

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

CITY OF SANTA ROSA GEYSERS-DELTA POND CONNECTION/ DIFFUSER IMPROVEMENTS PROJECT



NOVEMBER 2021

PREPARED FOR:

City of Santa Rosa
69 Stony Circle
Santa Rosa, CA 95401

PREPARED BY:

AES-Montrose
1801 7th Street, Suite 100
Sacramento, CA 95811
(916) 447-3479
www.analyticalcorp.com



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SECTION 1.0 INTRODUCTION

The proposed Geysers-Delta Pond Connection project (Geysers), Delta Pond Discharge Diffuser Improvements project (Diffuser), and the associated upgrading of an existing gravel access road to facilitate project construction (collectively referred to as the Proposed Project) is a project as defined under the California Environmental Quality Act (CEQA). This Initial Study (IS) was prepared for the Transportation and Public Works Department of the City of Santa Rosa (City) pursuant to CEQA, Public Resources Code (PRC) § 21000, et seq., as amended and implementing CEQA Guidelines, Title 14, Chapter 3 of the California Code of Regulations (CCR; collectively, CEQA).

- | | |
|--|---|
| 1. Project Title: | Geysers-Delta Pond Connection/ Diffuser Improvements Project |
| 2. Lead Agency Name and Address: | City of Santa Rosa
Transportation and Public Works Department
69 Stony Circle, Santa Rosa, CA 95401 |
| 3. Contact Person and Phone Number: | Andy Wilt, P.E., Associate Civil Engineer
awilt@srcity.org; (707) 543-3878 |
| 4. Project Location: | APNs: 130-040-008, 130-210-028, 130-040-014

Delta Pond
Willowside Road
Santa Rosa, CA 95401 |
| 5. Project Sponsor | City of Santa Rosa |
| 6. General Plan Land Use Designation: | Sonoma County: Extensive
Agriculture/Commercial |
| 7. Zoning: | City of Santa Rosa: Rural Residential
Sonoma County: Land Extensive Agriculture |
| 8. Surrounding Land Uses and Setting: | Agriculture |
| 9. Description of Project: | The City will conduct improvements to the Delta Pond connection to meet the City's desired recycled water conveyance capacity of 50 million gallons per day. In addition, sediment that has built up over the effluent diffuser will be removed by dredging sediment from and around the diffuser's nozzles. An existing gravel access road from Willowside Road would be improved as a part of the Proposed Project. |
| Date Initial Study Completed: | November 2021 |

1.1 PURPOSE OF STUDY

This IS examines the potential effects on the environment as a result of the City of Santa Rosa's (City's) Geysers-Delta Pond Connection project (Geysers), Delta Pond Discharge Diffuser Improvements project (Diffuser), and the associated upgrading of an existing gravel access road to facilitate project construction (collectively referred to as the Proposed Project).

The Proposed Project assessed within this IS is described in Section 2.0. The project description is compared against existing baseline for which environmental impacts are analyzed in Section 3.0.

This IS has identified potentially significant impacts and mitigation measures; when incorporated into the Proposed Project as described in Section 2.0, these impacts would be reduced to less-than-significant levels. Therefore, this IS would support a Mitigated Negative Declaration (MND) under CEQA Guidelines § 15070.

This IS is organized into the following sections:

Section 1.0 - Introduction: Provides an overview of the Proposed Project, location, sponsor, when the IS was completed, environmental resources potentially affected by the Proposed Project, and the significance determination of the Proposed Project on the environment.

Section 2.0 - Project Description: Includes a detailed description of the Proposed Project and background information.

Section 3.0 - Environmental Checklist: Contains the Environmental Checklist form and a discussion of associated environmental issues. Mitigation measures, if necessary, are included following each impact discussion. The numbering sequence for each mitigation measures corresponds to the associated topical sections.

Section 4.0 – Preparers

Section 5.0 – References Cited

1.2 SIGNIFICANCE DETERMINATION

Based on the environmental evaluation presented in **Section 3.0**:

- I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION (ND) will be prepared.
- I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. An MND will be prepared.

- I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
- I find that the Proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.
- I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or ND pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to the earlier EIR or ND, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Amy Nicholson
Signature

12/29/2021
Date

Amy Nicholson, Environmental Coordinator/Senior Planner
Printed Name

City of Santa Rosa
Lead Agency

1.3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Impacts to all resources listed below were evaluated using the checklist included in **Section 3.0**. However, only the environmental factors that were checked could be potentially affected by the Proposed Project and involve impacts that would require mitigation to reduce impacts to less-than-significant levels. The unchecked resource areas were determined to have a less-than-significant impact or no impact, with or without mitigation.

- | | |
|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Land Use and Planning |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Population and Housing |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Transportation and Circulation |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Wildfire |
| | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

SECTION 2.0 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

This IS/MND provides project-level CEQA review for the Proposed Project as described in detail in this section.

2.1.1 EXISTING SETTING

Project Site Location

The project site is located in a rural area west of Santa Rosa (**Figure 1**) and is surrounded by agricultural fields and two waterways, Santa Rosa Creek and Laguna de Santa Rosa (**Figure 2** and **Figure 3**). California State Route (S.R.) 116 travels north to south approximately 1.4 miles west of the project site.

Project Site Existing Conditions

The project site includes the eastern portion of the existing Delta Pond where the Geyser connection improvements would be undertaken and the immediate surrounding area that would be used for staging, the Santa Rosa Creek where dredging in the area around the existing effluent diffuser would take place as well as the areas adjacent to the stream work that would be used for staging this portion of the project, and upgrading an existing gravel access road as shown on **Figure 3** located in Sonoma County (County). The project site encompasses approximately 25 acres of land, and consists of a generally flat surface comprised mainly of low-lying vegetation such as grasses, trees, and shrubbery. The Delta Pond is owned by the City and located within City limits; however, a majority of the project site and the associated access road and diffuser are located in unincorporated Sonoma County (City of Santa Rosa, 2020a). A small portion of the project site, closest to the Delta Pond, is located within City limits.

Project Site General Plan and Zoning Designations

The County General Plan designates the Delta Pond as Commercial within the City limits, while the remaining portion of the project site is designated as a Land Extensive Agriculture District (LEA) and Public Quasi Public (PQP). The Delta Pond portion of the project site is zoned Rural Residential – 40 (RR-40) by the City and the remaining portion of the project site is zoned by the County as LEA and Public Facilities District (PF) (City of Santa Rosa, 2009).

Existing Adjacent Land Uses

Adjacent land uses are agricultural and rural in nature. There are no sensitive receptors located immediately adjacent to the project site boundaries. However, rural residential uses are located over 1,000 feet south of the project site and a school is located approximately 500 feet southeast of the project site.

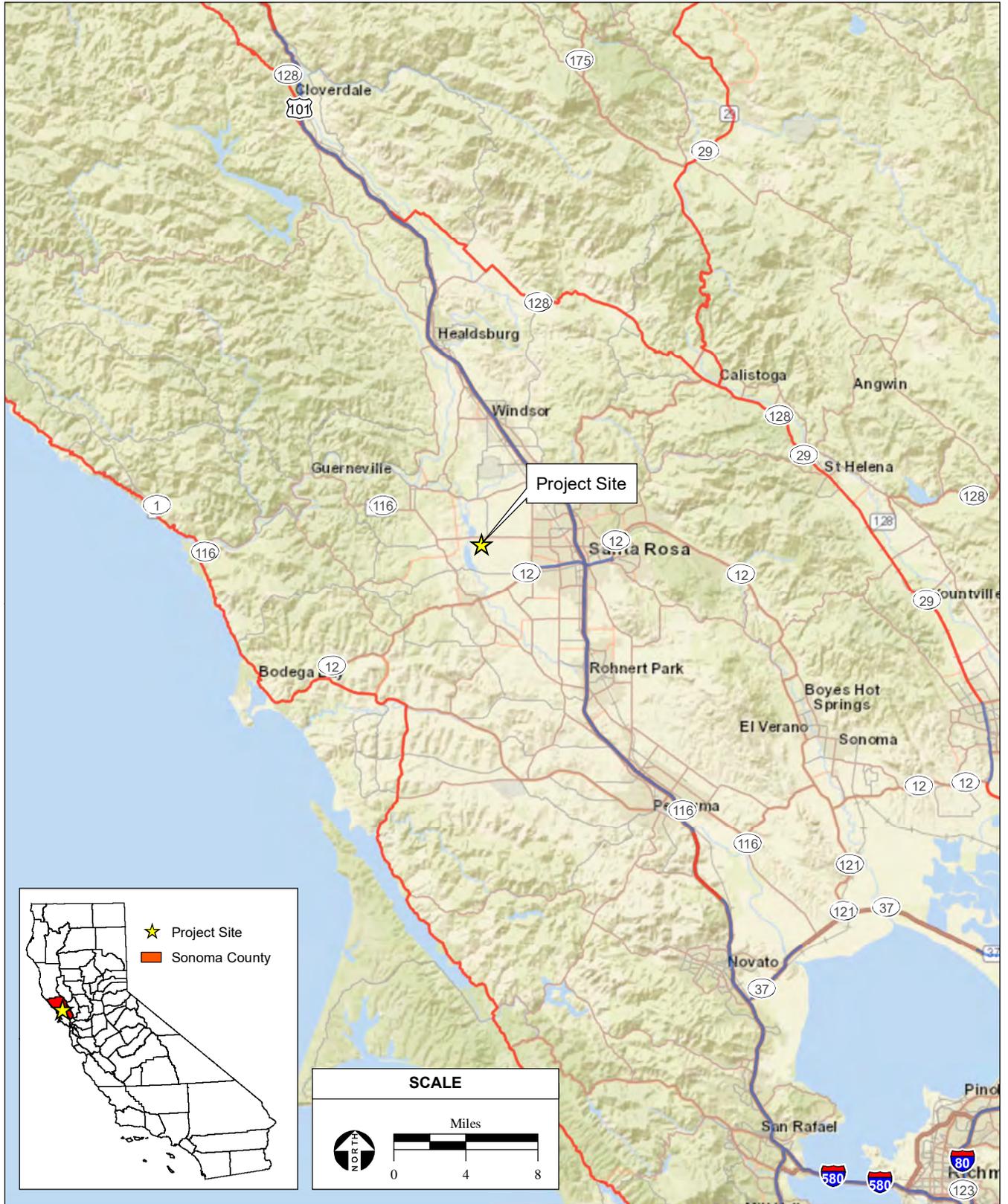
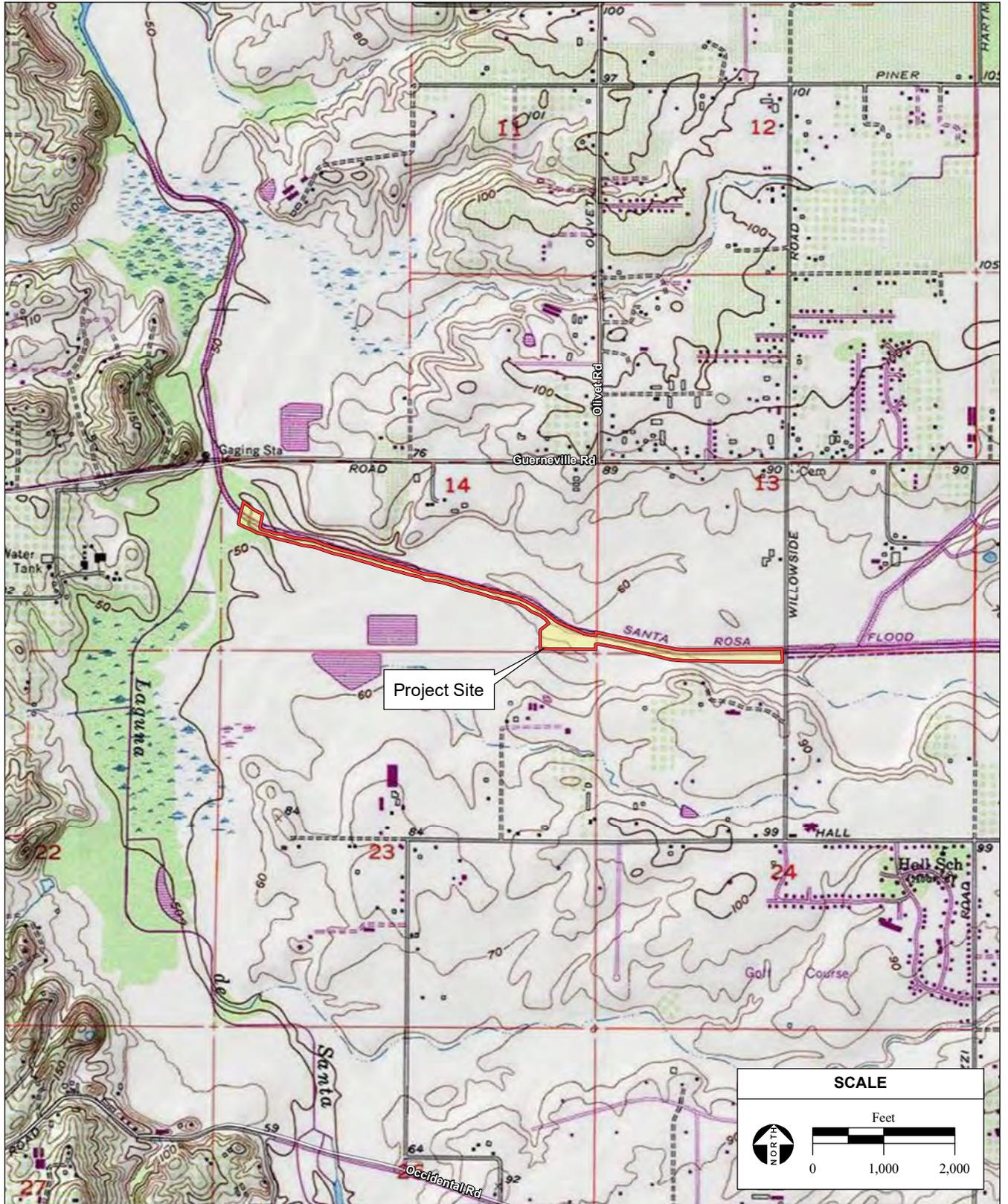


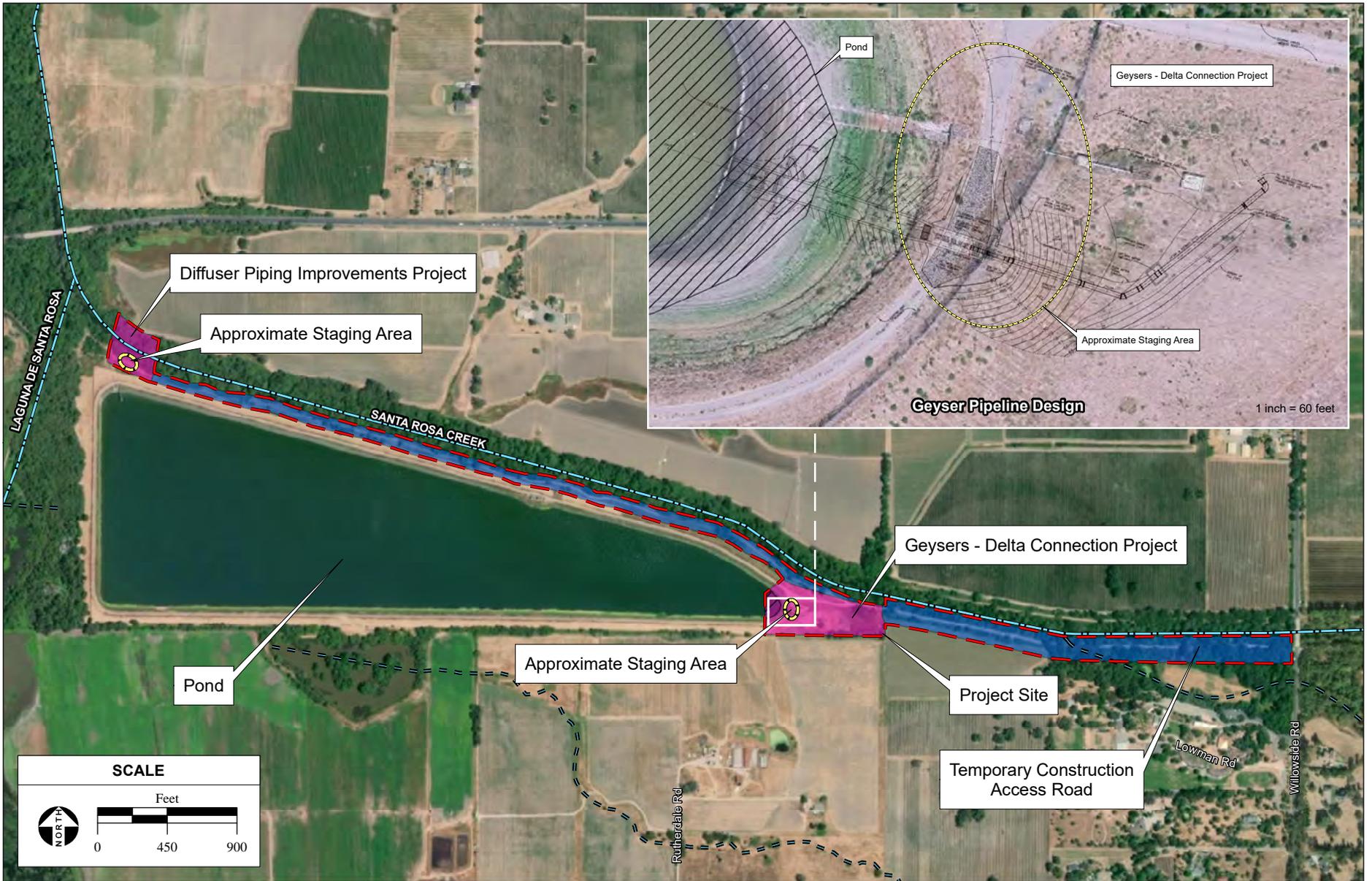
Figure 1
Regional Location



SOURCE: "Sebastopol, CA" USGS 7.5 Minute Topographic Quadrangle, T7N R9W, Sections 13, 14, & 24, Mt. Diablo Baseline & Meridian; ESRI, 2019; AES, 10/6/2020

City of Santa Rosa Delta Pond Capital Improvement Project IS/MND / 217561 ■

Figure 2
Site and Vicinity



SOURCE: Brelje & Race, 3/6/2018; DigitalGlobe aerial photograph, 7/29/2019; ESRI, 2020; AES, 10/7/2020

City of Santa Rosa Delta Pond Capital Improvement Project IS/MND / 217561 ■

Figure 3
Aerial Site Plan

The land surrounding the project site is designated in the County General Plan as a scenic resource and the portion of Guerneville Road located north of the project site is designated as a Scenic Corridor by the County (Sonoma County, 2020a).

2.2 PROJECT DESCRIPTION

2.2.1 SITE DESIGN

The Proposed Project includes three components: the Geysers-Delta Pond connection improvements (Geysers component); the Delta Pond Diffuser Improvements (Diffuser component), and upgrades to the existing access road (access road component).

Geysers-Delta Pond Connection Improvements (Geysers) Component

The purpose of the Geysers component is to upsize the connection between the existing Geysers pipeline and the Delta Pond to meet the City's desired recycled water conveyance capacity of 50 million gallons per day (mgd). This would allow the City to concurrently operate all six pumps at the Llano pump station that feeds recycled water to the Delta Pond.

Accordingly, the Geysers component includes the installation of a new spillway and energy dissipation system to accommodate the increased inflow. Tasks would include excavation, trenching, and underground work.

The Geysers pipeline currently traverses from the Llano pump station through a 48-inch pipeline to a 33-inch diameter reclaimed water turnout. Approximately 130 feet east of the Delta Pond, the 33-inch pipe is necked down to a 12-inch line (vinyl-coated steel pipe) that flows through 12-inch and 6-inch diameter branches housed within a vault. The 12-inch line traverses from the vault over the east end of Delta Pond and discharges into a concrete inlet channel filling the Delta Pond. To meet the desired conveyance capacity, the proposed 24-inch diameter pipeline would connect at the end of the existing 33-inch turnout before it necks down to the 12-inch line.

The spillway that currently serves the existing 12-inch diameter line is insufficient in size and function to serve as the spillway for the proposed 24-inch diameter line. A new spillway facility would be built immediately south of the existing facility. The new concrete facility would begin with the termination of the proposed 24-inch diameter line and a reduction to 12-inch diameter line with a 12-inch diameter fixed-cone discharge control valve. The control valve would discharge into a concrete box culvert dissipation structure. Discharge would flow from the box culvert into an 8-foot wide concrete spillway down the inside dike of the Delta Pond and would terminate with a stilling basin at the bottom of the pond. The existing facility would continue to serve as a discharge facility until construction of the new facilities is completed; the existing facility would also be utilized for small flow rates (4 mgd or less).

Delta Pond Diffuser Improvements (Diffuser) Component

The Delta Discharge Diffuser Improvements component (Diffuser) will require dredging sediment from the diffuser nozzles and possible modifications to the existing diffuser, and will require environmental permits with subsequent routine sediment removal requiring a

maintenance agreement with CDFW (refer to **Table 2-1**). The existing effluent diffuser is located in the Santa Rosa Creek adjacent to the northwest corner of the Santa Rosa Delta Pond. The diffuser is supplied by the Delta Pond and releases into the Santa Rosa Creek. The purpose of the Diffuser component is to remove sediment that has accumulated over the diffuser nozzles and dredge around the diffuser to maximize velocity and increase the speed of particulate breakdown, and thus reduce pollutant concentrations at each discharge point and conduct ongoing maintenance using similar techniques as described below. Routine maintenance would be conducted in a similar manner at a reduced intensity to eliminate the need for additional intensive dredging operations. The approach for the proposed removal of the accumulated sediment from the diffuser will be to incorporate mechanical and hydraulic dredging to minimize the schedule for in-stream construction activities. A “U” shaped sediment curtain will be installed within Santa Rosa Creek, encompassing the entirety of the dredging impact area. The installation of the “U” shaped sediment curtain will ensure a movement corridor is maintained to allow for passage of fish and other aquatic species both upstream and downstream. Furthermore, the existing access road will be enhanced to allow trucks to travel to and from the Diffuser staging area and Willowside Road during the time of construction. This will not increase traffic during operation of the Proposed Project.

