limits of records search conducted for the Santa Cruz Water Rights Project EIR.



SOURCE: Bing Maps Accessed 2019, Kennedy/Jenks Consultants 2012 and 2014, URS 2013, County of Santa Cruz 2020

DUDEK

0 500 1,000 Feet

FIGURE 1

Proposed Intertie-1 and Pump Station

Intertie-1 Project

1.1.1 Previously Conducted Technical Studies

There are six previously conducted technical studies with reported coverage that intersects the Proposed Project area (Table 1). The studies are described in detail below Table 1.

Table 1. Previously Conducted Technical Studies

Report No.	Authors	Year	Title	Publisher
S-003913	William Roop, Leo Barker, and Charlene Detlefs	1977	Cultural Resource Inventory of the Scotts Valley Wastewater Project Service Area	Archaeological Resource Service
S-003913a	Leo Barker and Charlene Detlefs	1977	Historical Synopsis and Site Inventory of Scotts Valley	
S-004005	David Chavez	1979	Cultural Resources Assessment of the Pasatiempo/Rollingwoods Wastewater Project Locations, Santa Cruz County, California	
S-004100	Diane C. Watts	1980	Archaeological Survey Report, 04-SCr-17 2.0/2.4, Proposed Median Closure and Shoulder Widening along Route 17, near Sims Road, Santa Cruz County, 04217-101700	California Department of Transportation
S-008134	Stephen A. Dietz	1986	Report of Archaeological Investigations for the Proposed Christian Life Center Church Facility, La Madrona Drive, Santa Cruz County, California, APN 67-183-53 and 67-351-06	Archaeological Consulting and Research Services Inc.
S-012082	Robert Cartier	1990	Cultural Resource Evaluation for Gateway South Assessment District in the City of Scotts Valley, County of Santa Cruz	Archaeological Resource Management

S-003913 and S-003913a

This series of reports included the results of a large area general reconnaissance that covered all the Scotts Valley wastewater service area including all the City of Scotts Valley and some adjacent areas within Santa Cruz County (Roop et al. 1977). The coverage included the north portion of the Proposed Project area. The effort resulted in the recording of numerous new prehistoric and historical period resources, however, none of those resources are within the Proposed Project area.

S-004005

S-004005 reports findings from a general surface reconnaissance for new pipelines and facility improvements to the Pasatiempo/Rollingwood Wastewater Treatment System (Chavez 1979). The reconnaissance covered a large area between Pasatiempo and Scotts Valley and included some of the south portion of the Proposed Project area.

S-004100

This report includes cultural resources' findings from a Caltrans report on access changes to Highway 17 between Pasatiempo and Scotts Valley (Watts 1980). The survey coverage included the south portion of the Proposed Project area. No new resources were reported.

S-008134

S-008134 is a parcel level survey of 15.3 acres for a proposed church on La Madrona Drive (Dietz 1986). The location of the proposed development was several hundred feet west of the Proposed Project alignment, but the survey likely covered the parcel frontage along La Madrona Drive in the Proposed Project area. After finding a few chert flakes and trace marine shell remains, Dietz completed over 30 auger probes and one 1 × 1 meter test unit to 90 centimeters. Findings suggested that the identified shell deposit was not of archaeological origin and the chert flakes were too sparse to justify recording them as a site.

S-012082

Cartier (1990) conducted a records search and surface reconnaissance on two acres of property surrounding the Highway 17/Mt. Hermon Road Interchange. The location intersects the extreme north portion of the City/SVWD intertie Project area in the vicinity of the proposed pump station location. The reported results were uniformly negative.

Guerrero 2012 (not included in NWIC records search results)

Guerrero (2012) conducted a records search and surface survey for most of the Proposed Project area for National Historic Preservation Act Section 106 and CEQA-level environmental review. Results of the study were negative.

1.1.2 Previously Recorded Resources

There are no previously recorded resources within the Proposed Project area. There are two resources beyond the Proposed Project area but within the 0.25-mile radius of the records search (Table 2).

Table 2. Previously Recorded Resources within the Project Area and 0.25-Mile Buffer

Primary	Trinomial	Resource Name	Resource Type	Age	Attributes
Resources within Study Area					
NONE					
Resources within 0.25-Mile Records Search Buffer					
P-44-000038	CA-SCR-000032	Camp Mitchell	Site	Prehistoric	Bedrock milling feature
H-15	No Information	Informal Resource: Killfoyle House	No information	Historic	No information

2 Field Survey

On May 6, 2020, Dudek Archaeologist John Schlagheck, M.A., RPA, conducted an archaeological surface survey of the portion of the Proposed Project alignment from just west of Sims Road at Brook Knoll Drive to the Mount Hermon Road/Highway 17 interchange. On December 22, 2022, Dudek Archaeologist Kolin Taylor, B.A., conducted a second survey focused on north portion of the Proposed Project area east of La Madrona Drive west of the Highway 17 southbound on ramp. The second survey also covered the south portion of the Proposed Project area along Firehouse Lane from Sims Road to the Pasatiempo tank facility. Mr. Schlagheck and Mr. Taylor conducted the surveys using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory. The land area was surveyed in pedestrian transects with approximately 5-meter spacing. Where the survey was along a linear right-of-way, a single transect was completed on either side of the road surface. Where hard surfaces obscured the soil, the surveyors closely examined the soil in adjacent areas. All field notes, photographs, and records related to the current study are on file at the Dudek office in Santa Cruz, California.