Dredging of the accumulated sediment will be employed both upstream and downstream of the diffuser with the use of a six-inch dredge pump located on shore (Diffuser staging area) and diver as depicted in **Figure 3**. Dredging will be established 5 feet upstream and 8 feet downstream from the center line of the diffuser, and will include the entire diffuser duckbill array. The sediment will be dredged to an elevation of 47.1 upstream and an elevation of 45 (varies) downstream to fully expose the diffuser array, and will remove approximately 300 CY of sediment. The diver will manage a four-inch suction line from the dredge pump with a debris screen to methodically remove the sediment as directed by the engineer on the shore as tracked by survey equipment that monitors the progress. In all, approximately 300 CY of material will be removed from the approximately 50-foot by 13-foot area surrounding the diffuser. Discharge from the dredge pump will be directed into a small Geotube placed on shore to separate the solids from the liquid. Decant water expressed from the Geotube will be discharged into the upper floodplain adjacent to the Diffuser staging area and allowed to infiltrate. Once the dredging is complete, the Geotube will be cut open and sediment will be excavated. After the excavated dredge spoils from the Geotube have allowed to dewater naturally, dredge spoils will be hauled offsite for safe disposal. Additionally, barriers surrounding the dredge spoils will be implemented in order to prevent runoff back to the creek. Furthermore, some degree of clearing will be required to provide a staging area where trucks can be loaded and the hydraulic pump and Geotube can be setup.

Upgrading Existing Access Road

The gravel access road is used by Sonoma Water for their stream maintenance operations, and is also a public trail (Santa Rosa Creek Trail [trail]). This portion of the trail, from Willowside Road to the Project Site, will be closed to the public for the duration of construction. The access road traverses adjacent to Santa Rosa Creek (creek) for approximately 3,700 feet (0.7 miles) before reaching the Delta Pond, and then continues north of the Delta Pond for approximately

6,300 feet (1.2 miles) before reaching the Diffuser staging area. The creek is maintained by Sonoma Water for flood control. The City refers to the reach of the creek as Reach 8 and Sonoma Water refers to this area as Santa Rosa Reach 1.

The Proposed Project would involve upgrading Sonoma Water's existing approximately 10,000-foot-long (1.9 mile) gravel access road from Willowside Road to the Diffuser staging area to ensure construction vehicles and rock-hauling trucks could access the detention pond and Santa Rosa Creek to implement the Geysers and Diffuser component of the Proposed Project. Upgrading the access road would consist of filling potholes with clean gravel to maintain current road conditions for construction equipment access. Two low spots along the access road between Willowside Road and the Geysers staging area would be temporarily filled with gravel during the construction season as necessary for access and these low spots would be re-established prior to the rainy season. The continuation of the existing access road between the Geysers staging area and the Diffuser staging area will require a D6 dozer for grading purposes; it is assumed fill will not be required to build the road, however class II road base may be needed to make this section of the access road passible to the truck traffic. To facilitate use by construction vehicles, the existing potentially jurisdictional drainage feature traversing the access road would be avoided through clear spanning. The access road would not be expanded beyond its current limits but would require a building permit for development within a floodway. The access road would be kept free of construction equipment and materials.

The existing access road would be maintained as needed for use by construction vehicles. The road contractor would maintain the existing access road during construction and through the completion of work. Decomposed granite or other applicable rock substrate would be utilized to re-stabilize the road surface as needed due to use. Maintaining the existing access road would not include the removal of any trees and all work would be performed within the current road width.

2.2.2 CONSTRUCTION

The Proposed Project would require preliminary plans, specifications, and the approval of the changes to the eastern embankment from the Geysers connection including the box culvert and spillway from the Division of Safety of Dams (DSOD), prior to the start of the Proposed Project. The DSOD would provide oversight of the design, construction, and maintenance, and would ensure that the design meets minimum requirements, oversee the construction, inspect the embankment on an annual basis, and possibly require independent testing to ensure structural performance (Department of Water Resources, 2020). This would ensure that all work is performed safely and methodically, and that the embankment is structurally sound.

Construction of the Proposed Project is conservatively assumed to occur in multiple phases starting and ending in 2021; the duration of construction would be approximately 4 months with work commencing in June and being completed prior to the rainy season (end of October). Construction would require a maximum of approximately 10 workers per day. Construction would involve grading, excavation, trenching, groundwork, and compaction. Grading and compacting would occur on the existing access road. Excavation, trenching, and groundwork

would occur on the eastern portion of the Delta Pond to upsize the Geysers connection pipeline. Additionally, dredge spoils from the effluent diffuser northwest of the Delta Pond will be extracted and hauled offsite for safe disposal. The Proposed Project is anticipated to require the excavation and transport of approximately 1,000 CY of excavated materials, inclusive of all on-site earthwork (excavation, dredging, and fill), import of off-site fill materials, and backfill. The Diffuser component will also require the removal of some riparian vegetation at the staging area to allow equipment to access the creek. An anticipated 45 material transport trips would be required, inclusive of all import of off-site fill materials, backfill materials, concrete, surfacing materials, pipe, etc. The Proposed Project is anticipated to require the fill and transport of a maximum of 50 CY (excluding concrete) of rock materials. Additionally, an estimated 1,100 CY of road base may be needed to make the temporary road to the Diffuser staging area passable to truck traffic. The excavated material and rock would be transported in accordance with State and County requirements during normal construction hours (City Municipal Code 17-16 restricts construction to be completed between 7:00 A.M. and 7:00 P.M.), and dust suppression Best Management Practices (BMP) would be implemented for roadways and truck operations.

2.2.3 PROJECT APPROVAL PROCESS

The Proposed Project may require the following permits:

TABLE 2-1. POTENTIAL PERMITS AND APPROVALS REQUIRED

Agency	Permit or Approval
Division of Safety of Dams	Approval of embankment work
Federal Emergency Management Agency	Permit for floodplain development
City of Santa Rosa	Grading permit
Sonoma County	Encroachment permit and roiling permit
U.S. Army Corps of Engineers	CWA Section 404 fill permit
Regional Water Quality Control Board	CWA Section 401 water quality certification
California Department of Fish & Wildlife (CDFW)	Section 1600 permit (Streambed Alteration Agreement)
California Department of Fish & Wildlife (CDFW)	Maintenance Agreement for Routine Sediment Removal

SECTION 3.0 ENVIRONMENTAL CHECKLIST

Pursuant to CEQA Guidelines § 15063, an IS should provide the Lead Agency with sufficient information to determine whether to prepare an EIR, ND, or MND for a proposed project. The CEQA Guidelines state that an IS may identify environmental impacts by use of a checklist, matrix, or other method, provided that conclusions are briefly explained and supported by relevant evidence. If it is determined that a particular physical impact to the environment could occur, then the checklist must indicate whether the impact is Potentially Significant, Less Than Significant with Mitigation, or Less Than Significant. Findings of No Impact for issues that can be demonstrated not to apply to a proposed project do not require further discussion.

This IS was prepared to assess the environmental impacts of the Proposed Project in accordance with CEQA to provide the lead agency with sufficient information to determine whether to prepare an EIR, ND, or MND for the Proposed Project.

3.1 AESTHETICS

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Except as provided in PRC § 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In nonurbanized 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.1.1 ENVIRONMENTAL SETTING

The scenic quality of the City is characterized by its location within the Santa Rosa Plain and the rolling hillsides and more prominent mountains such as Mount Hood to the east and Taylor Mountain to the southeast. Due to the flat nature of the City, views of the surrounding scenic vistas are fairly prominent. Views along surrounding roadways are mostly blocked due to obstructing brush and trees.

The project site is relatively flat and is mainly covered in low-lying vegetation such as grasses, trees, and shrubbery. Additionally, the project site is bordered by the Santa Rosa Creek to the north; the Delta Pond is located to the southwest. The project site is visually accessible from the existing access road that runs east to west along the Santa Rosa Creek.

Guerneville Road runs east to west approximately 0.25 miles north of the project site. Trees, brush, grasslands, and vineyards are located around the perimeter of the project site. In addition, a school is located just southeast of the project site. Although the project site is not located within a State scenic highway, Guerneville Road is a designated Scenic Corridor by the County (Sonoma County, 2020a).

3.1.2 IMPACT DISCUSSION

Question A

While much of the project site is visually hidden behind trees and shrubbery, the project site can be viewed from the access road and intermittently along Guerneville Road. Given the rural nature of the project site, and limited access points, the project site is not anticipated to attract additional onlookers.

The Proposed Project would consist of three projects including 1) trenching and underground work at the southeast corner of the pond to improve the Geysers-Delta Pond Connection, 2) dredging along the existing effluent diffuser in the Santa Rosa Creek, and 3) upgrading the existing access road to the Geyser and Diffuser staging areas to allow for construction vehicle use.

As a result of the Proposed Project, the change in the visual character of the project site during construction and operation would be minimal. Construction would consist primarily of excavation, trenching, dredging, and compaction. The change in visual character of the project site during operation would include a small concrete pad where the Geysers component would be constructed. The pad would remain close to the ground, mainly hidden among the tall grasses, and would not obstruct views of trees, hillsides, or other features. Additionally, a small Geotube will be utilized at the shoreline of the Diffuser staging area (see **Figure 3**) temporarily and removed at the completion of the Diffuser component of the Proposed Project. The remaining areas of the project site would mostly appear visually unchanged, however some riparian vegetation will be removed near the Diffuser staging area. **No impact** would occur.

Question B

While portions of the project site along the northern, eastern, and southern boundaries are considered scenic resources, the project site is not located within a State scenic highway, and no damage to scenic resources such as trees, rock outcroppings, or historic buildings would occur within the viewshed of such a highway. **No impact** would occur.

Question C

Development of the Proposed Project would result in temporary road improvements along the access road from Willowside Road to the Diffuser staging area, which also serves as a public walking trail. Because the improvements to the access road consist only of compaction and graveling, while maintaining the same width, the visual character of the trail would not change. Additionally, upgrades to the access road would not include the removal of any trees, however some degree of vegetation clearing will be required to provide a staging area for the Diffuser component of the Proposed Project.

The Proposed Project includes trenching, dredging, and the insertion of new widened pipelines that would mainly occur underground and be shielded from any publicly accessible vantage point; work would be mostly compatible with the existing visual character of the project site.

Accordingly, implementation of the Proposed Project would result in a **less-than-significant impact** to the existing visual character of the project site.

Question D

The project site does not contain any form of lighting at present, and the Proposed Project does not include the installation of any lighting. Therefore, the Proposed Project would not add sources of new daytime or nighttime lighting or glare and thus would not adversely affect day or nighttime views in the area. **No impact** would occur.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
<p>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 Department of 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 Range Assessment Project and Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2.1 ENVIRONMENTAL SETTING

The project site is located in a rural area west of the City and is surrounded entirely by agricultural fields. The project site is relatively flat and contains the access road as well as low-lying vegetation such as grasses, trees, and shrubbery. Additionally, the Geysers portion of the project site is bordered by the Santa Rosa Creek to the north and the Delta Pond to the southwest. The Diffuser portion of the project site consists of the Santa Rosa Creek and

associated upland areas. While the lands outside of the creek have been used for agricultural purposes, they have not been used as forest land or for timber harvest.

3.2.2 REGULATORY SETTING

Farmland Mapping and Monitoring Program

The U.S. Department of Agriculture (USDA) and the California Department of Conservation (DOC) analyze farmland losses. In 1975, the USDA Natural Resources Conservation Service (NRCS) began a mapping program to produce agricultural resource maps based on soil quality and land use nationwide. In 1982, the State of California created the Farmland Mapping and Monitoring Program (FMMP) within the DOC to continue the mapping activity from the USDA-SCS on a continuing basis. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status and is based on information obtained from aerial photographs and data from the NRCS (refer to **Figure 4**).

Williamson Act

The California Legislature passed the California Land Conservation Act (commonly referred to as the "Williamson Act") in 1965 to preserve agricultural lands and open space by discouraging premature and unnecessary conversion to urban uses. Under the Williamson Act, private landowners contract with counties and cities to voluntarily restrict privately owned land to agricultural and compatible open-space uses. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than their potential market value. The vehicle for these agreements is a rolling-term, 10-year contract that is automatically renewed unless either party files a "notice of non-renewal." The project site is not subject to a Williamson Act contract (Sonoma County, 2018).

Land Use Planning

No land within the City is zoned for forestland or timberland. The project site, that is located outside the City limits, is zoned by the County as LEA and PF. There are several other parcels of land south of the project site that are zoned by the City as LEA. Although Prime Farmland, Unique Farmland, and Farmland of Statewide Importance have been identified within the City, none occur on the project site, which consists only of Farmland of Local Importance (DOC, 2016).

3.2.3 IMPACT DISCUSSION

Questions A through E

The Proposed Project is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; however, it is located on Farmland of Local Importance. Additionally, the

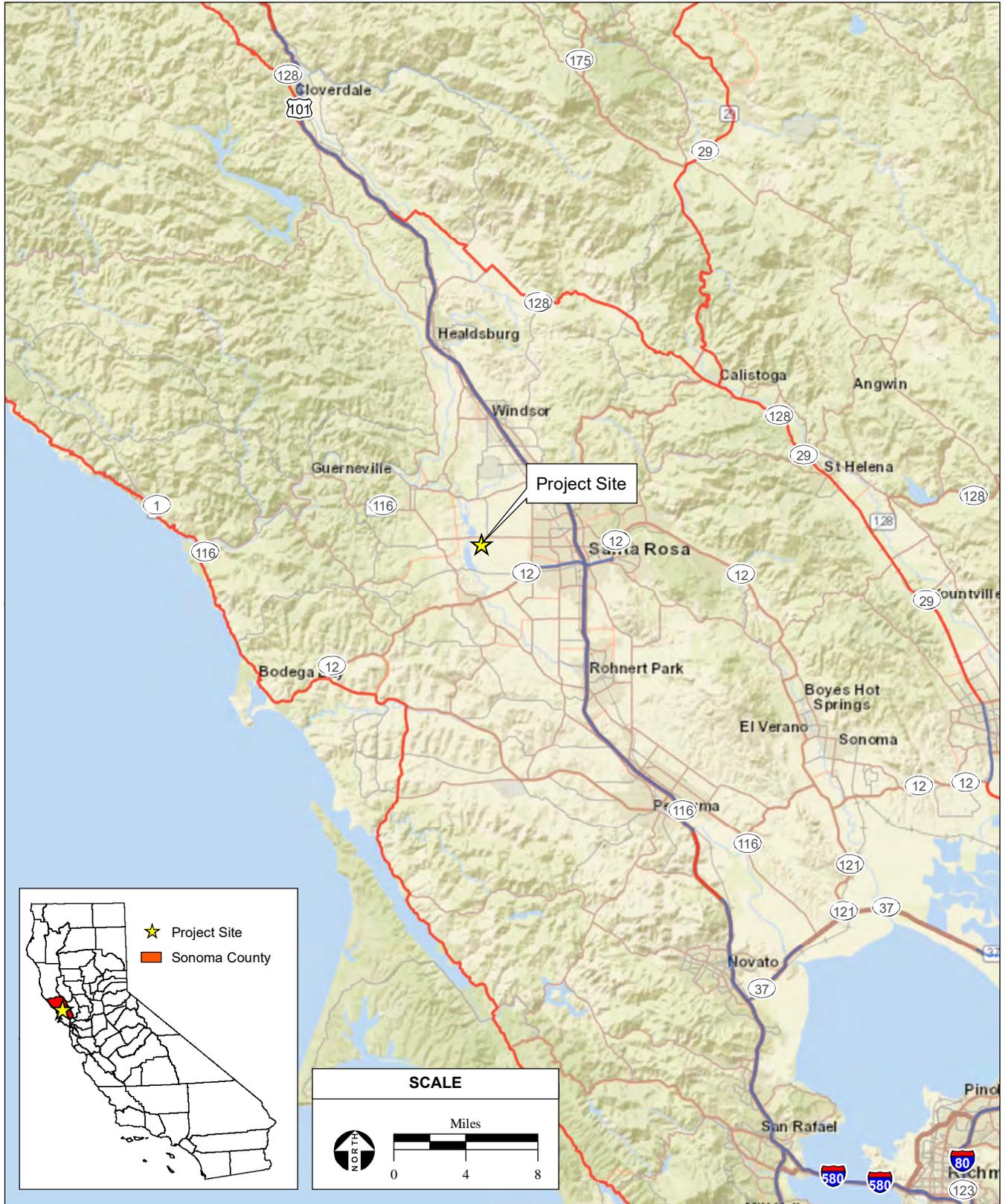


Figure 1
Regional Location

project site is not subject to a Williamson Act contract and would not convert any farmland to a non-agricultural use. As stated above, there is no existing forestland, timberland, or timberland zoned for Timberland Production within the Santa Rosa City limits and no forestland would be converted to non-forest use. Accordingly, there would be no conflict with existing zoning. **No Impact** would occur.

3.3 AIR QUALITY

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 ENVIRONMENTAL SETTING

Air quality issues in the City are under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), as the County is one of the counties that comprise the San Francisco Bay Area air basin (SFBAAB). A portion of the project site is located within the Santa Rosa City limits and is surrounded by agricultural fields located in unincorporated Sonoma County.

3.3.2 REGULATORY SETTING

The 1977 Federal Clean Air Act (CAA) required the U.S. Environmental Protection Agency (USEPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for the six “criteria” air pollutants: ozone (O₃), carbon monoxide, nitrogen dioxide, sulfur dioxide, respirable particulate matter (PM), and lead. PM is designated into two size classes, coarse particulate matter 10 micrometers or less in diameter (PM₁₀) and fine particulate matter 2.5 micrometers or less in diameter (PM_{2.5}). The smaller size of PM_{2.5} allows it to enter the cardiovascular system and cause more serious health problems. For this reason, the NAAQS sets a more stringent standard on PM_{2.5} in ambient air quality. Pursuant to the 1990 CAA Amendments, the USEPA has classified air basins (or portions thereof) as either “attainment” or “nonattainment” for each criteria air pollutant, based on whether the NAAQS have been achieved. The region’s attainment status for the NAAQS is provided in **Table 3-1**.

California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants. Under the California Clean Air Act, patterned after the federal CAA, areas have been designated as attainment or nonattainment with respect to Clean Air Act Quality Standards (CAAQS). The region's attainment status for the CAAQS is also provided in **Table 3-1**. The SFBAAB is designated under the NAAQS as nonattainment for 8-hour O₃ and 24-hour PM_{2.5}. The SFBAAB is designated under the CAAQS as nonattainment for 1- and 8-hour O₃, annual and 24-hour PM₁₀, and annual PM_{2.5} (BAAQMD, 2017). The SFBAAB is in attainment or is unclassified for all other criteria pollutants under the NAAQS and the CAAQS.

TABLE 3-1. BAAQMD ATTAINMENT STATUS

Pollutant	Averaging Time	California Standards		Federal Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O ₃)	8 Hour	0.070 ppm (137 µg/m ³)	Nonattainment	0.070 ppm Primary same as secondary	Nonattainment
	1 Hour	0.09 ppm (180 µg/m ³)	Nonattainment		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment
	1 Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	Attainment	0.100 ppm	Unclassified
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Attainment
Sulfur Dioxide (SO ₂)	24 Hour	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	0.075 ppm (196 µg/m ³)	Attainment
	Annual Arithmetic Mean			0.030 ppm (80 µg/m ³)	Attainment
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	Nonattainment		
	24 Hour	50 µg/m ³	Nonattainment	150 µg/m ³	Unclassified
Particulate Matter Fine (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	12 µg/m ³	Unclassified
	24 Hour			35 µg/m ³	Nonattainment
Sulfates	24 Hour	25 µg/m ³	Attainment		
Lead	30 Day Average	1.5 µg/m ³			Attainment
	Calendar Quarter			1.5 µg/m ³	Attainment
	Rolling 3 Month Average			0.15 µg/m ³	Attainment
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Unclassified	N/A	N/A

Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm (26 µg/m ³)	No information available	N/A	N/A
Visibility Reducing particles	8 Hour (10:00 to 18:00 PST)	10-mile nominal visual range	Unclassified	N/A	N/A
N/A = not applicable ppm = parts per million µg/m ³ – micrograms per cubic meter Source: BAAQMD, 2017					

Sensitive Receptors

Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors.

There are several sensitive receptors in the vicinity of the project site. The closest sensitive receptor is Summerfield Waldorf School located immediately southeast of the project site, approximately 500 feet (ft.) from the proposed upgrading of the access road. There are also two residences located over 1,000 feet from the project site.

3.3.3 IMPACT DISCUSSION

Questions A and B

Air quality impacts potentially associated with the Proposed Project include those resulting from short-term dredging and construction activities and from vehicle traffic during construction and material hauling. Dredging and construction-related emissions could include exhaust from dredging and construction equipment, and fugitive dust from land clearing, earthmoving, movement of vehicles, and wind erosion of exposed soil during site preparation and construction..

BAAQMD has developed preliminary screening criteria for criteria pollutant and precursor emissions. If all screening criteria are met, then construction of a proposed project would result in a less-than-significant impact from criteria air pollutant and precursor emissions. The screening criteria for construction impacts include applicable screening level sizes, incorporation of basic construction mitigation measures, and exclusion of emission-intensive construction activities, such as demolition and extensive material transport (greater than 10,000 cubic yards of soil hauling). Construction of the Proposed Project would meet the applicable screening size of 11 acres for general industrial uses. Additionally, as described in **Section 2.2.2**, the Proposed Project would not include demolition activities and would require less than 10,000 cubic yards of material transport. After incorporation of BAAQMD basic construction mitigation measures included in **Mitigation Measures AQ-1(a) to AQ-1(h)**, the Proposed Project would meet all applicable screening criteria and a less-than-significant impact from criteria pollutants would occur.

BAAQMD's approach to analysis of construction-related particulate impacts is to emphasize implementation of effective and comprehensive dust control measures rather than detailed quantification of emissions. BAAQMD considers construction-related fugitive dust impacts of projects to be less than significant if a suite of recommended dust-control measures are implemented. Dust control measures are required by BAAQMD for compliance with their Clean Air Plan. The absence of dust control measures during construction would conflict with BAAQMD's Clean Air Plan, which would be a potentially significant impact. Therefore, BAAQMD-identified Best Management Practices (BMP) for control of fugitive dust are included as **Mitigation Measures AQ-1(a) to AQ-1(h)**. Therefore, the Proposed Project would not conflict with implementation of applicable air quality plans, violate air quality standards, or substantially contribute to air quality violations. The impact would be **less than significant with mitigation**.

Question C

Dredging and construction of the Proposed Project could result in temporary emissions of diesel particulate matter (DPM) from equipment and vehicles. The closest sensitive receptor is Summerfield Waldorf School located approximately 500 feet southeast of the project site. Construction DPM emissions often dissipate quickly and are generally unnoticeable offsite. **Mitigation Measures AQ-1(f) and AQ-1(g)** would be implemented to reduce potential impacts from DPM concentrations on sensitive receptors by limiting idling times and requiring proper equipment maintenance. Significant odors would not be emitted during operation of the Proposed Project. The impact would be **less than significant with mitigation**.

Question D

Dredging and construction equipment has the potential to emit odor in the vicinity of the project site; however, dredging and construction odors are not anticipated to be detected beyond the project site boundaries. Under the BAAQMD Guidelines, the Proposed Project is not considered an odor generating land use. Additionally, in accordance with BAAQMD Regulation 7, the Proposed Project would be restricted from emitting quantities of pollutants that would cause detriment, nuisance, or annoyance to any persons or to the public. The Proposed Project would not expose sensitive receptors, as defined above, to substantial pollutant concentrations or odors. This impact would be **less than significant**.

3.3.4 MITIGATION MEASURES

AQ-1 The following BMPs would be implemented during dredging and construction.

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.

- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure CCR Title 13, Section 2485). Clear signage shall be provided for construction workers at all access points.
- g. All dredging and construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- h. A publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints shall be posted. This person shall respond and take corrective action within 48 hours. The BAAQMD phone number shall also be visible to ensure compliance with applicable regulations.

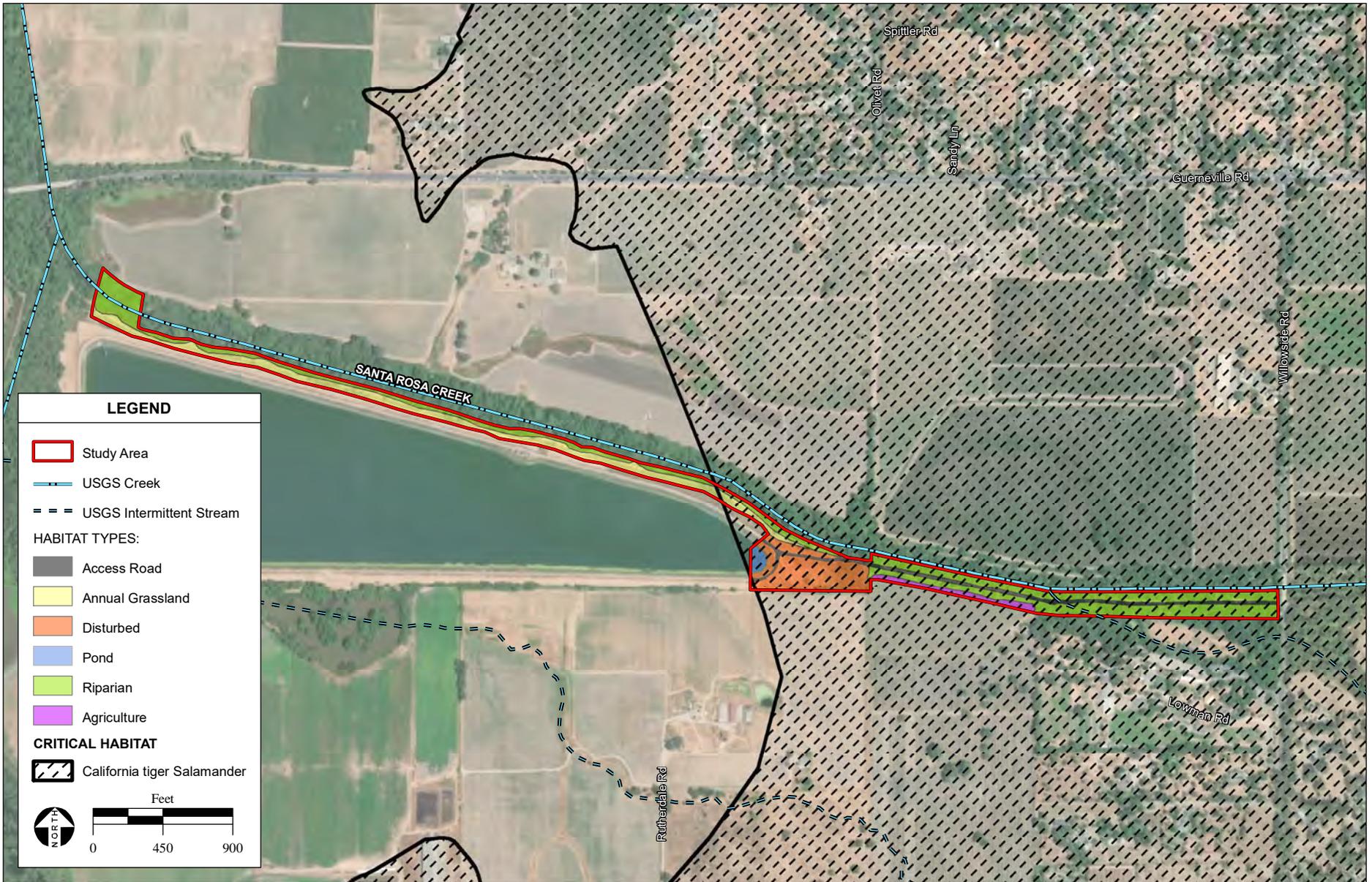
3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4.1 ENVIRONMENTAL SETTING

The project site encompasses a gravel access road running from east to west providing access to the Delta Pond to the south and the Santa Rosa Creek to the north. Santa Rosa Creek is located adjacent to the northern edge of the project site and contains the diffuser and riparian habitat. A habitat map of the project site can be found in **Figure 5**. The access road is lined with oaks, willows, and brambles (*Rubus armeniacus*). Lower growth along the road is predominantly curly dock (*Rumex crispus*), black mustard (*Brassica nigra*), wild radish (*Raphanus raphanistrum*), wild rye (*Elymus* sp.) and sedges (*Carex* spp.).

The area east of the Delta Pond is ruderal disturbed with non-native plants. This area is proposed for extensions to the pumping and pipeline network.



Critical Habitat

The project site is within designated critical habitat for California tiger salamander (CTS; *Ambystoma californiense*; **Figure 5** and **Appendix A**). Figure 2 of the Santa Rosa Plain Conservation Strategy (SRPCS) designates the project site as “100-year Flood Zone” of the Laguna de Santa Rosa (U.S. Fish & Wildlife Service [USFWS], 2005). Figure 3 of the SRPCS states that “presence of CTS is not likely but mitigation for listed plants may be required” for the project site (USFWS, 2005). National Oceanic and Atmospheric Administration (NOAA) also lists the Sebastopol quad as containing anadromous fish critical habitat for Coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*O. tshawytscha*), and steelhead trout (*O. mykiss*) (NMFS, 2020). More specifically NOAA has listed Santa Rosa Creek as designated critical habitat for Coho salmon (NOAA, 2020).

Essential Fish Habitat

The National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) map and the Santa Rosa Citywide Creek Master Plan were consulted in regards to essential fish habitat within the project site. NOAA lists the Sebastopol quad as containing essential fish habitat for Coho salmon and Chinook salmon. The Santa Rosa Citywide Creek Master Plan lists a concrete low flow structure within the reach that may present a barrier to juvenile fish migrating downstream during low water conditions. Chinook salmon and steelhead trout occur in Santa Rosa Creek.

Special-Status Species

For the purposes of this assessment, special status has been defined to include those species that are:

- Listed as endangered or threatened under the Federal Endangered Species Act (FESA) (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (CESA) (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Wildlife (CDFW) Code (§ 1901);
- Designated as fully protected, pursuant to CDFW Code (§§ 3511, 4700, or 5050);
- Designated as species of concern to the CDFW;
- Covered under the International Migratory Bird Treaty Act (MBTA); or
- Defined as rare or endangered under CEQA.

An official special-status species list was generated from the USFWS Information, Planning, and Conservation (IPaC) system, CDFW’s California Natural Diversity Database, National Marine

Fisheries Service (NMFS), and the California Native Plant Society (CNPS) rare plant list. (**Appendix A**). These lists identify 50 plant species, 5 fish species, 5 amphibian species, 2 reptile species, 6 mammal species, 3 bird species, and 2 invertebrate species for a total of 73 special-status species with the potential to occur in the region of the project site. Critical habitat and details for each are further discussed in **Appendix A**. There is a vegetated riparian corridor and stream within the Project Site, which may provide a network of migration for species in the vicinity of the project site. Following a site-specific analysis of the project site, species with a potential to occur on the project site were determined to be the following:

- Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*)
- Sonoma sunshine (*Blennosperma bakeri*)
- Dwarf downingia (*Downingia pusilla*)
- Fragrant fritillary (*Fritillaria liliacea*)
- Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)
- Thin-lobed Horkelia (*Horkelia tenuiloba*)
- Sebastopol meadowfoam (*Limnanthes vinculans*)
- Marsh microseris (*Microseris paludosa*)
- Baker's navarretia (*Navarretia leucocephala*)
- Two-fork clover (*Trifolium amoenum*)
- Saline clover (*Trifolium hydrophilum*)
- Russian River tule perch (*Hysterothorax traskii* *pomo*)
- Navarro roach (*Lavinia symmetricus navarroensis*)
- Coho salmon (*Oncorhynchus kisutch*)
- Steelhead trout (*Oncorhynchus mykiss irideus*)
- Chinook salmon (*Oncorhynchus tshawytscha*)
- California tiger salamander (*Ambystoma californiense*)
- California red-legged frog (*Rana draytonii*)
- Red-bellied newt (*Taricha rivularis*)
- Western red bat (*Lasiurus blossevillii*)
- Western pond turtle (*Emys marmota*)
- Tricolored blackbird (*Agelaius tricolor*)

3.4.2 REGULATORY SETTING

Federal Endangered Species Act

Under the FESA, the Secretary of the Interior and the Secretary of Commerce have the joint authority to list a species as threatened or endangered (16 United States Code [USC] § 1533c). The purposes of FESA are to provide a means to conserve the ecosystems that endangered and threatened species depend on and to provide a program for conservation and recovery of

the species with the intent of removing the species from a listed, protected status. Regulatory protection is given to any species listed as endangered or threatened.

The USFWS and the NMFS are the federal agencies that enforce FESA. Pursuant to the requirements of FESA, an agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and determine whether the project would have an impact on such species. Under FESA, habitat loss is considered a significant impact. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed for listing under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536).

California Department of Fish and Wildlife

California Fish and Game Code §§ 3503 and 3503.5 provide protection of birds and nests by prohibiting the take of birds, their nests, or their eggs. California Fish and Game Code § 1600 et seq., requires notification to the CDFW for proposed projects that may divert, obstruct, or change the natural flow or the bed, channel or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river stream, or lake.

CEQA Guidelines

Several federal and State statutes protect rare, threatened, and endangered species. CEQA Guidelines Article 20, § 15380 provides that a species not listed on the federal or State list of protected species may be considered rare, threatened, or endangered if the species can be shown to meet certain specified criteria. These criteria are modeled after the definitions of endangered, rare, or threatened provided in FESA and CESA. This section of the CEQA Guidelines gives public agencies the authority to protect a species from any potential impacts of proposed projects until the respective government agency has the opportunity to designate (list) a species as protected, if warranted.

The CNPS maintains an extensive list of plant species that it considers to be rare, threatened, or endangered, but that have no designated status or protection under federal or State endangered species legislation. Impacts to CNPS listed species (e.g., CNPS Lists 1B and 2) are considered pursuant to CEQA during environmental review.

California Endangered Species Act

Under CESA, it is unlawful to take a State-listed endangered or threatened species. Fish and Game Code section 86 defines take as “hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture, or kill.” CESA take authorization, over CDFW, if there is potential for take of a State-listed plant or wildlife species.

Migratory Bird Treaty Act

Migratory birds are protected under the federal MBTA of 1918 (16 USC §§ 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. As such, project-related disturbances must be reduced or eliminated during the nesting season.

Santa Rosa Plain Conservation Strategy

The USFWS has developed a strategy to conserve and contribute to the recovery of certain federally listed species of the Santa Rosa Plain and their habitats. The SRPCS identifies potential habitat and survey guidelines for five special-status species known to occur on the Santa Rosa Plain; CTS, Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam, and many-flowered navarretia (USFWS, 2005).

3.4.3 IMPACT DISCUSSION

Question A

As described in **Section 3.4.1**, 73 special-status species were determined to have the potential to occur in the region. However, in the preparation of a biological resources assessment report (AES, 2021) for this project, it was determined that only 2 of the 11 special-status plant species mentioned above have the potential to occur within the project site. This determination was made based on the assessment of habitat types present within the project site. Below is a list of special-status species with the potential to occur within the project site. Based on the site-specific habitats and species-specific habitat requirements for each species that may occur in the vicinity Study Area, the Study Area is capable of supporting 2 special-status plant species and 11 special-status animal species. Species with no potential to occur on the project site were ruled out based on lack of suitable habitat, soils, elevation, and necessary substrate, or by negative results during the surveys if it coincided with the identifiable bloom period for plant species. Work within the project site will be limited to the already disturbed road, staging areas adjacent to the Delta Pond and dredging area, and a small section of the Santa Rosa Creek.

- Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)
- Thin-lobed horkelia (*Horkelia tenuiloba*)
- Russian River tule perch (*Hysterothorax traskii* *pomo*)
- Navarro roach (*Lavinia symmetricus navarroensis*)
- Coho salmon (*Oncorhynchus kisutch*)
- Steelhead trout (*Oncorhynchus mykiss irideus*)
- Chinook salmon (*Oncorhynchus tshawytscha*)

- California tiger salamander (*Ambystoma californiense*)
- California red-legged frog (*Rana draytonii*)
- Red-bellied newt (*Taricha rivularis*)
- Western red bat (*Lasiurus blossevillii*)
- Western pond turtle (*Emys marmota*)
- Tricolored blackbird (*Agelaius tricolor*)

Additional information has been provided below for Coho salmon (*Oncorhynchus kisutch*), Sebastopol meadow foam (*Limnanthes vinculans*), Sonoma sunshine (*Blennosperma bakeri*), and bats consistent with a CDFW request.

Central California Coast Coho Salmon (*Oncorhynchus kisutch*),

Federal Status – Endangered

State Status – Endangered

Other – None

A portion of the proposed project occurs within the Santa Rosa Creek, located at the western end of the Study Area. The Santa Rosa Creek flows into the Laguna de Santa Rosa, thence Mark West Creek, and thence Russian River. Runs of Coho Salmon are known to occur within the Russian River (NOAA, 2005). The Sebastopol quadrangle is also designated critical habitat for this species (NMFS, 2016). In addition, CNDDDB has listed one occurrence of this species within five miles of the Study Area (Occurrence #20) documented in 2015, occurring approximately 4.17 miles to the north. This occurrence documented smolt of hatchery origin within Green Valley Creek, which is a tributary of the Russian River. Given that the Russian River is known to support salmonids, it is likely that the stretch of Santa Rosa Creek that occurs within the Study Area can also support this species. With implementation of mitigation measure BIO-5, impacts to this species will be less than significant.

Sebastopol Meadowfoam (*Limnanthes vinculans*)

Federal Status – Endangered

State Status – Endangered

Other – CNPS 1B.1

Sebastopol meadowfoam is an annual herb in the meadowfoam family (Limnanthaceae) found vernal mesic habitats which include meadows and seeps, wetlands, valley and foothill grassland, and vernal pool habitats. This species occurs at elevations from 15 to 305 meters above mean sea level, and blooms from April to May. It's known to occur in Napa and Sonoma counties (CNPS, 2020).

CNDDDB has listed 26 occurrences of this species within the five miles of the Study Area. The nearest occurrence (Occurrence #52) to the Study Area was made in 1988, approximately 0.59

mile to the south, located 0.1 to 0.2 air miles southeast of the intersection of Hall Road and Cahill Lane, and northwest of Santa Rosa Golf Course. It was stated that this occurrence is thought to be extirpated based on no observations made of this species at this location during surveys conducted between 2002 and 2014. The next closest occurrence (Occurrence #27) was made in 2012, approximately 0.88 mile to the south between Occidental Road and Hall Road, and Between Sanford Road and Santa Rosa Golf Course. Upon analysis of the onsite habitat, this species was determined to not have a potential to occur within the Study Area due to the lack of habitat suitable to support this species. Even though the Study Area provides annual grassland habitat, it consisted of predominantly upland grass species that did not support vernal mesic conditions. While this species is unlikely to occur on site, preconstruction surveys (MM #X) will ensure no adverse impacts to this or other listed plant species.

Sonoma Sunshine (*Blennosperma bakeri*)

Federal Status – Endangered

State Status – Endangered

Other – CNPS 1B.1

According to the Draft Recovery Plan for the Santa Rosa Plain, Sonoma sunshine is an annual herb that occurs at elevations that range from 10 to 110 meters above sea level. It occurs within vernal pools, grassy margins of swales, and seasonally wet grasslands (USFWS, 2016a). More specifically, within the Santa Rosa Plain, this plant is known to occur within vernal pools and swales found within valley oak woodlands and north coastal prairie grasslands typically growing in shallow vernal pools, 30 to 50 cm deep, and in swales (USFWS, 2016a). It may also occur in swale bottoms, but more commonly grows near the upper edges of the high-water line of vernal pools (USFWS, 2016a). This species blooms from March through May. Sonoma sunshine is endemic to Sonoma County and this is the only region where this species occurs. It is known for having entire lower leaves, one to three lobed upper leaves, and ray flowers that have dark red stigmas. Critical habitat has not been designated for this species and it does not have a recovery plan.

CNDDDB has listed seven occurrences within the five miles of the Study Area. The nearest CNDDDB occurrence (Occurrence #15) was documented in 2018 located approximately 1.52 miles to the northeast identified within vernal pool and swale habitat. This occurrence identified this species on both sides of Piner Road just east of Hartman Road, extending south to Oak Farm Lane, west of Santa Rosa. The habitat requirements for this species listed in the above description are not present within Study Area. Though there is potential for this species to occur within the region, the Study Area lacks any depression or swale features suitable to support this species. Additionally, the annual grassland habitat present within the Study Area is routinely maintained in the form of mowing, for the City of Santa Rosa to access infrastructure for maintenance purposes. Upon analysis of the onsite habitat, this species was determined to not have a potential to occur within the Study Area.

Bat Species

The project would result in the removal of no more than 10 willow trees from the area immediately surrounding the dredging area in addition to some young, recently planted trees consisting of Oregon ash and valley oak. It was determined upon further review and a site visit that there is no suitable habitat present to support roosting of the pallid bat (*Antrozous pallidus*). Additionally, upon further review and a site visit, it was determined that there is a potential for western red bat (*Lasiurus blossevilli*) to roost within the trees present within the riparian habitat. However, only trees less than 4 inches in diameter will be removed. Western red bats prefer to roost in mature riparian trees and the trees designated for removal within the project site were determined to not be suitable to support roosting of the western red bat. Vegetation designated for removal/trimming lacks exfoliating bark and cavities. Given the lack of suitable habitat, no bat habitat is present within the impact area where tree removal/trimming will occur.

Nesting Birds

Tricolored blackbird and federally protected nesting migratory birds have the potential to nest within the project site, primarily within the riparian habitat, and could be indirectly impacted by noise or directly impacted by proposed vegetation removal along the riparian area of Santa Rosa Creek associated with the Delta Discharge Diffuser Improvements component. WPT and CRLF may occur within the Santa Rosa Creek and Delta Pond. Santa Rosa Creek contains suitable habitat to support CRLF adults but lacks habitat suitable to support breeding of this species. CRLF have a low potential to occur within the project site due to the absence of CNDDDB occurrences within five miles of the site (CDFW, 2020). WPT has a low potential to occur within terrestrial habitats within the project site due to its disturbed nature and routine maintenance activities occurring on the site. CTS and RBN have a low potential to occur within terrestrial habitat within the project site due to its disturbed nature and routine maintenance, however CTS may use the Delta pond and RBN may use Santa Rosa Creek. The western red bat has a potential to occur within the riparian habitat along Santa Rosa Creek, however no suitable roosting trees will be removed, therefore resulting in no impact to this species. Mitigation Measures Bio-1 and Bio-2 require biological surveys to be conducted prior to the installation of exclusionary fencing and commencement of ground disturbing activities. This will allow for the identification of any potentially occurring special-status species within the project site and outline what next steps shall be followed if special-status species are observed during the survey. This will prevent project related impacts to any potentially occurring special-status species. Mitigation Measure Bio-1 also states that a biological monitor will be present during all ground disturbing activities and conduct daily inspections of all construction related equipment for special-status species prior to the start of daily construction activities. Having a biological monitor present during construction activities allows for potentially occurring special-status species to be identified and properly addressed, preventing direct impacts to special-status species. The biological monitor will have stop work authority if a special-status species is observed within the project site and is in danger of being harmed. The biologist will stop all construction activities in the vicinity of the special-status species until the special-status species has moved out of harm's way on its own accord. Mitigation Measure Bio-4 requires that a rare

plant survey be conducted, allowing for identification of potentially occurring special-status plant species within the project site and to initiate the consultation process with USFWS if special-status plants are identified within the project site and impacts are unavoidable. The identification of rare plants will allow the biologist to create an exclusionary buffer around the potentially occurring plant(s) and will also initiate consultation with the USFWS regarding how to proceed with the project if impacts to the plant species are unavoidable. Implementation of **Mitigation Measures Bio-1, Bio-2, Bio-4, and Bio-5** would reduce potential impacts to these species to less-than-significant levels.

Special-status Fish

NOAA also lists the Sebastopol quad as containing anadromous fish critical habitat for Coho salmon, Chinook salmon, and steelhead trout (NMFS, 2020). Salmonids are known to occur within Santa Rosa Creek and could be directly impacted by proposed dredging activities within the Santa Rosa Creek. Mitigation Measure Bio-3 requires silt fencing and other BMP's, which are effective in preventing sediment latent water from entering waters of the state, as outlined in the Construction General Permit (SWRCB, 2009). Mitigation Measure Bio-5 establishes a work window that avoids impacts to salmonid fall and winter runs known to occur during the months of November to February in the area. By establishing a no work window, this will avoid impacts to potentially occurring salmonid runs. Additionally, this mitigation measure also states that a biological monitor will be present in order to avoid project related impacts to special-status aquatic species. The biological monitor has stop work authority in the case a special-status species is observed. Construction activities will resume once the biological monitor determines that the special-status species is no longer threatened by construction related activities. Implementation of **Mitigation Measures Bio-3 and Bio-5** would reduce potential impacts to these species to less-than-significant levels.

CTS Critical Habitat

Additionally, the project site occurs within designated critical habitat for CTS (**Figure 5 and Appendix A**). Designated critical habitat for the species occurs only within the eastern portion of site which includes the Geysers-Delta Pond connection improvements portion of the project and also along the existing access road. Although designated habitat occurs within the eastern portion of the project site, it is highly unlikely that the site can support CTS based on the following:

- The project site contains previous disturbance and does not contain suitable breeding habitat (wetland pools that contain standing water continuously for at least twelve weeks, extending into April) and lacks the presence of small mammal burrows suitable to support aestivation of this species (USFWS, 2005).
- Per Appendix E of the SRPCS, wooded riparian corridors, which occur along the project site, are not considered CTS habitat except rarely as dispersal routes (USFWS, 2005).
- Per Appendix E of the SRPCS, areas within the FEMA 100-year floodplain (**Figure 6**) and seasonal pools subject to flooding from perennial sources, such as the Laguna de

Santa Rosa, are not likely to support CTS breeding due to the high likelihood of CTS predators (bullfrogs, etc.).