Much of the area is covered with paved surfaces, however, where soil in the Proposed Project area is visible, it contains brown, gray, sandy loam with considerable rock content and modern debris. In open areas, the presence of only light vegetation and rodent activity provided excellent views of the soil and material ejected from the subsurface.

Regarding the linear pipeline portion of the survey route, exposed soil along the west side of the La Madrona Drive provided excellent views of native soil. Over much of the length of the proposed intertie alignment, La Madrona Drive is cut into the native grade from a few feet to as much as 25 feet, with severe slopes rising west of the roadside. This indicates that much of the Proposed Project area within the La Madrona Drive right-of-way is significantly below the native grade. This point is further illustrated by the presence of nearly vertical bedrock exposures just west of La Madrona Drive in numerous locations. Native soil was visible in several locations near the bedrock, but much of that material appears to have eroded down to lower elevations from the native grade above. Where La Madrona Drive is not cut into the slope, the soil is heavily mixed with modern fill material near the numerous private driveways. The native soil in these areas is medium gray sandy loam with variable rock content. The route crosses two small unnamed east trending tributaries to Carbonera Creek, a perennial waterway that flows south, immediately east of Highway 17. The northernmost drainage is located approximately 700 feet south of Silverwood Drive, and the second drainage is about 0.5 miles further south at Via Vinca (road). Both drainages are traversed by La Madrona Drive approximately 20 feet above the bottom of the drainage bed. At both locations the road is supported by culvert structures. Both drainages contained minimal flowing water at the time of the survey.

The open area at the northern end of the Proposed Project area is a relatively flat field covered in grass with many spots of good surface visibility. The soil was a brown sandy loam with some gravels. No cultural features or artifacts were observed in this survey area.

The portion of the route along Firehouse Lane is mostly a linear survey along each side of the road and then in the road when it transitions to unpaved road in the southern half. There is a more wooded area in the south by the two Pasatiempo tanks. The area around the two tanks is mostly paved, making surface visibility poor in that area. Surface visibility was about 50 percent in the rest of the survey area due to forest duff and other vegetation. The soil was a brown sandy loam with some gravels. No cultural features or artifacts were observed in this survey area.

3 Built Environment Resources

The Proposed Project study area for built environment resources considered potential impacts from the construction and implementation of the Proposed Project on resources that are 45 years of age or older. The study area encompasses the geographic area or areas within which the Proposed Project may directly or indirectly cause a substantial adverse change in the significance of a known or unknown historical resource. A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (14 California Code of Regulations § 15064.5[b][1]). For built resources, the study area includes the project footprint and any area outside of the project footprint where visual, atmospheric, or audible intrusions may directly alter the character of a historical resource, as well as any area where a historical resource may be indirectly affected by project-related effects that occur later in time or are farther removed in distance but are still reasonably foreseeable.

For the purposes of this report, the study area for built resources is coincident with the Proposed Project footprint as depicted in Figure 1 and includes the 12-inch pipeline, the proposed intertie components, and their buffer areas, as well as the geographic extent of the proposed pump station site components and their identified easements, and the Pasatiempo tank site components. As noted in Section 2, there are four structures within the study area that are older than 45 years. These resources include two culvert structures along the route of La Madrona Drive and two storage tanks within the Pasatiempo tank facility. Additional considerations used to justify the boundaries of the study area include the following:

- The area of direct physical effect within the Pasatiempo tank facility is limited to the northeast corner of the site, where the segment of the pipeline terminates approximately 500 feet northeast of storage tank 1 and approximately 1,200 feet northwest of storage tank 2. At these distances, the project would have no potential to cause a direct physical effect on either storage tank. As such, these two storage tanks were excluded from inventory and evaluation.
- The area of direct physical effect along La Madrona Drive is limited to areas of the linear corridor that exclude the culvert located near the intersection with Via Vinca Drive and the culvert located approximately 675 feet south of the intersection with Silverwood Drive. No part of these two culverts would be modified by the Proposed Project, and they would continue to function as roadway features of La Madrona Drive. Because the Proposed Project would have no potential to cause a direct physical effect on either culvert, these two resources were excluded from inventory and evaluation.
- Since no known built historical resources were identified within or adjacent to the Proposed Project footprint, and since there are no reasonably foreseeable project activities that would occur later in time or that would be farther removed in distance that could indirectly affect built historical resources, the study area has been limited to the Proposed Project footprint.

4 Conclusions

The results of this study suggest there are no potentially significant cultural resources within the Proposed Project area that could be adversely affected by the Proposed Project. The results also suggest that the potential for encountering unknown archaeological resources during construction of the Proposed Project is low. Specifically, the records search did not identify any known archaeological resources within the Proposed Project area and the surface reconnaissance was negative for evidence of previously unknown archaeological resources. The present findings are the same as those made in the Santa Cruz Water Rights Project EIR for the City/SVWD Intertie.

5 Management Recommendations

Given similar findings for the Proposed Project in the present study and the Santa Cruz Water Rights Project EIR, recommendations contained in the EIR are entirely adequate to address Proposed Project CEQA compliance moving forward. Specifically, the application of City's Standard Construction Practices 24 and 25 is appropriate given the relatively low sensitivity for cultural resources. In addition, Standard Construction Practices 24 and 25 address the issue of inadvertent discovery of both new archaeological deposits and human remains during construction. No further effort regarding the identification of cultural resources in the Proposed Project area is recommended.

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