- Figure 2 of the SRPCS designates the project site and surrounding areas as “100-year Flood Zone” of the Laguna de Santa Rosa (USFWS, 2005). Per the Recovery Plan for the SRPCS, CTS avoid areas that are more likely to flood, such as the project site (**Figure 6**) (USFWS, 2016b).
- Figure 2 of the SRPCS indicates the project site and surrounding areas as not within 1.3 miles of known or extirpated CTS breeding pools (USFWS, 2005).
- Figure 3 of the SRPCS designates the project site as “presence of CTS is not likely but mitigation for listed plants may be required” (USFWS, 2005).
- During the site surveys conducted on December 11, 2019 and on September 30, 2020, small mammal burrows that could be used as upland estivation habitat were not observed within the Project Site.

Therefore, the project site does not contain suitable breeding or dispersal habitat to support CTS and is unlikely to contain upland estivation habitat. Construction of the Proposed Project would predominantly occur on areas already previously disturbed, greatly reducing the potential for suitable upland habitat to occur for this species due to the lack of small mammal burrows. Mitigation Measure Bio-1 require surveys to be conducted prior to ground disturbing activities. If no special-status species are observed during the survey, exclusionary fencing will be installed immediately following the survey. This will allow for the work area to be free of special-status species during construction activities. Additionally, a biological monitor will be present during all ground disturbing activities to ensure no “take” of special-status species occur. The biological monitor has stop work authority in the case a special-status species is observed. Construction activities will resume once the biological monitor determines that the special-status species is no longer threatened by construction related activities. The implementation of **Mitigation Measure Bio-1** would reduce potential impacts to this species to less-than-significant levels

Question B

The Delta Discharge Diffuser Improvements Project component of the Proposed Project is located within a portion of riparian habitat adjacent to Santa Rosa Creek and is also located within a portion of Santa Rosa Creek (**Figure 5**). This project component involves hydraulic and mechanical dredging of the creek to remove accumulated sediment and will require the removal of existing riparian vegetation to allow for equipment access to the creek. Mechanical dredging will be conducted as a means to reduce in-stream time during the sedimentation removal process, resulting in less potential for environmental and biological impact. Permits will be required for this work, including a CWA Section 404 permit, a CWA Section 401 water quality certification, and a CDFW Section 1600 Streambed Alteration Agreement, and maintenance agreement. These permits will likely require mitigation to offset the impacts to their respective jurisdictional impacts, including dredging impacts to the stream, impacts to the floodplain, and impacts to the riparian corridor. Mitigation in order to offset temporary and permanent impacts

may include riparian enhancement through planting of native vegetation along Santa Rosa Creek at no less than a 1 to 1 ratio, restoration of Santa Rosa Creek involving the removal and continued management of invasive vegetation along the Santa Rosa Creek riparian corridor, preservation of a portion of the riparian corridor along Santa Rosa Creek, or buying off-site mitigation credits at no less than a 1 to 1 ratio. The goal of the mitigation is to achieve no net loss of environment and biological resources. Mitigation Measure Bio-3 states that silt fencing and other BMP's effective in preventing sediment latent water from entering waters of the state, as outline in the Construction General Permit (SWRCB, 2009), will be installed acting as a barrier to runoff from the project site. Sediment latent water can potentially impact aquatic species by limiting the uptake of oxygen of some aquatic species. With implementation of **Mitigation Measure Bio-3**, impacts would be **less than significant with mitigation**.

Approximately 40 linear feet of riparian habitat will be impacted as a result of the project and will be compensated for at a 3:1 ratio resulting in approximately 120 linear feet of restoration/enhancement along the riparian corridor, including the restoration/enhancement of the existing riparian habitat width. Willows are the only trees designated for removal within this riparian corridor. Not more than 10 willows will be removed from this area and will be replaced in kind at a 3:1 ratio within the riparian restoration area(s). Willows 4-inches or greater will not be removed. Enhancement of the riparian habitat will include the removal of invasive species which primarily includes the removal of Himalayan blackberry (*Rubus armeniacus*) and replacement planting of willows. All riparian mitigation will occur on-site or as close to the site as possible within the same stream or watershed.

Additionally, some previously planted trees within the staging area will need to be removed for placement of dredge material for decanting purposes. This activity is a permanent impact and the removal of trees in this area will be compensated for with a replanting ratio of 3:1 and will be replaced in kind. This replanting will occur adjacent to where these trees were removed. No willows will be removed from this area. No trees greater than 4- inches in diameter breast height will be removed. In addition to planting at a 3:1 ratio, extra trees will be planted to account for potential die off to ensure success criteria is met at the end of the five year monitoring period. No more than 160 small trees will be removed from the proposed staging area, composed of valley oak and Oregon ash. As compensation for the removal of these previously planted trees, they will be replaced in kind at a 3:1 ratio with extra oak trees planted ($\geq 20\%$ over planting or as determined necessary) to ensure success criteria is met at the end of the five year monitoring period. Based on final tree removal needs and space requirements needed for decanting and staging of equipment and material determined upon the start of the project, there may be a reduction in the number of trees needing to be removed. This will result in less trees needing to be replanted for mitigation purposes. Final tree mitigation replanting numbers and location of the plantings will be included in the as-built plan and within the annual monitoring report. It is anticipated that the replanting will occur upstream from where willows will be removed along the creek, with the second mitigation area occurring within the annual grassland west of where previously planted trees will be removed within the staging area. A mitigation monitoring plan has been prepared for the required permitting.

Question C

The Delta Discharge Diffuser Improvements Project component of the Proposed Project involves dredging within Santa Rosa Creek in addition to positioning equipment immediately adjacent to the Creek (**Figure 3**). BMPs, such as silt fence, would be implemented to avoid water quality issues and associated impacts to Santa Rosa Creek. The Proposed Project could have an adverse effect on Santa Rosa Creek due to dredging activities associated with the removal of material surrounding the diffuser nozzles. Permits necessary to perform these in-stream dredging activities would require mitigation measures to offset any impacts to waters of the U.S. Mitigation, in order to offset temporary and permanent impacts, may include riparian enhancement through planting of native vegetation along Santa Rosa Creek at no less than a 1 to 1 ratio, restoration of Santa Rosa Creek involving the removal and continued management of invasive vegetation along the Santa Rosa Creek riparian corridor, preservation of a portion of the riparian corridor along Santa Rosa Creek, or buying off-site mitigation credits at no less than a 1 to 1 ratio. The goal of the mitigation is to achieve no net loss of environment and biological resources. Mitigating impacts to waters of the state would result in a no net loss of this resource. Mitigation Measure Bio-3 states that silt fencing and other BMP's effective in preventing sediment latent water from entering waters of the state, as outline in the Construction General Permit (SWRCB, 2009), will be installed acting as a barrier to runoff from the project site into waters of the state. Mitigation Measure Bio-5 states that through the process of obtaining 401, 404, and 1600 permits, mitigation will be implemented as outlined within these permits in order to offset any potential environmental impacts that occur as a result of construction activities. Implementation of **Mitigation Measure Bio-3** and **Bio -5**, impacts would be **less than significant with mitigation**.

Question D

Dredging activities within the Santa Rosa Creek may interfere with the movement of native resident fish species, migrating fish species, or other aquatic species. In efforts to remove sediment from around the diffuser nozzles, noise and sediments cause by dredging activities may alter the course of migrating fish. Mitigation Measure Bio-5 states that work will be conducted outside of the fall and winter runs of salmonids which will greatly reduce impacts to salmonids. By avoiding this window, impacts to migrating salmonids will be greatly reduced as salmonids will have completed their migration and will not occur in large numbers typically associated with a salmonid run. A qualified fisheries biological monitor will also be present during the initial installation of the "U" shaped sediment curtain to ensure no fish or other aquatic species become entrapped within the dredge area. The installation of the "U" shaped sediment curtain will fully encompass the dredging area and will ensure a movement corridor is maintained to allow for passage of fish and other aquatic species both upstream and downstream. The placement of the "U" shaped sediment curtain will begin on the upstream portion of the impacted area and the curtain shall not be removed until all of the dredging work is completed and when removed shall be done in a manor to minimize silt moving down stream. With implementation of **Mitigation Measure Bio-5**, impacts would be a **less than significant impact with mitigation**.

Question E

The Proposed Project will obtain all necessary permits in order to comply with local policies protecting biological resources. The proposed vegetation removal along Santa Rosa Creek will require the acquisition of a tree removal permit obtained from the Director of Recreation and Parks in order to conduct this activity. Since some vegetation removal and trimming will occur, Mitigation Measure Bio-3 states that silt fencing and other BMP's effective in preventing sediment laden water from entering waters of the state, as outline in the Construction General Permit (SWRCB, 2009), will be installed acting as a barrier to runoff from the project site into waters of the state. Mitigation Measure Bio-5 states that appropriate environmental permitting will be acquired, which will include mitigation to compensate for vegetation removal. Mitigation Measure Bio-6 states that a tree removal permit will be applied for due to the need for tree trimming and removal along the Santa Rosa Creek within the Delta Pond Discharge Diffuser Improvements project area. With implementation of **Mitigation Measure Bio-3, Bio-5, and Bio-6**, impacts would be a **less than significant impact with mitigation**.

Question F

The need to use the access road to the Delta Pond and its facilities is outlined in the Santa Rosa Citywide Master Creek Plan (City of Santa Rosa, 2013). The Proposed Project would not interfere with any other approved local, regional, or State habitat conservation plan and thus would not affect any such plans or areas. **No impact** would occur.

3.4.4 MITIGATION MEASURES

Bio-1 No more than 14 days prior to ground-disturbing activities, a biologist shall conduct a pre-construction survey of the project site for all terrestrial special-status species listed above within **Question A** listed as having a potential to occur within the project site. If habitat suitable to support CTS or CRLF (i.e. occupied new small mammal burrows) are identified during the pre-construction survey, the applicable agencies shall be notified. Whether or not special-status animal species are identified on the project site, exclusionary fencing shall be installed to prevent their entrance during work activities. If CTS, CRLF, RBN, or WPT or other listed animal species are observed on the project site, they shall be allowed to move out of the project site on their own accord prior to installation of exclusionary fencing. If the species does not move out of the project site on its own, follow-up surveys will be conducted on additional days to verify that the species is no longer present within the project site. Additionally, a biological monitor will be present during all ground disturbing activities to ensure "take" of special-status species does not occur. The biologist will monitor ground-disturbing activities and conduct daily inspections of all construction related equipment for special-status species prior to the start of daily construction activities.

Bio-2 Should construction activities associated with the Proposed Project occur during the general nesting season (February 15 to September 15), a pre-construction nesting bird

survey shall be conducted no more than 14 days prior to the start of construction. Areas within 500 feet of construction shall be surveyed for active nests.

Should an active nest be identified, an avoidance buffer shall be established based on the needs of the species identified and pursuant to consultation with the USFWS as appropriate prior to initiation of construction activities. Avoidance buffers may vary in size depending on habitat characteristics, project-related activities, and disturbance levels. Avoidance buffers shall remain in place until the end of the general nesting season or upon determination by a qualified biologist that young have fledged or the nest has failed.

Additionally, a bat emergence survey will be conducted prior to the removal of any trees. If emergence of bats is detected, tree trimming and removal shall happen in a two-step process. Felled trees and trimmed branches shall be allowed to lay on the ground for a period of 24 hours after the initial cut. Once a 24-hour period has passed, the felled trees and trimmed branches can be removed from the site. Due to no trees over a 4-inch needing to be cut, no bat roosting habitat will likely be impacted.

- Bio-3** To avoid impacts to Santa Rosa Creek and the Delta Pond, from stormwater or other project activities, BMPs shall be implemented to address any runoff issues. BMPs would include but not be limited to silt fencing along Santa Rosa Creek and the access road and the eastern perimeter of the Delta Pond near the staging area, as well as appropriate stockpile management. Additionally, BMP's will encompass designated areas for the dewatering of dredge sediment as to prevent sediment latent water from entering Santa Rosa Creek. A the "U" shaped fishery sediment curtain in Mitigation Measure Bio 5 will be deployed within Santa Rosa Creek and will also limit suspended sediment, caused by dredging activities, from continuing downstream.
- Bio-4** A pre-construction rare plant survey shall be conducted prior to ground disturbance. An April bloom survey would address all identified plant species of concern. If special-status species are observed within the project site during any of the pre-construction surveys, an updated biological memorandum will be prepared by a qualified biologist, and if necessary site plans will be revised with items such as but not limited to developing alternate routes around identified special-status plant species or relocating the staging to eliminate impacts to identified special-status plant species. If avoidance of special-status plants are unavoidable, consultation with CDFW and or USFWS shall be initiated and mitigation may be necessary.
- Bio-5** Dredging operations will be conducted outside of the known salmonid fall and winter runs, known to occur during the months of November to February for the region. By avoiding this window, impacts to migrating salmonids will be greatly reduced as the majority of the salmonids will have completed their migration. A "U" shaped sediment curtain will be installed to fully contain the dredging area preventing any fish from entering the dredge area and preventing silt from leaving the immediate area until it settles during either hydraulic or mechanical dredging. A qualified biological monitor will

be present during the installation of the sediment curtain to ensure that any fish or other aquatic species are out of harm's way until the sediment curtain is fully installed. Installation will begin on the upstream side to enable fish to escape naturally outside of the work area. In consultation with appropriate fisheries agencies, removal of sediment from around the diffuser nozzles will be conducted using the hydraulic and mechanical dredging methods where the dredge spoils will be conveyed to a dewatering area as adjacent as feasible to the dredge location within the floodplain in order to minimize sediment mobilization back to the stream. The dredge material will be placed on the floodplain with runoff contained to minimize sediment discharge into Santa Rosa Creek. Material from hydraulic dredging will be allowed to dewater from the Geotube, with mechanical dredging material being stockpiled and allowed to dewater naturally prior to being hauled off site. To offset impacts to riparian vegetation within the work area of the dredging, mitigation planting of native vegetation along Santa Rosa Creek will be planted at a 3:1 ratio. The target area for this mitigation should be in areas infested with invasive species such as Himalayan blackberry, and replaced with native willows to help shade the stream. Additionally, 404, 401, and 1600 permits will be obtained. If additional mitigation measures are required they shall also be implemented. The project will consult with CDFW and National Marine Fisheries Service regarding the need for a CESA ITP or federal authorization and will obtain such authorizations if warranted prior to project construction. Such consultation may be combined with the permitting process for this project.

Bio-6 Tree removal and trimming of tree limbs will be necessary in order to conduct the proposed activities along Santa Rosa Creek, to allow for equipment access to the Diffuser Improvements Project area. The Santa Rosa City Code, Title 17 Environmental Protection, Chapter 17-24.030 will be followed. This ordinance states that no person shall trim or remove any tree, situated in the City, without a permit. A tree removal application will be submitted to the City in seeking approval for vegetation trimming and removal along the Santa Rosa Creek to the Director of Recreation and Parks.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of ahistorical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5.1 ENVIRONMENTAL SETTING

Methods

Two cultural resources assessments, including separate field surveys, were conducted by Charlane Gross, a Registered Professional Archaeologist, and field staff from Analytical Environmental Services (AES). A record search covering both survey footprints was completed on November 26, 2019 at the Northwest Information Center (NWIC) at Sonoma State University (NWIC File No.: 19-0766), and provided a review of pertinent literature and historic maps. This record search included, but was not necessarily restricted, to a review of the National Register of Historic Places, California Register of Historical Resources, historical marker listings, Sonoma County resource listings, and historic maps. No cultural resources were identified within either project site or within ½-mile. Historic maps examined include the 1857 Molinos Rancho Map, the 1866 Bowers Map, the 1866 General Land Office Survey Plat map, the 1877 Atlas of Sonoma County, and U.S. Geological Survey (USGS) quadrangles from 1935, 1942, and 1954. None of the maps indicate that there was ever any development on either Project Site before Delta Pond.

Field surveys were completed on December 10, 2019 and September 30, 2020 that included all project components. The surveys consisted of pedestrian transects spaced no more than 15 meters apart. Ground surface visibility near the roadways was as much as 50 percent, but was reduced in other areas where vegetation blocked mineral surface visibility. No cultural resources were identified during either survey.

Prehistory

Archaeological evidence indicates that human occupation of California began at least 12,000 years ago. Early inhabitants had an economy based largely on hunting, and social structures

were based on extended family units. Regionally, occupation began approximately 7,000 years ago. The earliest documented period is marked by milling equipment (handstones and grinding slabs) and large, concave-based projectile points. Later, middle-period assemblages are marked by lanceolate projectile points, mortars and pestles, and certain types of Olivella shell beads. Approximately 1,000 years ago, the introduction of the bow and arrow gave rise to a distinctive projectile point that was small and light, with straight to slightly expanding stem and serrated edges. The final period, extending to European contact, was marked by small projectile points and clamshell disk beads.

At the time of European contact, the region was controlled by the Coast Miwok; the Coast Miwok economy focused on marsh resources with added emphasis on hunting and gathering in the hills of the North Coast Ranges. A typical Coast Miwok tribe inhabited a semi-permanent village from which they traveled to temporary, seasonal camps to obtain locally available resources.

History

The name Santa Rosa Creek (located immediately north of the project site) was supposedly bestowed by Father Juan Amoros of San Rafael when he baptized an Indian girl there in honor of Saint Rose of Lima in the late 1820s. The City received a boost to the local economy and population when the railroad arrived in 1870. A local landmark is the Church Built from One Tree, a giant redwood cut down near Guerneville in 1873 and used to build the church (Hoover, et al., 2002).

3.5.2 REGULATORY SETTING

California Environmental Quality Act

CEQA requires that, for projects financed by, or requiring the discretionary approval of public agencies in California, the effects that a proposed project has on historical or unique archaeological resources be considered (PRC § 21083.2). Historical resources include: buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance (PRC § 50201). CEQA Guidelines § 15064.5 define three cases in which a property may qualify as a historical resource for the purpose of CEQA review:

1. If it is listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR); or
2. It is included in a local register of historical resource or identified as significant in a qualifying historical resource survey; or
3. The resource appears in, or is determined eligible for the listing, in the CRHR. PRC § 5024.1 and CEQA Guidelines § 15064.5 define eligibility requirements and state that a resource may be eligible for inclusion in the CRHR if it:

- a. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- b. is associated with the lives of persons important in our past;
- c. embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
- d. has yielded, or may be likely to yield, information important in prehistory or history.

Sites younger than 45 years, unless of exceptional importance, are not eligible for listing in the CRHR. Properties must retain integrity to be eligible for listing on the CRHR. Properties that are listed in, or are eligible for, listing in the National Register of Historic Places are automatically considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC § 5024.1(d)(1)).

1. The resource is included in a local register of historic resources, as defined in PRC § 5020.1(k), or is identified as significant in a historical resources survey that meets the requirements of PRC § 5024.1(g) (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).
2. The Lead Agency determines that the resource may be a historical resource as defined in PRC §§ 5020.1(j), 5024.1, or significant as supported by substantial evidence in light of the whole record.

PRC § 21083.2 governs the treatment of unique archaeological resources, defined as "an archaeological artifact, object, or site about which it can be clearly demonstrated" as meeting any of the following criteria:

- contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- has a special and particular quality such as being the oldest of its type or the best example of its type; or
- is directly associated with a scientifically recognized important prehistoric or historic event or person.

3.5.3 IMPACT DISCUSSION

Question A

No historical resources, as defined in CEQA Guidelines § 15064.5, were identified either during the background research or the field survey. Therefore, construction of the Proposed Project would have **no impact** on historical resources.

Question B

There is an elevated potential for cultural resources to be uncovered during project-related ground disturbance as Santa Rosa Creek lies immediately to the north and would have offered a variety of resource-gathering opportunities in the prehistoric era. While none of the in-pond improvements along the eastern portion of Delta Pond would impact intact cultural resources, trenching and underground work outside the pond for the Geysers component, upgrading of the existing gravel access road from Willowside Road to Delta Pond, and vegetation clearance by Santa Rosa Creek offer the opportunity to uncover archaeological resources. These might include, but are not limited to: flakes and chipped stone tools; grinding implements such as milling stones, manos, mortars and pestles; midden soils; fragments of bone or shellfish; and fire affected rock. Archaeological and/or Native American monitoring of ground-disturbing activities would increase the chances of identification of these or similar resources at the project site. **Mitigation Measure CR-1** would require monitoring and that work stop if archaeological resources are encountered during construction; with implementation of **Mitigation Measure CR-1**, impacts to archaeological resources discovered during construction of the Proposed Project would be reduced to **less-than-significant**.

Question C

It is unlikely that human remains are located within the project site due to the general level of disturbance, however if any human remains are encountered during ground-disturbing activities, impacts to these remains would be potentially significant. With implementation of **Mitigation Measure CR-2**, impacts to human remains discovered during construction would be reduced to **less-than-significant levels with mitigation**.

3.5.4 MITIGATION MEASURES

CR-1 A qualified professional archaeologist and Native American monitor shall be retained to monitor ground-disturbing work associated with the Geysers component of the Proposed Project as well as any work associated with the access road and clearing for machinery needed to remove sediments near the Diffuser. If the archaeologist or monitor observes cultural materials or features, all work within 50 feet of the find shall halt until the monitoring team can identify the materials, determine their possible significance, and formulate appropriate measures for their treatment; these measures shall be implemented by the City prior to the resumption of construction. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, avoidance of the resource through changes in construction methods or project design or implementation of a program of testing and data recovery, in accordance with all applicable federal and State requirements. Any efforts shall be documented in a cultural resources report to be filed with the NWIC.

CR-2 Work shall halt within 50 feet if human remains are uncovered during construction, the significance of the find shall be assessed, and the appropriate management shall be pursued. California law recognizes the need to protect interred human remains, particularly Native American burials and items of cultural patrimony, from vandalism and

inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code §§ 7050.5 and 7052 and PRC § 5097. If remains are uncovered, the City and the County coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code § 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code § 7050[c]). The project applicant or its appointed representative and the professional archaeologist shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the City shall determine the ultimate disposition of the remains and any associated artifacts.

3.6 ENERGY

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.6.1 ENVIRONMENTAL SETTING

As noted in **Section 2.1.1**, the Delta Pond is owned by the City and located within City limits, while a majority of the project site and the associated access road are located in unincorporated Sonoma County. The project site is surrounded by farmland and rural residential lands. Energy would be supplied to the project site by Pacific Gas and Electric (PG&E).

3.6.2 REGULATORY SETTING

Renewable Portfolio Standards

The California Renewable Portfolio Standard (RPS) program was established in 2002 by SB 1078 and requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide a certain percentage of their supply from renewable sources. The initial requirement was for at least 20 percent of electricity retail sales to be served by renewable resources by 2017. SB 107 of 2006 and SB 2 of 2011 accelerated the RPS to reach 33 percent procurement of renewable energy by 2020. The RPS program was extended in 2015 with SB 350 which mandated a 50% RPS by 2030. In 2018, SB 100 was signed into law, which accelerated the RPS to 60 percent by 2030 and requires all electricity in the State to come from carbon-free resources by 2045.

California Green Building (CALGreen) Standards

Title 24 Building Standards Code, Part 11 of the California Code of Regulations is referred to as the California Green Building (CALGreen) Standards. The Title 24 CALGreen Standards were developed by the California Energy Commission and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The California Energy Code is updated every three years. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental

impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality. The California Energy Commission's long-term vision is that future updates to the California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and non-residential buildings by 2030.

The 2019 CALGreen Building Standards Code became effective January 1, 2020 for new construction, alterations and additions and includes numerous updates to the 2016 Standards. According to the University of California at Davis California Lighting and Technology Center (UCD CLTC), the 2019 CALGreen updates reduce indoor lighting usage by 29 percent compared to the 2016 CALGreen Standards for building area categories such as auditoriums, meeting centers, dining areas, hotels, offices, parking garages, and other public use spaces (UCD 2019; CEC 2018). A substantial contributor to this energy usage reduction is the installation of light-emitting diode (LED) devices for both indoor and outdoor fixtures. Additionally, the 2019 Standards includes the requirement that a proportion of new parking spaces must have installed or be pre-wired for installation of electric vehicle supply equipment (EVSE).

Transportation Fuel-Related Legislation

Several additional pieces of legislation have been passed by the State to reduce transportation-related and emissions. AB 1493, also known as Pavley I, was adopted in 2002 to reduce emissions of passenger vehicles and light-duty trucks. EO S-01-07, passed in 2007, established a Low Carbon Fuel Standard (LCFS) for transportation fuels and required a reduction of the carbon intensity of fuels by ten percent by 2020. SB 375, passed in 2008 encouraged alternative transportation planning in regional transportation, housing and land use plans. Lastly, SB 743 encouraged active transportation and infill development to reduce transportation-related emissions and fuel use by utilizing vehicle miles traveled (VMT) as a CEQA impact criteria.

3.6.3 IMPACT DISCUSSION

Question A

The Proposed Project would tie into the existing electrical infrastructure of the Delta Pond. The Proposed Project would require minimal electrical power and integrate 2019 California Green (CalGreen) Building Standards to reduce energy demand. Although energy demands of the Proposed Project would be greater than the current conditions of the project site as a result of wider pipes and an increase in water flow, due to the relatively small project size, it would not be substantially greater. Additionally, most work will be conducted underground and no buildings will be constructed or altered as a result of the Proposed Project. Furthermore, there are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. The energy demands of the Proposed Project would therefore result in **less-than-significant impacts** to energy resources.

Question B

Operation of the Proposed Project would result in the consumption of electricity and transportation fuel. The Proposed Project would be connected to the existing PG&E electrical grid and infrastructure. The Proposed Project would adhere to all State and local plans for renewable energy or energy efficiency. Each phase of the Proposed Project would be required to meet the most recent CalGreen Building Energy Efficiency Standards. Standards are updated every three years, with the most recent (2019) becoming effective January 1, 2020. Further, energy procured during project operations would be required to abide by statewide regulations such as those related to energy efficiency, renewable energy procurement among investor-owned utilities such as PG&E, and fuel standards. Due to these regulations, it is anticipated that impacts to energy resources in ensuing operational years would be less than those in the buildout year of 2022. **No impact** to state or local plans for renewable energy or energy efficiency would occur.

3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.7.1 ENVIRONMENTAL SETTING

The project site is located in the Coast Ranges geomorphic province of California. The Coast Ranges are characterized by a series of northwest-trending valleys and mountain ranges and dominated by irregular knobby topography (California Geological Survey [CGS], 2002). The project site is located in a broad valley underlain by thick alluvial deposits. The flat parcel sits slightly lower than its street frontage, south of the access road, and slopes gently downhill toward the southwest corner of the project site, and is therefore not susceptible to landslides. Additionally, no unique paleontological resources or geologic features have been discovered at the project site.

Seismicity

Earthquakes pose especially high risks to the City because of its proximity to active faults. The Rodgers Creek Fault Zone is the nearest active fault to the project site, approximately 6.5 miles directly east. The Rodgers Creek Fault is delineated as a known Alquist-Priolo earthquake fault zone. Additional faults located in the project vicinity include: Bloomfield Fault approximately 11.5 miles to the southwest, Maacama Fault approximately 12 miles to the northeast, San Andreas Fault located approximately 22 miles to the west, and Hayward Fault approximately 45 miles to the southeast of the project site (DOC, 2015). Because of the proximity of the faults, the region is considered seismically active. Numerous small earthquakes occur every year in the region, and large earthquakes have been recorded and can be expected to occur in the future.

The primary seismic hazards affecting the project site are considered to be ground shaking and ground failure. Ground shaking occurs as energy and is transmitted as elastic waves up through the bedrock to become a series of complex waves or oscillations in the ground surface. Such ground shaking is one of the main causes of earthquake damage. According to the Seismic Shaking Hazards in California map, the project site is located in an area with relative high potential for peak ground acceleration during a seismic event (CGS, 2016). Liquefaction and landslides can increase damage from ground shaking. Liquefaction changes water-saturated soil to a semi-liquid state, removing support from foundations and causing buildings to sink. Liquefaction is determined by a number of factors, including soil type, depth to water, soil density, and the duration and intensity of ground shaking, however, because no new buildings or structures would be constructed as a result of the Proposed Project, impacts as a result of liquefaction would be minimal (USGS, 2020).

Soil and Soil Hazards

Soil survey reports for the project site are available online through the NRCS, a sub-unit of the USDA. Each NRCS survey maps soil units and provides a summary of major physical characteristics with recommendations based on the soil characteristics. Soils mapped on the project site consist of Pajaro clay loam, Clear Lake clay, and Yolo sandy loam (NRCS, 2020). A soil map is provided in **Figure 4**, and soil descriptions are discussed below.

As shown in **Figure 4**, the vast majority of the project site, with the exception of the westernmost and easternmost portions of the site consist of PcA: Pajaro clay loam, 0 to 2 percent slopes. This type of soil occurs at elevations of 50 to 300 feet, and is formed from a parent material of alluvium derived from sedimentary rock. It also has a depth to water table of 0 inches and is frequently subject to flooding, however it is not subject to ponding (NRCS, 2020).

The very western-most portion of the project site consist of CfA: Clear Lake clay, 0 to 2 percent slopes. This type of soil generally occurs at elevations of 1,500 feet, and similar to Pajaro clay loam, is formed from a parent material of alluvium derived from sedimentary rock. It also has a depth to water table of more than 80 inches and is not subject to flooding, however it is subject to frequent ponding.

The very eastern-most portion of the project site consist of YmB: Yolo sandy loam, 0 to 5 percent slopes. This type of soil occurs at elevations of 0 to 3,500 feet and is formed from a parent material of alluvium derived from sedimentary rock. It also has a depth to water table of more than 80 inches and is occasionally subject to flooding, however it is not subject to ponding (NRCS, 2020).

3.7.2 REGULATORY SETTING

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972, prohibits the placement of structures intended for human occupancy from being built across active fault traces in California. The Act requires delineation of zones (Alquist-Priolo zones) along active faults in order to address seismic concerns as they relate to public safety and project design. The Act only addresses the hazards of surface fault rupture and is not intended to regulate activities relating to other earthquake hazards such as liquefaction, landslides, or tsunamis. Cities and counties are required to regulate development projects within Alquist-Priolo zones.

Seismic Hazards Mapping Act

This Seismic Hazards Mapping Act provides areas that are prone to earthquake hazards such as liquefaction, earthquake-induced landslides, and amplified ground shaking and that are governed by city, county, and State agencies with the appropriate seismic hazard zone maps to be used during the planning and controlling of construction and development. Before a development permit is granted to a proposed project located in a seismic hazard zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design in hopes to minimize the loss of life and property. Because the Proposed Project does not include any structures, nor would it construct structures for the purpose of human habitation, the Seismic Hazards Mapping Act would not apply.

3.7.3 IMPACT DISCUSSION

Question A

The Proposed Project would not be developed on a fault line as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area and therefore no adverse impacts from fault rupture would result from project development (DOC, 2015). However, due to the close proximity to a fault line, there would be a potential for strong seismic ground shaking or seismic-related ground failure. However, because the Proposed Project does not propose to construct any buildings or structures for the purpose of human habitability, there would be no threat to the loss of life or property. Due to the relatively flat topography and soil structure, there would not be a risk for landslides based on the activities of the Proposed Project. The Proposed Project would not expose people or structures to potentially substantial adverse effects including the risk of loss, injury, or death. A **less-than-significant** would occur.

Question B

During the construction and staging of the Proposed Project, underlying soils at the project site would be temporarily exposed during grading and underground activities, which could lead to an increase in erosion. Exposed soils are more likely to erode during rainfall or high winds because stabilizing vegetation would be removed. In addition, a small concrete pad would cover the pipework area, posing a potential, but less-than-significant threat for erosion to occur. In addition, the upgrading of the existing gravel access road would include installing a pervious rock surface to lessen erosion and flooding during construction. The road upgrading may require installation of approximately 1,100 cyds of Class II base.

During dredging as part of the Diffuser component of the project, approximately 300 cyds of material would be dredged from the Santa Rosa Creek, adjacent to the northwest corner of the Santa Rosa Delta Pond. Dredging would occur over an approximately fifty-by-fifty foot area surrounding the diffuser on the creek bed, approximately half way in either horizontal direction from the center line of the diffuser. Dredging would include removal of accumulated sediment in the Creek, which would be collected into a Geotube, naturally dewatered, and hauled offsite for safe disposal. Dredging would cause no soil erosion or topsoil loss.

The State Water Resources Control Board requires the project applicant to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or exaction that disturb at least one acre of land area. The NPDES permit requires that the Proposed Proponent prepare and submit to the City of approval a Project Specific Storm Water Prevention Plan (SWPPP) to control soil erosion during construction because the site is larger than one acre. The SWPPP would identify a combination of erosion control and sediment control measures (BMPs) to reduce or eliminate sediment discharge to surface water during construction. With compliance to the requirements noted in the SWPPP, the potential for erosion impacts during construction would be less than significant.

The Proposed Project is required to comply with all City development standards. As a result, **impacts would be less than significant** in relation to soil erosion during operation.

Question C

The Proposed Project is not located on a geological soil that is unstable or would become unstable as a result of Proposed Project activities. There is no evidence of on-site landslides, lateral spreading, subsidence, liquefaction, or collapse on or near the project site. The project site is relatively flat and not susceptible to landslides, lateral spreading, subsidence, liquefaction, or collapse and thus **no impact** would occur.

Question D

While the project site is located on expansive soils as defined in Table 18-1-B of the Uniform Building Code, and conventional grading operations tailored to the expansive characteristics of the soil would occur during construction of the Proposed Project, no new structures or buildings would be constructed. Impacts as a result of expansive soils during construction would be **less than significant**.

Question E

No septic tanks or sewer lines are proposed and therefore the Proposed Project would not have an impact on the use of septic tanks or alternative wastewater disposal systems. **No impact** would occur.

Question F

The Proposed Project is not located on a unique paleontological resource or site nor a unique geologic feature, and thus no unique paleontological resource or site or unique geologic feature would be directly or indirectly destroyed as a result of the Proposed Project (refer to **Section 3.5.3**). **No impact** would occur.

3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.8.1 ENVIRONMENTAL SETTING

Climate change is the long-term change in average weather that can be measured by wind patterns, storms, precipitation, and temperature. Greenhouses gases (GHGs) are molecules that, due to their chemical bonding structure, have capacity to absorb and radiate heat, trapping heat in the atmosphere. GHGs are emitted into the atmosphere from both natural sources and human activities. Some of the most common GHGs include water (H₂O), carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Sources of GHG emission in Sonoma County include, but are not limited to, on- and off- road vehicles, humans, pets, agriculture (cattle and farming), wine and beer production and transport, water and wastewater transport and treatment, indirect electricity use, solid waste disposal, loss of carbon sequestration in flora, and land use changes. Increasing concentrations of GHG emissions have the potential to lead to global temperature increases in the next century, potentially affecting Santa Rosa’s flora and fauna, water supply, and climate.

A portion of the project site is located within the Santa Rosa City limits, while the remaining portions of the project site are located in unincorporated Sonoma County and are surrounded by agricultural fields. The City adopted a Community-wide Climate Action Plan (CCAP) on June 5, 2012. The CCAP examines community-wide sources of GHG emissions and outlines strategies for reducing emissions. On August 6, 2013, the City adopted a Municipal Climate Action Plan (MCAP) as a companion document to the CCAP. The MCAP focuses on GHG emissions from the City’s municipal operations. The MCAP identifies projects, practices, and programs that will enable the City to cost-effectively and efficiently reduce GHG emissions from municipal operations and activities.

3.8.2 REGULATORY SETTING

Emissions Reduction Legislation

Assembly Bill (AB) 32 established the first comprehensive GHG regulatory program in the United States and requires GHG emissions to be reduced to 1990 levels by 2020. California Executive Order (EO) B-30-15 was signed by the Governor on April 29, 2015, and established a State GHG reduction target of 40 percent below 1990 levels by 2030. This intermediate GHG emissions reduction target would make it possible to meet the ultimate GHG emissions reduction target of 80 percent below 1990 levels by 2050, as established in EO S-3-05. Senate Bill 350 codifies the GHG targets for 2030 set by EO B-30-15. Additionally, SB 32, signed in 2016, further strengthens AB 32 with goals of reducing GHG emissions to 40 percent below 1990 levels by 2030. Based on GHG emissions inventory data compiled by the California Air Resources Board (CARB) through 2017 and the emission limit of 431 million metric tons (MT) of carbon dioxide-equivalent (CO₂e) established in the IPCC Fourth Assessment Report, the State's emission reduction goal for 2020 will be met by abiding by the California Climate Change Scoping Plan.

California Renewable Portfolio Standards

The California Renewable Portfolio Standard (RPS) program was established in 2002 by SB 1078 and requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide a certain percentage of their supply from renewable sources. The initial requirement was for at least 20 percent of electricity retail sales to be served by renewable resources by 2017. The RPS program was accelerated in 2015 with SB 350 which mandated a 50% RPS by 2030. In 2018, SB 100 was signed into law, which again increased the RPS to 60 percent by 2030 and requires all electricity in the State to come from carbon-free resources by 2045. Executive Order B-55-18, signed on the same day as SB 100 on September 10, 2018, directs the state as a whole to achieve carbon neutrality by 2045 and net negative emissions thereafter.

California Green Building Standards Code (CalGreen)

The State regulates energy consumption under Title 24 Building Standards Code, Part 6 of the California Code of Regulations (also known as the California Energy Code). The Title 24 Building Energy Efficiency Standards were developed by the California Energy Commission and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The California Energy Code is updated every three years, with the most recent iteration (2019) effective as of January 1, 2020.

The purpose of the CalGreen Standards is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality. The California Energy Commission's long-term vision is that future updates to the

California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and non-residential buildings by 2030. Refer to **Section 3.6.2** for additional information on Title 24 requirements.

CEQA and Bay Area Air Quality Management District Climate Change Guidelines

In June 2010, the BAAQMD Governing Board adopted CEQA Guidelines (Guidelines) which provide guidance for analyzing project-level climate change impacts. The Guidelines provide GHG emissions thresholds for project operation; however, the Guidelines do not provide construction-related emissions thresholds. On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds provided in its CEQA Guidelines. The court set aside the thresholds until the BAAQMD complied with CEQA.

The most recent update to the BAAQMD Guidelines was released in May 2017 (BAAQMD, 2017). This updated provided an operational GHG threshold of significance of 1,100 MT CO₂e or 4.6 MT CO₂e per service person ([sp], residents plus employees) per year, or compliance with a qualified GHG reduction strategy. It provided no construction phase GHG threshold (BAAQMD, 2017).

Under CEQA, GHG impacts are exclusively cumulative impacts because no single project could, by itself, result in a substantial change in climate. (CEQA Guidelines § 15064.4(b); refer to BAAQMD, 2012 and California Air Pollution Control Officers Association, 2008). Therefore, the evaluation of cumulative GHG impacts presented below evaluates whether the Proposed Project would make a considerable contribution to cumulative climate change effects. Additionally, as noted above, BAAQMD has not established a quantitative threshold relative to construction-related emissions.

3.8.3 IMPACT DISCUSSION

Questions A and B

The Proposed Project would directly generate limited amounts of GHGs during short-term construction and dredging activities and from project operations. As noted in **Section 3.6.3** above, dredging and construction activities would require use of equipment that require fossil fuels. However, dredging and construction activities would be temporary, occurring over a period of approximately four months in total, and would not be substantially more intensive than construction projects of a similar size. Additionally, **Mitigation Measures AQ-1(f)(g)** would be implemented, limiting equipment use and associated fossil fuel consumption during dredging and construction phases. Given the small scale of the Proposed Project, significant emissions of GHGs would not be produced during construction with or without implementation of this mitigation measure.

Operational emissions would be limited to electricity use for water pumping and distribution. As described in **Section 2.2**, the Geysers component includes the installation of a new spillway and

energy dissipation system to accommodate increased inflow for the Delta Pond. The Proposed Project would directly support the Geysers Recharge Project by ensuring reliable use of the Delta Pond as an emergency discharge storage basin. The increased capacity of the Geysers component would provide additional security and volume of recycled water resources for communitywide usage in the City, as well as hydropower-generated electricity.

For this reason, the CCAP specifically highlights the Geysers Recharge Project as a key GHG reduction project for the City: improvements to the Geysers project are included as GHG reduction Action 7.2.1. The CCAP notes that, coupled with additional development of renewable energy projects at the Laguna Treatment Plant, recycled water and clean energy from the Geysers project is expected to reduce emissions by approximately 3,960 MT CO₂e by 2035 (City of Santa Rosa, 2012). These two projects are intended to help the City reach its goal of a 35 percent reduction in energy usage at its water and wastewater treatment facilities by 2035. Thus, expansion of water capacity as part of the Geysers component would thereby assist in reducing fossil-fuel based operational emissions citywide.

Given that BAAQMD has not established a quantitative threshold relative to construction related GHG emissions and on experience with similarly sized projects, emissions of GHGs would be limited and quantification is not warranted. The Proposed Project would not result in a cumulatively considerable net increase of GHGs.

Similarly, the Proposed Project supports the goals and objectives of the City's CCAP to continue to provide recycled water to the Geysers component to generate clean energy. Therefore, the Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. A **less-than-significant impact** would occur.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.9.1 ENVIRONMENTAL SETTING

Existing Conditions

Airport Hazard Zones

Airports and air strips are considered to contain harmful material and are considered a potential hazardous zone. The Proposed Project is located approximately 4.5 miles south of the Charles M. Schulz–Sonoma County Airport and not located within the airport’s safety zones (Sonoma County, 2016).

Emergency Evacuation Plan

The project site is located within the Northwest Santa Rosa Evacuation Planning Area Map. The nearest evacuation travel route is Guerneville Road located approximately 0.45 miles north of the project site (City of Santa Rosa, 2019a).

Wildlands

The project site is within a rural area surrounded by agricultural use and scattered commercial and residential land use. The project site is not located in a Very High Fire Hazard Severity Zone (CAL FIRE, 2008).

3.9.2 REGULATORY SETTING

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in CCR Title 22 § 66260.10 as:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Cortese List

California Government Code § 65962.5(a) states that the California Department of Toxic Substances Control (DTSC) shall compile and update as appropriate, but at least annually, a list detailing the following (commonly known as the Cortese List):

All hazardous waste facilities subject to corrective action pursuant to Health and Safety Code § 25187.5.

1. All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with § 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
2. All information received by the DTSC pursuant to Health and Safety Code § 25242 regarding hazardous waste disposals on public land.
3. All sites listed pursuant to Health and Safety Code § 25356.

Database Searches

EnviroStor is a DTSC data management system for tracking hazardous material incidents in California. The database includes information on contaminated sites and lists facilities that process or transfer toxic waste, including sites found on the Cortese List. The database includes federally designated sites, State response sites, military sites, school sites, and voluntary cleanup sites. Each entry in the database contains a report that includes information on the current address, site status, past contaminating uses, history of the site, current and historical toxic substances present, land use restrictions, potential environmental impacts of present toxic substances, and completed or planned projects. Sites that were once listed as contaminated, but have been cleaned up or been completed, are also uniquely listed.

A search of the Proposed Project area revealed that there are no sites listed on the EnviroStor database within 1,000 feet of the project site and the project site itself is not listed in the EnviroStor database (DTSC, 2020).

The State Water Resources Control Board (SWRCB) provides an online database system (GeoTracker) that provides information on hazardous materials incidents in California. The GeoTracker data management system indicates no sites with hazardous materials incidents exist on or within 1,000 feet of the project site (SWRCB, 2020).

3.9.3 IMPACT DISCUSSION

Question A

The Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials as there are no known hazards or hazardous materials onsite or within 1,000 feet of the project site. Implementation of the Proposed Project would result in increased conveyance capacity of treated wastewater and does not involve the use or generation of hazardous materials. Therefore, it is not anticipated that any hazardous materials would need to be routinely transported, used, or disposed of. **No impact** would occur.

Question B

The Proposed Project does not involve hazardous materials and per the above-mentioned databases, there are no hazardous materials on the project site that indicate a release of

hazardous materials would occur. Construction and dredging activities would be subject to all local, State, and federal regulations related to the use, storage, and transportation of any hazardous materials such as paint, solvents, and petroleum products. Therefore, the Proposed Project would not cause a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. A **less-than-significant** impact would occur.

Question C

As seen in **Figure 3**, the nearest school is the Summerfield Waldorf School approximately 500 ft. south of the access road on the project site. However, as discussed in **Section 2.2**, the Proposed Project would involve upgrading the existing access road, trenching and ground work to upsize the connection between the Geyser pipeline and the Delta Pond, as well as dredging along the existing effluent diffuser in the Santa Rosa Creek. Outside of typical construction materials and fluids, the Proposed Project would not emit hazardous emissions or involve the handling hazardous or acutely hazardous materials, substances, or waste. Due to its nature, the Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school. **No impact** would occur.

Question D

There are currently no listings of hazardous materials incidents pursuant to Government Code § 65962.5 (Cortese List) within 1,000 feet of the project site (SWRCB, 2020). Due to the absence of listings within 1,000 feet of the project site, there is no indication of hazardous materials that could impact nearby residents. **No impact** would occur.

Question E

The project site is located approximately 4.5 miles south the Charles M. Schulz – Sonoma County Airport and outside of the airport's Sphere of Influence Area, Primary Referral Area Boundary, Detailed Land Use Study Area, or any safety zone, per the Charles M. Shultz – Sonoma County Airport Safety Zones (Sonoma County, 2016). The two Charles M. Shultz – Sonoma County Airport runways run northeast to southwest and northwest to southeast, bypassing the project location that is located south of the runways. Therefore, airplanes do not fly directly over the project site, and there would be no safety hazards associated with airports. **No impact** would occur.

Question F

The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as the access road would be enhanced and the Geysers component would be constructed adjacent to existing conveyance infrastructure. The nearest evacuation route is located approximately 0.45 miles north of the project site. The Proposed Project would not result in the blockage of access routes or

evacuation routes adopted within an emergency response plan or emergency evaluation plan. **No impact** would occur.

Question G

The project site is surrounded by rural residential and agriculture. According to the California Fire Hazard Severity Zone Map, the project site is not located in a Very High Fire Hazard Severity Zone (CAL FIRE, 2008). Equipment and vehicles used during construction and dredging activities may create sparks that could ignite vegetation on the project site. The use of power tools and acetylene torches may also increase the risk of fire during construction. Mitigation listed below would ensure that construction of the Proposed Project would not create a substantial fire hazard. Therefore, the Proposed Project would not be exposed to less-than-significant risks from wildland fires. The impact would be **less-than-significant with mitigation**.

- HAZ-1** Construction equipment shall contain spark arrestors, as provided by the manufacturer.
- HAZ-2** Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel.
- HAZ-3** During construction, the project site shall be cleaned daily of trash and debris to the maximum extent practicable.

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) result in a substantial erosion or siltation on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.10.1 ENVIRONMENTAL SETTING

The City sits approximately 27 miles east of the Pacific Ocean, 34 miles west of Lake Berryessa, and 33 miles north of the San Pablo Bay. The project site, which is located in a rural setting surrounded mainly by agriculture, sits within two watersheds, the Lower Santa Rosa Creek and the Lower Laguna De Santa Rosa. Surface water bodies surrounding the project site

include Santa Rosa Creek, Santa Rosa Delta Pond (Delta Pond), Laguna de Santa Rosa, Mark West Creek, Atascadero Creek, Green Valley Creek, and the Russian River. The City is located within the Russian River watershed and is underlain by one groundwater basin, the Santa Rosa Valley-Santa Rosa Plain. The Delta Pond is situated on the southwestern boundary of the project site. A small portion of the Santa Rosa Creek where the diffuser is located, near the northwest corner of the Delta Pond, is included within the project site. Additionally, the eastern-most corner of the Delta Pond is included with the project site.

Flooding

FEMA is responsible for predicting the potential for flooding in most areas. FEMA routinely performs this function through the update and issuance of Flood Insurance Rate Maps (FIRM) that depict various levels of predicted inundation. As shown on **Figure 6**, the project site is located within FEMA Zone AE (100-year floodplain), which designates areas subject to inundation by the 1-percent-annual-chance flood event (FEMA, 2008). In addition, the Delta Pond is prone to seiche waves during high wind events.

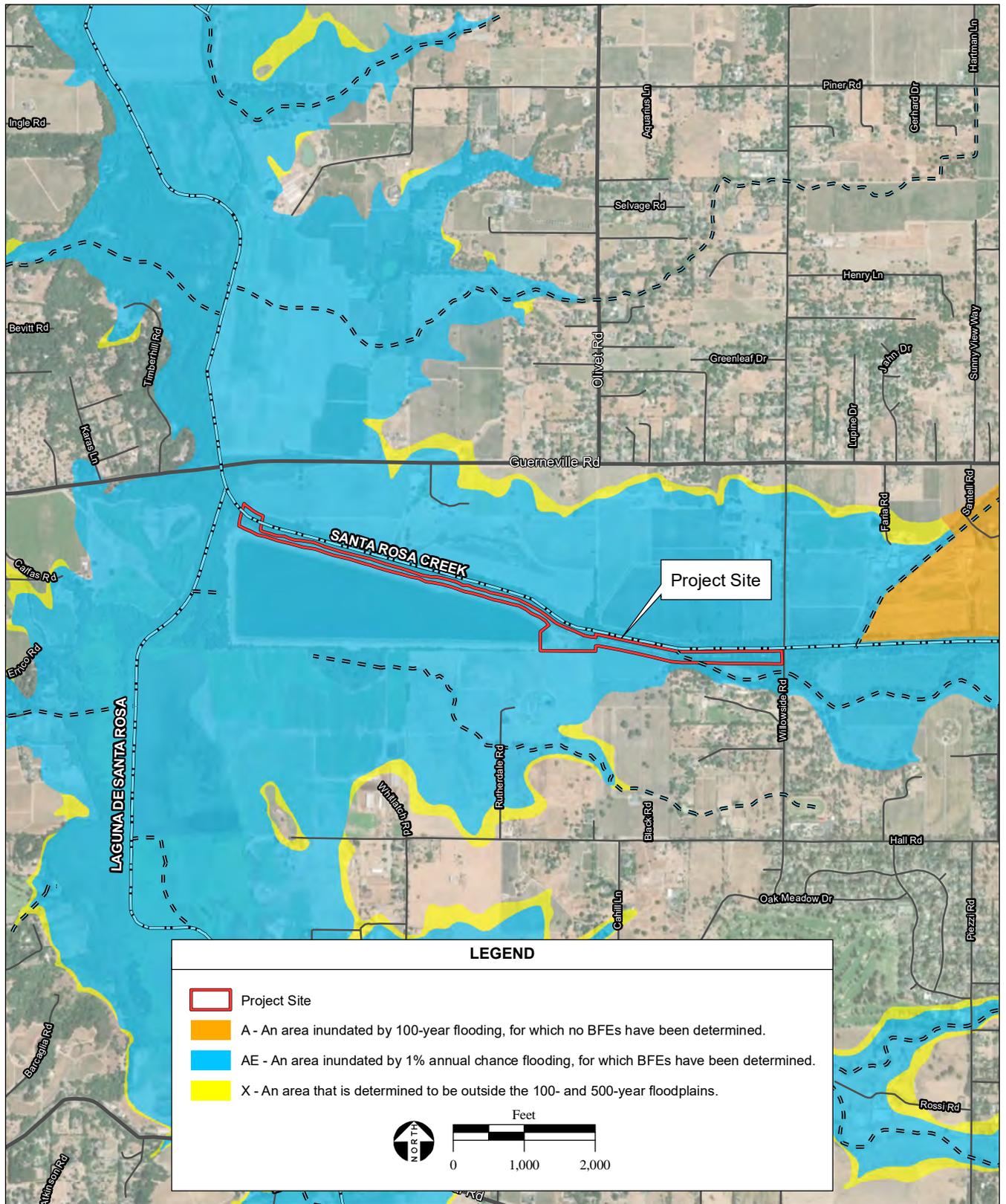
3.10.2 IMPACT DISCUSSION

Question A

Construction and dredging activities that would take place as a result of the Proposed Project could have the potential to substantially degrade surface water quality. Operational activities of the Proposed Project would not adversely affect surface water quality, however should improve water quality with the removal of excess sediment along the diffuser. Pursuant to the requirements of the State Water Resources Control Board, the Project applicant is required to obtain a NPDES permit for construction activities, as incorporated in **Mitigation Measure HYD-1**. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of land area. The NPDES permit requires that the Proposed Proponent prepare and submit to the City a Project Specific SWPPP to control stormwater runoff during construction because the site is larger than one acre. With compliance with City regulations and permit requirements along with implementation of BMPs outlined in the SWPPP, required in Mitigation Measure HYD-1, construction and dredging activities would result in a less-than-significant with mitigation impact related to water quality degradation. Additionally, permits will be required during the operation of the Proposed Project, including a CWA Section 404 permit, a CWA Section 401 water quality certification, and a Sonoma County roiling permit. These permits will require mitigation to offset the impacts to their respective jurisdictional impacts. Dredge material will be released outside of jurisdictional waters. The impact would be **less than significant with mitigation**.

Question B

No groundwater or groundwater wells would be either affected or developed as a result of the Proposed Project. The access road enhancement, the upsizing of the pipes for the Geyser component, and the dredging surrounding the existing diffuser in the Santa Rosa Creek, would



SOURCE: FEMA FIRM Effective 12/2/2008; VividMaxar Aerial Photograph, 7/29/2019; ESRI, 2019; AES, 10/6/2020

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Figure 6
FEMA Flood Types

not result in hindering nor accessing groundwater supply because the Proposed Project would not reach depths where the groundwater supply could be accessed. **No impact** would occur.

Question C (i & ii)

Two streams run near the project site and the Delta Pond is located southwest of the project site. The Proposed Project would not alter the course of any stream, nor substantially increase the amount of runoff which would result in flooding and erosion. However, the Diffuser component would involve the removal of accumulated sediment from the existing effluent diffuser in the Santa Rosa Creek, which would result in improved water flow and clarity. As a result of the Proposed Project, the rate or amount of surface runoff that would result in flooding on- or offsite would not change, and therefore the impact would be less-than-significant. The upgrade of the existing gravel access road would consist of resurfacing with rock, thus allowing water to percolate through, and minimizing any flood impacts. Additionally, the Geysers component would involve underground work which would not adversely affect impacts related to flooding or surface runoff. A **less-than-significant** impact would occur.

Question C (iii)

In order to minimize impacts as a result of the Proposed Project providing substantial additional sources of polluted runoff, and because more than one acre of soil would be disturbed, the Proposed Project would incorporate **Mitigation Measure HYD-1**, which would require the preparation of a SWPPP and include BMPs such as prohibiting construction activities from taking place during the rainy season. Additionally, barriers surrounding the dredge spoils as a result of the dredging portion of the Proposed Project, will be implemented in order to prevent runoff back to the creek. **Less Than Significant With Mitigation.**

Question D

As shown on FIRM parcel no. 06097C0705E, dated December 2, 2008, the project site is located within a 100-year flood hazard area, and a regulatory floodway as delineated on the Flood Insurance Rate Maps (FIRM) (FEMA, 2008). The Proposed Project would incorporate **Mitigation Measure HYD-2**, which would require a hydrologic and hydraulic analysis prior to the start of construction to confirm that no development resulting from the Proposed Project would cause any rise in base flood levels. As a result of the Proposed Project, neither the implementation of the access road enhancement project, the Diffuser component, nor the Geysers component would be adversely affected by flooding or seiche waves. Construction and vehicle use during construction of the Proposed Project have the potential to release pollutants due to project inundation, however impacts would only be temporary and minimal due to the permeable rock surface. Additionally, construction would be conducted during the dry season and all elevations returned to pre-existing conditions. Furthermore, construction and dredging activities would be subject to all local, State, and federal regulations related to the use, storage, and transportation of any hazardous materials such as paint, solvents, and petroleum products.

The project site is not located within a tsunami hazard zone. A **less-than-significant** impact would occur.

Question E

There is no implemented water quality control plan regarding the Proposed Project. Additionally, a sustainable groundwater management plan would not pertain to the Proposed Project as no groundwater would be disturbed as a result of the construction or operation of the Proposed Project. **No impact** would occur.

MITIGATION MEASURES

HYD-1 Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling or excavation. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan. The following BMPs shall be included in the SWPPP or SWPPPs prepared for Project construction in accordance with the General Construction Permit.

1. The construction contractor shall install a containment boom around the work area to contain floating debris, and shall provide a vessel to retrieve debris from the containment area at the end of each work day.
2. Straw bales, wattles, fiber rolls, gravel bags, or equivalent devices shall be installed around the perimeter of the staging area of where the diffuser is located and stockpiled materials that are exposed to the environment to prevent debris from being transported to the Santa Rosa Creek via runoff.
3. The use of hazardous materials during construction shall be minimized to the extent practical, and the amount of hazardous materials stored on or adjacent to the shoreline shall be limited to what is needed to immediately support construction activities.
4. Inactive material stock piles must be covered and bermed at all times.
5. All construction activities will be prohibited from take place during the rainy season (November-March).
6. In the case of a rain event, active debris boxes shall be covered during rain events to prevent contact with rainwater.

HYD-2 A hydrologic and hydraulic analysis must be performed prior to the start of development, and must demonstrate that the development would not cause any rise in base flood levels.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.11.1 ENVIRONMENTAL SETTING

The Delta Pond is owned by the City. The northern and eastern portions of the project site (outside of the Delta Pond) is located in the County and the Sonoma County Land Use map designates the project site as LEA and PQP, as depicted in **Figure 7**. As shown in **Figure 8**, the Delta Pond component of the project site is zoned by the City as RR-40, however, the remainder portion of the project site is zoned by the County as LEA and PF in the County (Sonoma County, 2020b).

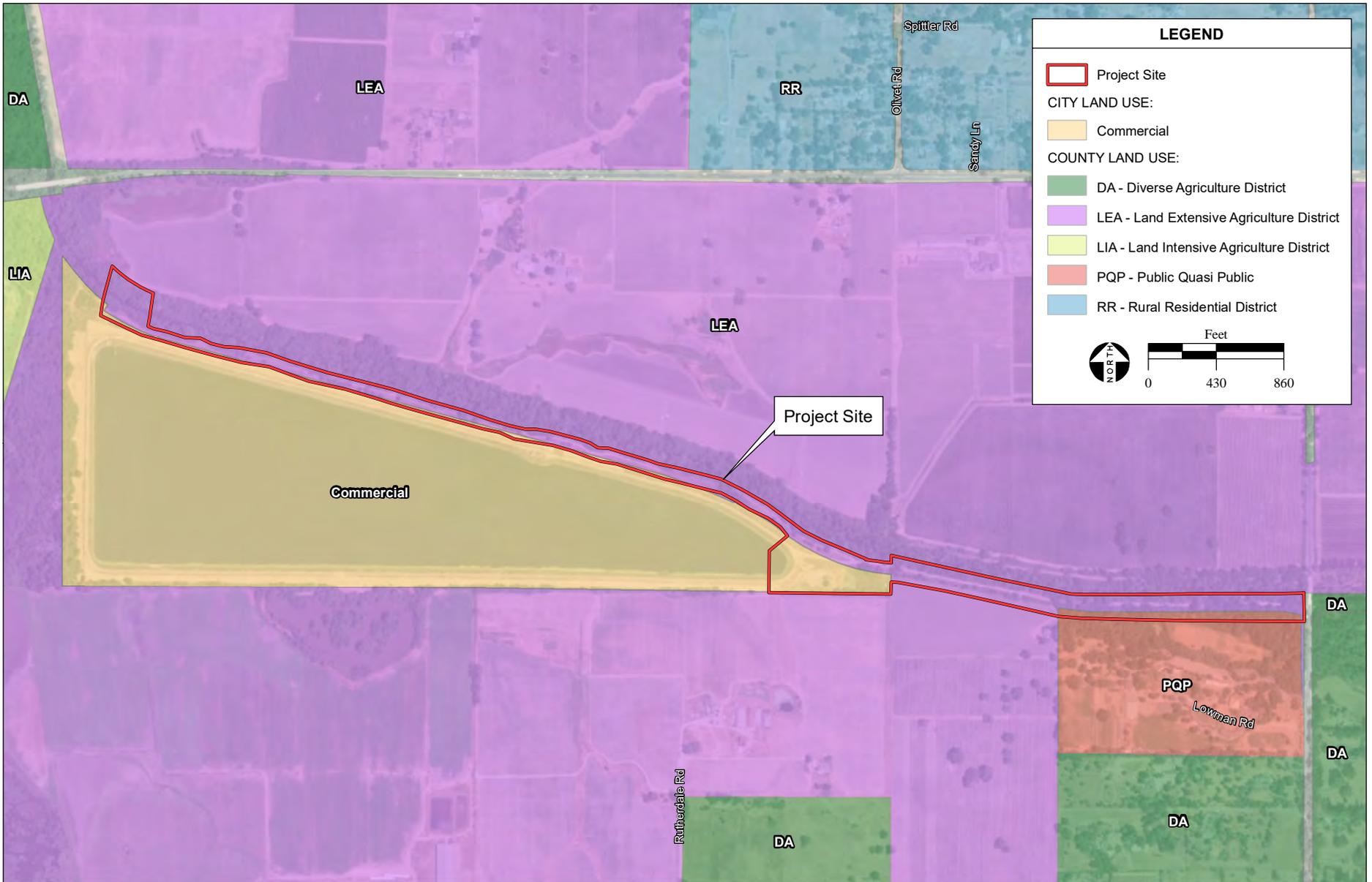
3.11.2 REGULATORY SETTING

The Sonoma County Land Use map designates the project site as LEA and PQP. LEA is intended to enhance and protect lands that can be used for animal husbandry or cropland. PQP is intended to serve the community or public need and is owned or operated by government agencies, nonprofit entities, or public utilities (Sonoma County, 2020c). The Sonoma County Zoning Regulations of the Sonoma County Code of Ordinances states that the LEA zone is intended to protect lands that are suitable for permanent low production agriculture and the PF zone is intended for uses that serve the public or community need (Sonoma County, 2019a and Sonoma County, 2019b).

3.11.3 IMPACT DISCUSSION

Question A

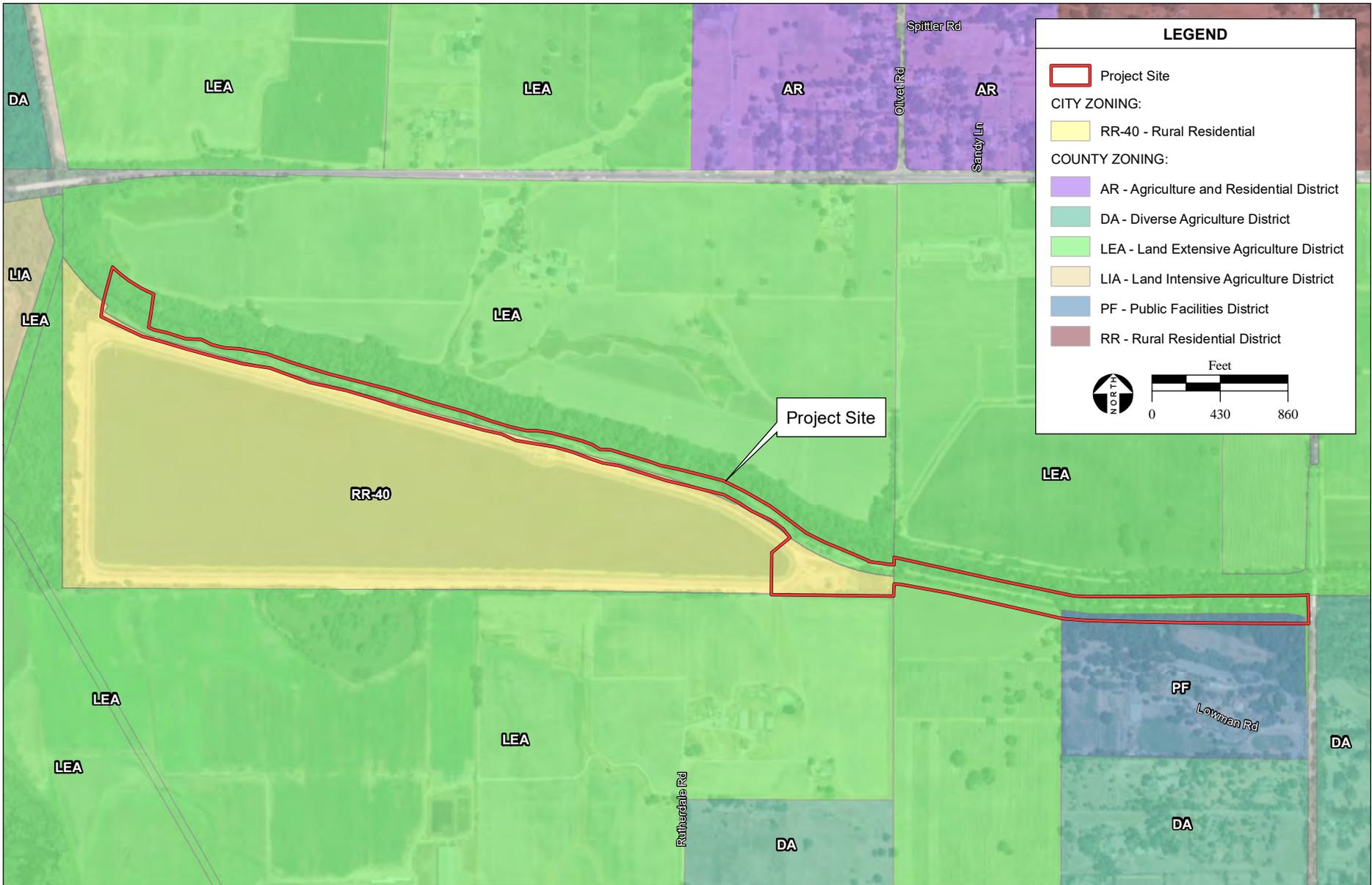
The area surrounding the project site consists of rural and agricultural land uses. The Proposed Project would not result in any permanent changes that would expand past the current extent of the Delta Pond, Santa Rosa Creek, or existing access road. Implementation of the Proposed Project would not impact the transportation network nor establish a barrier for residents to move amongst the community as all construction and dredging would be adjacent to the Delta Pond



SOURCE: Permit Sonoma GIS, 12/13/2019; DigitalGlobe aerial photograph, 10/30/2018; ESRI, 2019; AES, 10/6/2020

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Figure 7
County General Plan Land Use Designations



SOURCE: Permit Sonoma GIS, 12/13/2019; DigitalGlobe aerial photograph, 10/30/2018; ESRI, 2019; AES, 10/6/2020

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Figure 8
City and County Zoning

and the access road is an existing gravel road. Consequently, implementation of the Proposed Project would not divide the established community. **No impact** would occur.

Question B

The Proposed Project would not conflict with any land use plan, policy, or regulation. The Geyser component of the Proposed Project would be installed and constructed adjacent to the existing connection and therefore is consistent with existing land use. Accordingly, the Proposed Project would not conflict with the City's zoning designation of rural residential, which would allow for maintenance and the upsizing of the Geyser pipeline. The existing access road and Diffuser components are located within the County's jurisdiction. The access road would not conflict with the County land use designations of LEA and PQP, as both of these land uses allow for the upgrading of access roads. Furthermore, the access road would not conflict with the County's zoning designations of LEA and PF as both of these zoning designations also allow for the upgrading of access roads. Additionally, the removal of accumulated sediment from the existing effluent diffuser would not conflict with County zoning and land use designations of LEA. Furthermore, as an infrastructure project implemented to maximize treated wastewater conveyance, the Proposed Project would not conflict with City or County land use policies or regulations. A **less-than-significant** impact would occur.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 ENVIRONMENTAL SETTING

The project site is not currently being mined nor does it have a known valuable mineral resource (DOC, 1983). The project site is not a main access point for any other mined resources in the area. Mineral and aggregate resources exist in areas on the eastern limits of the City. Access to these resources is restricted by existing developed areas in residential neighborhoods and commercial developments along with existing roadways.

3.12.2 IMPACT DISCUSSION

Questions A and B

Based on the lack of valuable mineral resources on the project site, the Proposed Project would not result in the loss of availability of a known mineral resource that would be of future value to the region and residents of the State, nor would it result in the loss of availability of a locally important mineral resource recovery site. **No impact** would occur.

3.13 NOISE

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project in the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.13.1 ENVIRONMENTAL SETTING

The major existing noise source in the City is vehicle traffic, particularly from the two major highways and regional streets. In order to characterize existing ambient noise conditions in the vicinity of the project site, standards set forth in Chapter 17 of City’s noise ordinance were used (City of Santa Rosa, 2015). The Santa Rosa General Plan’s noise contour map covers the nearby road of Guerneville Road with an ambient noise level of 60 a-weighted decibels (dBA; City of Santa Rosa, 2009).

Sensitive Noise Receptors

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than commercial and industrial land uses. A sensitive receptor is defined as any living entity or aggregate of entities whose comfort, health, or wellbeing could be impaired or endangered by the existence of noise.

There are several sensitive receptors in the vicinity of the project site. The closest sensitive receptor is the Summerfield Waldorf School located approximately 500 feet southeast of the project site boundary. There are two residences over 1,000 feet from the project site that would likely receive little to no noise impact from the Proposed Project.

3.13.2 REGULATORY SETTING

City of Santa Rosa Noise Restrictions

The City's ambient noise levels are associated with zoning districts per Santa Rosa City Section Code 17-16.030. Code Section 17-16.120 states: It is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels. City Code Section 17-16.150 "Motor-driven vehicles-Noise" provides vehicle noise level limitations as set forth in Section 23130 of California Vehicle Code. This allows for higher noise levels for vehicles. The Delta Pond is currently zoned as RR-40 which has the specific noise criteria of 55 dBA from 7 a.m. to 7 p.m., 50 dBA from 7 p.m. to 10 p.m., and 45 dBA from 10 p.m. to 7 a.m. Actual use of the area would fall under "Industrial" practices, though not officially zoned for these practices the noise criteria for these land areas is 70 dBA anytime.

Sonoma County Noise Restrictions

Outside of the Delta Pond and surrounding properties fall under the county zoning jurisdiction and are classified as LEA and PQP. Noise criteria and limits are set forth by the Sonoma County General Plan's Noise Element. The Sonoma County General Plan sets a similar restriction to noise levels as the City in that the noise level at the property line shall not exceed up to a maximum of 5 dBA above the ambient level of noise (Sonoma County, 2020d).

3.13.3 IMPACT DISCUSSION

Question A

Based on **Table 3-2**, the construction noise at the project site would be 85 dBA, Leq. This is a conservative maximum noise level based on the assumption that louder equipment, such as jackhammers, could be used daily. An attenuation factor of 10.0 dBA per doubling of distance is

appropriate given the large amount of vegetation in the vicinity of the project site. Sound levels at nearby sensitive receptors (approximately 500 feet southeast of the project site boundary) during construction would be 65 dBA, Leq, which is within the City General Plan's Land Use Compatibility Standards conditionally acceptable threshold for Schools, Libraries, Churches, Hospitals, and Nursing Homes (City of Santa Rosa, 2009). Therefore, construction activities would not result in exposure of persons to, or generation of, or exacerbation of noise levels in excess of standards established in the General Plan, noise ordinance, or applicable standards of other agencies.

TABLE 3-2. TYPICAL CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dB at 50 feet
Backhoe	80
Compactor	83
Compressor (air)	78
Dozer	85
Dump Truck	84
Excavator	85
Generator	81
Jackhammer	80
Pneumatic Tools	85
Source: FWHA, 2006	

Post-construction operation would not expose persons to noise levels in excess of standards established in the City's General Plan. On-site and off-site work associated with the Proposed Project would occur only within the allowed hours. Humans typically perceive noise increases of three decibels and above. Accordingly, ambient noise levels would be consistent with the local surroundings of the area. A **less-than-significant** impact would occur.

Question B

Excessive vibration has the potential to be generated during construction that requires the use of equipment with high vibration levels (i.e., compactors, large dozers, pile drives, jack hammers, etc.) occurring within 25-100 ft. of an existing structure. The nearest sensitive receptor is approximately 500 ft. from where construction would occur (refer to **Section 3.12.1**). Impact pile driving, which typically produces the highest vibration levels, is not anticipated to occur. Earthmoving equipment would be used while improving the existing access road. All equipment, as stated in **Section 3.13.3**, would be considered standard construction equipment and would not produce substantial vibration of the project areas. Given the infrequent use of heavy equipment and the distance to the nearest sensitive receptor, exposure to ground-borne vibration from construction activities would not be detected at the nearest sensitive receptor.

The long-term operation of the Proposed Project includes no operations that would result in the exposure of residents to excessive ground borne vibration. The Proposed Project does not

include equipment or facilities that would generate or exacerbate ground borne vibration. A **less-than-significant** impact would occur.

Question C

The Proposed Project consists of road enhancement, infrastructure improvements to the detention basin, and removal of sediment along the existing effluent diffuser, which are all consistent with the City General Plan. The project site is located off of Willowside Road. Although the ambient noise level would increase, the noise levels would not increase significantly above or exacerbate the existing ambient noise level. A **less-than-significant** impact would occur.

Question D

As discussed above in **Question A**, the only potential for the Proposed Project to create an excessive temporary increase in noise levels is during construction and dredging. Unmitigated noise levels could reach a maximum of up to 85 dBA at 50 ft. from the noise source. The analysis presented in **Question A** concluded that construction would occur within the designated hours of operation and that noise levels on sensitive receptors would be within the conditionally acceptable threshold illustrated in the City's General Plan. A **less-than-significant** impact would occur.

Question E

The Proposed Project is located approximately 4.5 miles south of the Charles M Schulz-Sonoma County Airport; however, the Proposed Project is not within the airport influence area, per Development Code 18.100.020. The airport influence area is defined as area extending 14,000 ft. from the ends of the specified runways. The two Sonoma County Airport runways are positioned northeast to southwest and northwest to southeast, bypassing the project site that is located south of the runways. The flight path does not pass over the project site, thus limiting exposure of sensitive noise receptors to aircraft noise levels. **No impact** would occur.

Question F

The project site is not located within 2 miles of land that is used as a private airport, therefore, people residing in or working in the project area would not be exposed to excessive noise levels. **No impact** would occur.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14.1 ENVIRONMENTAL SETTING

In 2017, the City’s population was 178,064 residents with an estimate of 178,488 residents in 2018 (City of Santa Rosa, 2018). Sonoma County’s population was 501,346 residents in 2015 and was estimated at 499,942 residents for 2018 (U.S. Census, 2018). There were an estimated 64,709 households within the City in 2017, with an approximate 2.65 persons per household (U.S. Census, 2017).

3.14.2 IMPACT DISCUSSION

Question A

The Proposed Project would involve upsizing of the Geyser pipeline, dredging along the existing effluent diffuser, and upgrading the existing gravel access road. The Proposed Project would not include residential development and would therefore not directly induce population growth. The construction would be relatively minor and the construction workers would be supplied from the County and City or nearby population centers; therefore, no additional housing would be necessary. Furthermore, the increase in conveyance would meet the existing City’s goal for wastewater discharge to the Delta Pond and no expansion of the City’s treatment system would result from the Proposed Project; no growth barriers would be removed. The access roadway would be enhanced and therefore would not constitute as roadway development with the potential to remove a barrier of growth. Due to the absence of population growth-inducing development and the minor size of necessary construction, the Proposed Project would not directly or indirectly induce substantial population growth. A **less-than-significant** impact would occur.

Question B

The project site currently has no existing residents or housing, therefore, the Proposed Project would not displace a substantial number of existing people. **No impact** would occur.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
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:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 ENVIRONMENTAL SETTING

The project site is served by the Santa Rosa Police Department. The nearest police station is located approximately 6 miles east of the project site at 965 Sonoma Avenue in Santa Rosa. In 2019, the Santa Rosa Police Department received 4,472 priority one calls with an average response time of 6 minutes and 48 seconds (City of Santa Rosa, 2019b).

The Santa Rosa Fire Department (SRFD) provides protection, suppression, emergency medical, hazardous materials services, and rescue services for the City. The SRFD has 11 fire stations throughout Santa Rosa. Station 2 is closest to the project site and is located approximately 3.5 miles east of the project site at 65 Stony Point Road in Santa Rosa. Fire Station 2 has an active engine company, a truck company, and is staffed 24 hours per day. Additionally, the project site is not located within a Very High Fire Hazard Severity Zone (CAL FIRE, 2008).

The project site is located in the West Sonoma County Union High School District and Oak Grove Elementary District. West Sonoma County Union High School District has approximately 1,933 students enrolled and consists of four high schools (California Department of Education [CDE], 2020a). Oak Grove Elementary District has approximately 1,241 students enrolled and consists of four elementary and middle schools (CDE, 2020b).

The nearest park to the project site is Clahan Park, located at 390 Morris Street in Sebastopol, approximately 2.7 miles south of the project site. Clahan Park has baseball fields, walking paths, basketball courts, benches, and picnic tables.

3.15.2 IMPACT DISCUSSION

Questions A through E

The Proposed Project would not result in an increase in the use of public services that would result in the need for new or physically altered government facilities. With the upsizing of the pipeline connecting to the Geysers, dredging along the existing diffuser, and upgrading the existing gravel access road, construction and operation of the Proposed Project would not cause significant impacts to service ratios, response times, or other performance objectives to fire protection, police protection, schools, parks, or other public facilities in the area.

Fire Protection

Construction-related impacts include the potential fire threat associated with equipment and vehicles coming into contact with vegetated areas. Construction vehicles and equipment may accidentally spark and ignite vegetation or building materials. The increased risks of fire during the construction of the Proposed Project would be similar to that found at other construction sites and construction-related impacts are considered potentially significant. With the implementation of the BMPs stated in **Section 1.0** and mitigation measures described within each resource section, impacts would be less than significant during the construction phase of the Proposed Project. Construction of the Proposed Project would have a **less-than-significant impact** on fire protection.

Operationally, the project site would rarely be inhabited by workers except for routine maintenance and monitoring. These operations would be sparse throughout the year and therefore would not result in increased needs for fire protection that would result in interruption of current service levels. Operation of the Proposed Project would have a **less-than-significant impact** on fire protection services.

Police Protection

The planned facilities would result in a negligible increase in demands on the Santa Rosa Police Department due to the limited size and scope of the Proposed Project. Calls for service would not be disproportionate to other small-scale construction and recycled water pond operations in the area. Furthermore, calls for service would be reduced as no habitable structures are being developed as a result of the Proposed Project. Therefore, construction and operation of the Proposed Project would not result in an interruption in the current service levels within the City and impacts from Proposed Project would be **less than significant**.

Schools

The Proposed Project does not involve the construction of residential buildings nor would construction or operation require an increased number of people residing in the vicinity of the project site. West Sonoma County Union High School District and Oak Grove Elementary District would not experience an increase in students as a result of the Proposed Project. **No impact** would occur.

Parks

The Proposed Project does not involve the construction of residential buildings nor would construction or operation require an increased number of people residing in the vicinity of the project site. Nearby parks such as the Clahan Park would not experience an increase in visitors as a result of the Proposed Project. **No impact** would occur.

Other Public Facilities

Development of the Proposed Project would not lead to an increase in the City's population, and would therefore, not result in an increased demand for public services such as public health services and library services. Due to the Proposed Project not resulting in a population increase and not affecting other public facilities, the Proposed Project would have **no impact**.

3.16 RECREATION

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.16.1 ENVIRONMENTAL SETTING

As previously discussed, Clahan Park and the Santa Rosa Creek Trail are the closest recreational sites to the project site. The park contains grass and trees suitable for children’s play, walking, jogging, and has several picnic areas located throughout. As of 2018, the City’s park acreage included approximately 1,048 acres of traditional park land, open space, civic sites, plazas, and a golf course. The City maintains approximately 6 acres of parkland for every 1,000 residents (City of Santa Rosa, 2018).

3.16.2 IMPACT DISCUSSION

Questions A and B

As addressed in **Section 3.15.2**, the Proposed Project does not involve the construction of residential buildings nor would construction or operation require an increased number of people residing in the vicinity of the project site. Nearby parks such as Clahan Park would not experience an increase in visitors as a result of the Proposed Project. However, during the construction of the Proposed Project, a segment of the Santa Rosa Creek Trail that also serves as an access road, would be utilized for the Project. This portion of the Santa Rosa Creek Trail, from Willowside Road to the Project Site, will be closed to the public for the duration of construction of the Proposed Project. The road would be reinforced to support construction trucks and equipment. The Proposed Project would minimally impact the Santa Rosa Creek Trail and would enhance the road by filling existing potholes. Therefore, the Proposed Project’s impact on the nearby recreational facilities would be **less than significant**.

3.17 TRANSPORTATION AND CIRCULATION

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.17.1 ENVIRONMENTAL SETTING

The project site is located off Willowside Road in unincorporated Sonoma County. Project site access would predominately occur from the City to Willowside Road. Project site access from the greater Bay Area region would predominately occur via US-101 and S.R. 12. Willowside Road is a north to south County rural major collector. US-101 runs north to south through the states of California, Oregon, and Washington. Upon entering Sonoma County, US-101 is a six-lane highway south of Petaluma, where it narrows to four lanes, and then transitions back to six lanes at the north end of Petaluma, where it resumes freeway status up to Windsor, passing through Cotati, Rohnert Park, and Santa Rosa. S.R. 12 is a State highway that travels in an east-west direction from S.R. 116 in Sebastopol in Sonoma County to S.R. 49 north of San Andreas in Calaveras County.

3.17.2 REGULATORY SETTING

The Circulation and Transit Element of the Sonoma County General Plan 2020 addresses the location and extent of planned transportation routes and facilities and includes goals, objectives, and policies affecting the mobility of future residents, businesses, and visitors.

3.17.3 IMPACT DISCUSSION

Question A

Construction of the Proposed Project would temporarily result in a negligible increase in traffic volume along Willowside Road. Vehicular trips from construction would consist of worker trips and deliveries of equipment and materials to and from the project site. The expected increase in traffic would occur weekdays between the hours of 7 A.M. and 6 P.M.

The maximum estimated increase in trips along Willowside Road would be less than 24 one-way trips per day, based on the conservative approximation of 10 workers and 2 material delivery trips. Workers are expected to reside locally in the Santa Rosa vicinity or within the nearby Bay Area.

In 2017, there were approximately 3,931 average daily trips on Willowside Road in the vicinity of the project site (Sonoma County, 2017). The projected temporary increase in trips due to the Proposed Project is approximately 0.6 percent. This is not a substantial increase, and would not cause a significant change to the roadway's level of service. Furthermore, the existing access road will be enhanced to allow trucks to travel to and from the Diffuser staging area and Willowside Road during the time of construction. This will not increase traffic during operation of the Proposed Project. The Proposed Project would not result in indirect or cumulative growth impacts that would facilitate additional traffic. A **less-than-significant** impact would occur.

Question B

The Proposed Project would not introduce factors that would generate new or unanticipated long-term changes in traffic or vehicle miles travelled (VMT). The Office of Planning and Research (OPR) Technical Advisory contains screening thresholds for land use projects and suggests lead agencies may screen out VMT impacts using project size, maps, and transit availability. For small land use projects, absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, and projects that generate or attract fewer than 110 trips per day generally, may be assumed to cause a less-than significant impact (OPR, 2018). As described above, the Proposed Project would result in less than 24 one-way trips per day. Therefore, the Proposed Project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). **No impact** would occur.

Question C

The Proposed Project would not modify the design of existing roadways and would not include operational features that would impact traffic or increase hazards. **No impact** would occur.

Question D

The Proposed Project would not introduce factors that would generate new or unanticipated long-term changes in traffic. The projected temporary increase in trips due to construction is

approximately 0.6 percent along Willowside Road. Construction impacts to traffic are negligible and temporary, and construction staging would occur onsite. Implementation of the Proposed Project would not significantly impact emergency response or evacuation routes in the vicinity of the project site. **No impact** would occur.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC §5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue are included in environmental assessments for projects that may have a significant impact on such tribal cultural resources (TCR). TCRs can only be identified by members of the Native American community, thus requiring consultation under CEQA.

3.18.1 REGULATORY CONTEXT

Assembly Bill (AB) 52, signed into law in 2014, established a new category of resources in CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation. Pursuant to PRC, Division 13, Section 21074, TCRs can be either:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:
 - a. Included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register); or

- b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the eligibility criteria for the California Register (PRC § 5024.1(c)). In applying these criteria, the lead agency must consider the significance of the resource to a California Native American Tribe.

Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources. In light of this, AB 52 requires that, within 14 days of a decision to undertake a project or determination that a project application is complete, a lead agency shall provide written notification to California Native American tribes that have previously requested placement on the agency's notice list. Notice to tribes shall include a brief project description, location, lead agency contact information, and the statement that the tribe has 30 days to request consultation. The lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a tribe.

A Native American contact program was initiated in November 2019. A search request was sent to the Native American Heritage Commission (NAHC) on November 20, 2019 and a reply was received on November 26, 2019. In the reply, the NAHC stated that there was a resource in the Sacred Lands File, but did not identify the resource or a specific location. The NAHC also included a list of contacts for individuals who might have knowledge of cultural resources in the project area. On November 26, 2019, certified letters with a project description and map were sent to the nine people identified by the NAHC, but no replies were received. AES attempted to contact those individuals via telephone on January 22, 2020. Messages were left for eight of the nine people and a copy of the letter and map were emailed to Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley, as his letter was returned. The only responses to the telephone contact program were from the Kashia Band of Pomo Indians of the Stewarts Point Rancheria, who stated that the Proposed Project is not in their aboriginal territory, and from Middletown Rancheria who also stated that the Proposed Project is not in their territory and that they would defer to Graton Rancheria.

The City, as lead agency, identified Native American tribes which had requested placement on the City's AB 52 notice list, and on August 18, 2020 the City mailed certified project notification letters to both Graton Rancheria and Lytton Rancheria. On October 1, Graton Rancheria formally responded to the City's formal request for consultation under the provisions of AB 52, acknowledging receipt of the notification and formally requesting consultation; a copy of Graton's request may be found in **Appendix B**.

As part of their request for consultation, Graton specifically stated that they wished to consult on alternatives to the project, recommended mitigation measures, assessment of effects, the environmental review process, significance assessment for TCRs, significance of impacts to TCRs, asked for copies of cultural reports and record search materials, results of Sacred Lands File searches, and copies of ethnographic studies and geotechnical reports prepared for the project. Graton's response concluded with the statement that preservation in place is the preferred manner of mitigating impacts to archaeological sites.

On September 3, 2020, the City received an email from Lytton Rancheria acknowledging receipt of the City's letter and stating that Lytton was not requesting further consultation.

On March 31, 2021, AES spoke with Buffy McQuillen, THPO for the Federated Indians of Graton Rancheria, in order to determine whether she had any comments on the Cultural Resources section of the Delta Ponds Initial Study. She requested minor changes to **Mitigation Measure CR-1**; specifically, she wished that, where the mitigation measure suggested that construction monitoring be completed by either a Native American or an archaeologist, that the mitigation measure be changed so that monitoring be completed by a team that includes both an archaeologist and a Native American monitor. This change was made to **Mitigation Measure CR-1**.

3.18.2 IMPACT DISCUSSION

Question A (i and ii)

As discussed above, no TCRs were identified during cultural resources investigations.. If TCRs are identified during consultation, impacts would be potentially significant. The conclusion of formal consultation under AB 52 and the application of **Mitigation Measures TCR-1, CR-1, and CR-2** would reduce impacts to TCRs to a **less-than-significant** level.

3.18.3 MITIGATION MEASURES

TCR-1

If prehistoric archaeological resources or human remains are discovered during ground-disturbing activities, all ground-disturbing activities shall halt within 50 feet of the find, and the City and Graton Rancheria shall be notified. Consultation between the City and Graton Rancheria shall be undertaken to address the find. Construction shall not resume in the vicinity of the find until consultation is concluded or until a reasonably good-faith effort has failed to provide a resolution to further impacts that is acceptable to the consulting parties.

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.19.1 ENVIRONMENTAL SETTING

PG&E is the gas and electric provider for the project site. PG&E serves most of the County (California Energy Commission, 2015 and 2020).

The Recology, Inc. (doing business as Recology Sonoma Marin) handles the waste stream in the City, collecting both solid waste and recycled materials. The nearest landfill to the project site is the Central Disposal Site located at 500 Meacham Road in Petaluma. The Central Disposal Site has a remaining capacity of 9,181,519 CY and is permitted to receive 2,500 tons per day (CalRecycle, 2020).

Sonoma Water provides water to areas nearby the project site (Sonoma Water, 2020a). The Airport/Larkfield/Wikiup Sanitation District provides wastewater services to areas nearby the project site with an approximate 2,100-acre service area. Influent undergoes tertiary treatment and is used for irrigation purposes (Sonoma Water, 2020b).

3.19.2 IMPACT DISCUSSION

Question A

The Proposed Project would include an upgrade to the existing access road, an upsizing of the Geyser pipeline, and dredging along the existing diffuser, therefore the Proposed Project would not require water, wastewater treatment, stormwater drainage, natural gas, or telecommunications facilities. Although the Proposed Project would include upsizing the Geyser pipeline, a wastewater conveyance pipe, the Geyser pipeline is specific to the Geyser geothermal plants and would not constitute an expansion of wastewater infrastructure or stormwater drainage.

The Geyser component of the Proposed Project would require electric power for operational purposes. Electrical equipment would be extended from the Delta Pond Pump Control Building located northwest of the Geyser pipeline. Electrical power would be similar to other pipeline projects. The existing electrical infrastructure would have the capacity to serve the Proposed Project. The Proposed Project would not result in the construction or relocation of utility infrastructure.

Due to the Proposed Project not requiring water, wastewater treatment, stormwater drainage, natural gas, or telecommunications facilities and the existing electrical infrastructure having the capacity, the Proposed Project would have a **less-than-significant impact**.

Questions B and C

As previously stated, the Proposed Project would not require water, wastewater treatment, or stormwater drainage. Although the Proposed Project would include upsizing the Geyser pipeline, a wastewater pipe, the Geyser Pipeline is specific to the Geyser geothermal plants and would not constitute an expansion of wastewater infrastructure or stormwater drainage. Additionally, built-up sediment which will be removed from and around the existing effluent diffuser nozzles as a result of the Proposed Project, will result in a larger volume of flow from the Delta Pond as well as improve water turbidity in the Santa Rosa Creek. No water services or wastewater services would be required for the Proposed Project and therefore, **no impact** on water or wastewater providers or services would occur.

Question D

Construction of the Proposed Project could generate solid waste that would be disposed of at the Central Disposal Site. The Central Disposal Site is permitted to receive 2,500 tons of waste a day and would therefore have the capacity to receive the solid waste generated by the Proposed Project. A **less-than-significant** impact would occur.

Question E

The Proposed Project would adhere to all federal, State, and local statutes regarding waste reduction. **No impact** would occur.

3.20 WILDFIRE

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.20.1 ENVIRONMENTAL SETTING

The project site is located within the Santa Rosa Local Responsibility Area (LRA). Within that LRA, the project site is not located within a Very High Fire Hazard Severity Zone (CAL FIRE, 2008). Besides the pond area, the project site and surrounding areas are relatively flat and are located within the Santa Rosa Plain.

3.20.2 REGULATORY SETTING

The City has adopted an Emergency Operations Plan (EOP), a Continuity of Operations Plan, and a Local Hazard Mitigation Plan (City of Santa Rosa, 2020b and City of Santa Rosa, 2016). These plans include evacuation routes, designation of emergency personnel, emergency preparation measures, emergency preventative measures, and comprehensive guidelines for emergency situations.

The project site is located within the Northwest Santa Rosa Evacuation Planning Area Map. The nearest evacuation travel route is Guerneville Road located north of the project site (City of Santa Rosa, 2019a).

3.20.3 IMPACT DISCUSSION

Question A

The City adopted an EOP in June 2017 and a Local Hazard Mitigation Plan Update in October 2016 (City of Santa Rosa, 2017 and City of Santa Rosa, 2016). The Proposed Project would not impair the implementation of these plans and would be developed consistent with any applicable policies contained therein; therefore, a **less-than-significant impact** would occur.

Question B

The project site is located within Sonoma County, an area prone to wildfires. In the event of a wildfire, occasional Proposed Project occupants (workers during the construction phase and field crews performing maintenance and monitoring work during the operations phase) would be exposed to pollutant concentrations from a wildfire. However, the Proposed Project is not located within a Very High Fire Hazard Severity Zone. Furthermore, the City has a Hazard Mitigation Plan to reduce wildfire hazards and an EOP to aid residents in the event of a wildfire. Additionally, the Proposed Project would not have project occupants that could be exposed to pollutants from a wildfire or to wildfire; therefore, less than significant impacts would occur. A **less-than-significant impact** would occur.

Question C

The Proposed Project is located within the project site and impacts related to the development of the Proposed Project are analyzed throughout this document. Furthermore, the Proposed Project would adhere to all County's adopted fire codes that pertain to the Proposed Project. Due to the Proposed Project not requiring any associated infrastructure and adhering to the County's fire codes, the Proposed Project would have a **less-than-significant impact**.

Question D

Construction of the Proposed Project would include the creation of a slope, however it would not include the grading of slopes. The slope that would be created by the Proposed Project would have a low grade within the permitted grade as set by the County Fire Codes. The Geyser component of the Proposed Project would include construction below grade, however the area would be stabilized throughout construction. Furthermore, the Proposed Project would result in minimal permanent changes to the surface of the project site and would therefore not have a negative impact on runoff or drainage. A **less-than-significant impact** would occur.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporation	Less-Than-Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.21.1 IMPACT DISCUSSION

Question A

As discussed in the preceding sections, the Proposed Project has a potential to create short-term impacts that could degrade the quality of the environment by adversely impacting air quality, biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality. Mitigation Measures have been included to address known environmental concerns and reduce impacts.. For the other resources, with implementation of the mitigation measures identified within the sections, potential impacts would be reduced to less-than-significant levels. The long-term effect of the Proposed Project is the enhancement of the existing access road as well as for the Geysers and Diffuser components. A **less-than-significant impact would occur with mitigation.**

Question B

Implementation of mitigation as outlined in this Draft IS/MND would reduce all potentially significant impacts to less than significant. Potential adverse environmental impacts of the Proposed Project, in combination with the impacts of other past, present, and future projects, and given the project's size, the incremental effects of this project would not contribute to cumulatively significant effects on the environment with implementation of the mitigation measures presented within the resource sections. Furthermore, no scheduled current or future projects were found located within the vicinity of the Project Site that would cause a cumulatively significant impact. Conformance with City and County General Plan Policies and local statues would ensure that potential impacts would be individually limited and not cumulatively considerable in the context of impacts associated with other pending and planned development projects. Project-Related impacts would be typical of pipeline resizing projects in the General Plan area, and would be reduced to less-than-significant levels through conformance with General Plan Policies. Impact would be **less than significant with mitigation**.

Question C

After the implementation of design features, municipal code requirements, and standard conditions of approval, there would be no environmental effects caused by the Proposed Project that result would result in substantial adverse effect on human beings, either directly or indirectly. A **less-than-significant impact** would occur.

SECTION 4.0 PREPARERS

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APPENDICES

APPENDIX A

Biological Resources



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Guerneville (3812258) OR Healdsburg (3812257) OR Camp Meeker (3812248) OR Sebastopol (3812247))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Alopecurus aequalis var. sonomensis</i> Sonoma alopecurus	PMPOA07012	Endangered	None	G5T1	S1	1B.1
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Amorpha californica var. napensis</i> Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S2	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Arborimus pomo</i> Sonoma tree vole	AMAFF23030	None	None	G3	S3	SSC
<i>Arctostaphylos bakeri ssp. bakeri</i> Baker's manzanita	PDERI04221	None	Rare	G2T1	S1	1B.1
<i>Arctostaphylos bakeri ssp. sublaevis</i> The Cedars manzanita	PDERI04222	None	Rare	G2T2	S2	1B.2
<i>Arctostaphylos densiflora</i> Vine Hill manzanita	PDERI040C0	None	Endangered	G1	S1	1B.1
<i>Arctostaphylos stanfordiana ssp. decumbens</i> Rincon Ridge manzanita	PDERI041G4	None	None	G3T1	S1	1B.1
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Blennosperma bakeri</i> Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	PMLIL0C022	None	None	G3?	S3?	1B.2
<i>Calamagrostis crassiglumis</i> Thurber's reed grass	PMPOA17070	None	None	G3Q	S2	2B.1
<i>Calochortus raichei</i> The Cedars fairy-lantern	PMLIL0D1L0	None	None	G2	S2	1B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Campanula californica</i> swamp harebell	PDCAM02060	None	None	G3	S3	1B.2
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
<i>Castilleja uliginosa</i> Pitkin Marsh paintbrush	PDSCR0D380	None	Endangered	GXQ	SX	1A
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
<i>Ceanothus foliosus var. vineatus</i> Vine Hill ceanothus	PDRHA040D6	None	None	G3T1	S1	1B.1
<i>Ceanothus purpureus</i> holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
<i>Centromadia parryi ssp. parryi</i> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
<i>Chorizanthe valida</i> Sonoma spineflower	PDPGN040V0	Endangered	Endangered	G1	S1	1B.1
<i>Clarkia imbricata</i> Vine Hill clarkia	PDONA050K0	Endangered	Endangered	G1	S1	1B.1
<i>Coastal and Valley Freshwater Marsh</i> Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
<i>Cordylanthus tenuis ssp. capillaris</i> Pennell's bird's-beak	PDSCR0J0S2	Endangered	Rare	G4G5T1	S1	1B.2
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Cuscuta obtusiflora var. glandulosa</i> Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
<i>Delphinium bakeri</i> Baker's larkspur	PDRAN0B050	Endangered	Endangered	G1	S1	1B.1
<i>Delphinium luteum</i> golden larkspur	PDRAN0B0Z0	Endangered	Rare	G1	S1	1B.1
<i>Dicamptodon ensatus</i> California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Dubiraphia giulianii</i> Giuliani's dubiraphian riffle beetle	IICOL5A020	None	None	G1G3	S1S3	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
<i>Erigeron serpentinus</i> serpentine daisy	PDAST3M5M0	None	None	G2	S2	1B.3
<i>Fritillaria liliacea</i> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
<i>Gilia capitata ssp. tomentosa</i> woolly-headed gilia	PDPLM040B9	None	None	G5T2	S2	1B.1
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S1S2	
<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
<i>Horkelia tenuiloba</i> thin-lobed horkelia	PDROS0W0E0	None	None	G2	S2	1B.2
<i>Hysteroecarpus traskii pomo</i> Russian River tule perch	AFCQK02011	None	None	G5T4	S4	SSC
<i>Kopsiopsis hookeri</i> small groundcone	PDORO01010	None	None	G4?	S1S2	2B.3
<i>Lasiurus blossevillii</i> western red bat	AMACC05060	None	None	G5	S3	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasthenia burkei</i> Burke's goldfields	PDAST5L010	Endangered	Endangered	G1	S1	1B.1
<i>Lasthenia californica ssp. bakeri</i> Baker's goldfields	PDAST5L0C4	None	None	G3T1	S1	1B.2
<i>Lavinia symmetricus navarroensis</i> Navarro roach	AFCJB19023	None	None	G4T1T2	S2S3	SSC
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lessingia arachnoidea</i> Crystal Springs lessingia	PDAST5S0C0	None	None	G2	S2	1B.2
<i>Lilium pardalinum ssp. pitkinense</i> Pitkin Marsh lily	PMLIL1A0H3	Endangered	Endangered	G5T1	S1	1B.1
<i>Limnanthes vincularis</i> Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Microseris paludosa</i> marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Navarretia leucocephala ssp. plieantha</i> many-flowered navarretia	PDPLM0C0E5	Endangered	Endangered	G4T1	S1	1B.2
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<i>Northern Vernal Pool</i> Northern Vernal Pool	CTT44100CA	None	None	G2	S2.1	
<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G4	S2	
<i>Oncorhynchus mykiss irideus pop. 8</i> steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
<i>Pandion haliaetus</i> osprey	ABNKC01010	None	None	G5	S4	WL
<i>Piperia candida</i> white-flowered rein orchid	PMORC1X050	None	None	G3	S3	1B.2
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	PMPOA4Y070	None	Threatened	G2	S2	1B.1
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<i>Rhynchospora alba</i> white beaked-rush	PMCYP0N010	None	None	G5	S2	2B.2
<i>Rhynchospora californica</i> California beaked-rush	PMCYP0N060	None	None	G1	S1	1B.1
<i>Rhynchospora capitellata</i> brownish beaked-rush	PMCYP0N080	None	None	G5	S1	2B.2
<i>Rhynchospora globularis</i> round-headed beaked-rush	PMCYP0N0W0	None	None	G4	S1	2B.1
<i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
<i>Taricha rivularis</i> red-bellied newt	AAAAF02020	None	None	G4	S2	SSC
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Trifolium amoenum</i> two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<i>Usnea longissima</i> Methuselah's beard lichen	NLLEC5P420	None	None	G4	S4	4.2
<i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3

Record Count: 82

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

49 matches found. [Click on scientific name for details](#)

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3812258, 3812257 3812248 and 3812247;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	Poaceae	perennial herb	May-Jul	1B.1	S1	G5T1
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	1B.2	S2	G4T2
Arctostaphylos bakeri ssp. bakeri	Baker's manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.1	S1	G2T1
Arctostaphylos bakeri ssp. sublaevis	The Cedars manzanita	Ericaceae	perennial evergreen shrub	Feb, Apr, May	1B.2	S2	G2T2
Arctostaphylos densiflora	Vine Hill manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.1	S1	G1
Arctostaphylos stanfordiana ssp. decumbens	Rincon Ridge manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr(May)	1B.1	S1	G3T1
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
Brodiaea leptandra	narrow-anthered brodiaea	Themidaceae	perennial bulbiferous herb	May-Jul	1B.2	S3?	G3?
Calamagrostis crassiglumis	Thurber's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	2B.1	S2	G3Q
Calochortus raichei	The Cedars fairy-lantern	Liliaceae	perennial bulbiferous herb	May-Aug	1B.2	S2	G2
Campanula californica	swamp harebell	Campanulaceae	perennial rhizomatous herb	Jun-Oct	1B.2	S3	G3
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	2B.1	S2	G5
Castilleja uliginosa	Pitkin Marsh paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Jun-Jul	1A	SX	GXQ
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.1	S1	G1
Ceanothus foliosus var. vineatus	Vine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Mar-May	1B.1	S1	G3T1

<u>Ceanothus purpureus</u>	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.2	S2	G2
<u>Centromadia parryi ssp. parryi</u>	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2
<u>Chorizanthe valida</u>	Sonoma spineflower	Polygonaceae	annual herb	Jun-Aug	1B.1	S1	G1
<u>Clarkia imbricata</u>	Vine Hill clarkia	Onagraceae	annual herb	Jun-Aug	1B.1	S1	G1
<u>Cordylanthus tenuis ssp. capillaris</u>	Pennell's bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.2	S1	G4G5T1
<u>Cuscuta obtusiflora var. glandulosa</u>	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
<u>Delphinium bakeri</u>	Baker's larkspur	Ranunculaceae	perennial herb	Mar-May	1B.1	S1	G1
<u>Delphinium luteum</u>	golden larkspur	Ranunculaceae	perennial herb	Mar-May	1B.1	S1	G1
<u>Downingia pusilla</u>	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
<u>Erigeron greenei</u>	Greene's narrow-leaved daisy	Asteraceae	perennial herb	May-Sep	1B.2	S3	G3
<u>Erigeron serpentinus</u>	serpentine daisy	Asteraceae	perennial herb	May-Aug	1B.3	S2	G2
<u>Fritillaria liliacea</u>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
<u>Gilia capitata ssp. tomentosa</u>	woolly-headed gilia	Polemoniaceae	annual herb	May-Jul	1B.1	S1	G5T1
<u>Hemizonia congesta ssp. congesta</u>	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2	G5T2
<u>Horkelia tenuiloba</u>	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	1B.2	S2	G2
<u>Kopsiopsis hookeri</u>	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	2B.3	S1S2	G4?
<u>Lasthenia burkei</u>	Burke's goldfields	Asteraceae	annual herb	Apr-Jun	1B.1	S1	G1
<u>Lasthenia californica ssp. bakeri</u>	Baker's goldfields	Asteraceae	perennial herb	Apr-Oct	1B.2	S1	G3T1
<u>Legenere limosa</u>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
<u>Leptosiphon jepsonii</u>	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	1B.2	S2S3	G2G3
<u>Lessingia arachnoidea</u>	Crystal Springs lessingia	Asteraceae	annual herb	Jul-Oct	1B.2	S2	G2
<u>Lilium pardalinum ssp. pitkinense</u>	Pitkin Marsh lily	Liliaceae	perennial bulbiferous herb	Jun-Jul	1B.1	S1	G5T1
<u>Limnanthes vinculans</u>	Sebastopol meadowfoam	Limnanthaceae	annual herb	Apr-May	1B.1	S1	G1
<u>Microseris paludosa</u>	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	1B.2	S2	G2
<u>Navarretia leucocephala ssp. bakeri</u>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2
<u>Navarretia leucocephala ssp. plieantha</u>	many-flowered navarretia	Polemoniaceae	annual herb	May-Jun	1B.2	S1	G4T1
<u>Pleuropogon hooverianus</u>	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	1B.1	S2	G2
<u>Rhynchospora alba</u>	white beaked-rush	Cyperaceae	perennial rhizomatous herb	Jun-Aug	2B.2	S2	G5
<u>Rhynchospora californica</u>	California beaked-rush	Cyperaceae	perennial rhizomatous herb	May-Jul	1B.1	S1	G1

Rhynchospora capitellata	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1	G5
Rhynchospora globularis	round-headed beaked-rush	Cyperaceae	perennial rhizomatous herb	Jul-Aug	2B.1	S1	G4
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 17 November 2020].

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Contributors

[The Calflora Database](#)

[The California Lichen Society](#)

[California Natural Diversity Database](#)

[The Jepson Flora Project](#)

[The Consortium of California Herbaria](#)

[CalPhotos](#)

Questions and Comments

rareplants@cnps.org



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

October 23, 2020

Consultation Code: 08ESMF00-2021-SLI-0188

Event Code: 08ESMF00-2021-E-00489

Project Name: City of Santa Rosa - Delta Ponds Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2021-SLI-0188

Event Code: 08ESMF00-2021-E-00489

Project Name: City of Santa Rosa - Delta Ponds Project

Project Type: ** OTHER **

Project Description: Maintenance

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.44769029476329N122.82320595201838W>



Counties: Sonoma, CA

Endangered Species Act Species

There is a total of 16 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
<p>California Red-legged Frog <i>Rana draytonii</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</p>	Threatened
<p>California Tiger Salamander <i>Ambystoma californiense</i></p> <p>Population: U.S.A. (CA - Sonoma County) There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076</p>	Endangered

Insects

NAME	STATUS
<p>San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i></p> <p>There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3394</p>	Endangered

Crustaceans

NAME	STATUS
<p>California Freshwater Shrimp <i>Syncaris pacifica</i></p> <p>No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7903</p>	Endangered

Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Pitkin Marsh Lily <i>Lilium pardalinum ssp. pitkinense</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/570	Endangered
Sebastopol Meadowfoam <i>Limnanthes vinculans</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/404	Endangered
Showy Indian Clover <i>Trifolium amoenum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6459	Endangered
Sonoma Alopecurus <i>Alopecurus aequalis var. sonomensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/557	Endangered
Sonoma Spineflower <i>Chorizanthe valida</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7698	Endangered
Sonoma Sunshine <i>Blennosperma bakeri</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1260	Endangered
Vine Hill Clarkia <i>Clarkia imbricata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7044	Endangered
White Sedge <i>Carex albida</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3063	Endangered
Yellow Larkspur <i>Delphinium luteum</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3578	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> https://ecos.fws.gov/ecp/species/2076#crithab	Final

Quad Name **Sebastopol**

Quad Number **38122-D7**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) - **X**

CC Chinook Salmon ESU (T) - **X**

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) - **X**

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat - **X**

CC Chinook Salmon Critical Habitat - **X**

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat - **X**

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

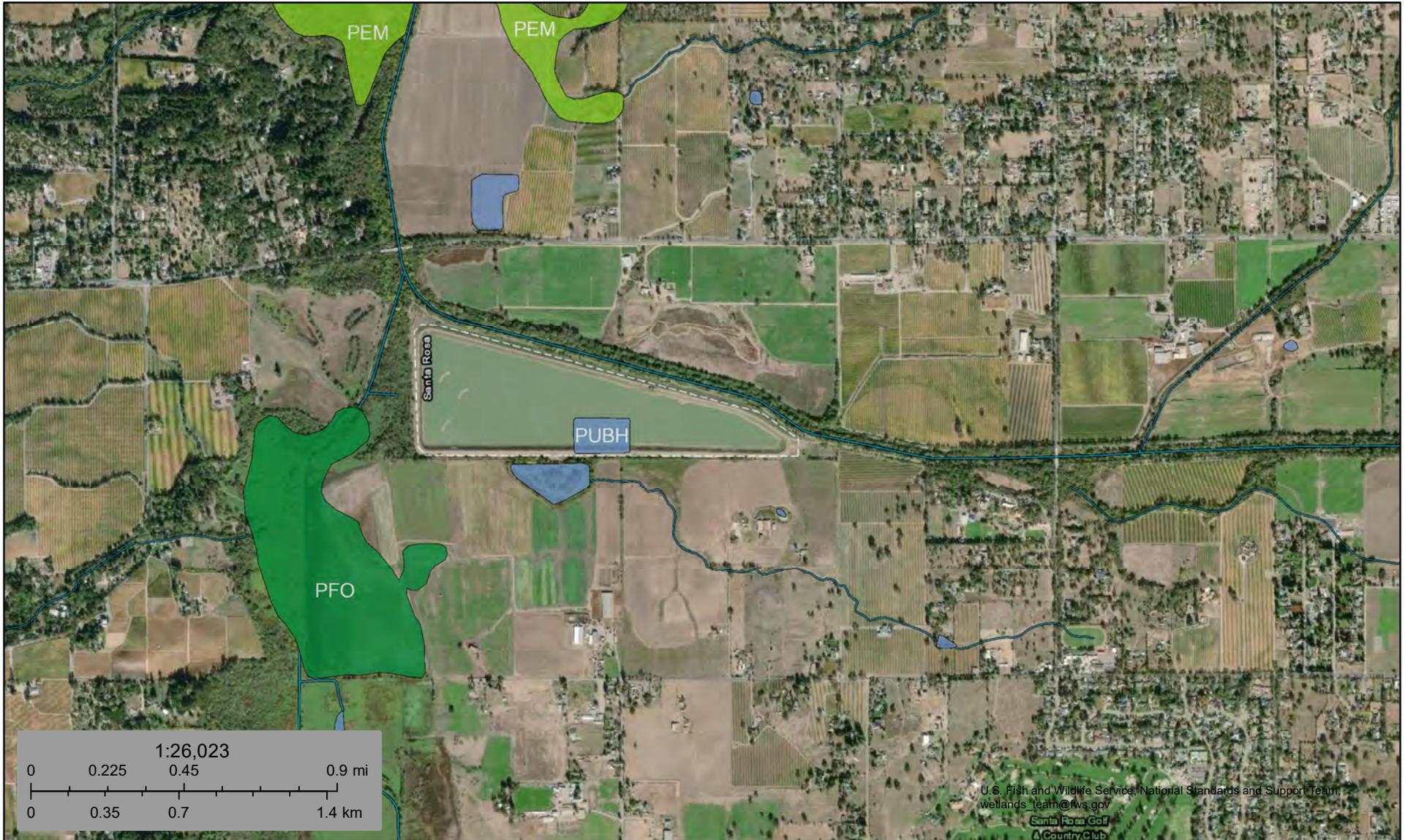
Coho EFH - **X**
Chinook Salmon EFH - **X**
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
562-980-4000**

MMPA Cetaceans -
MMPA Pinnipeds -



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov
Santa Rosa Golf & Country Club

May 7, 2020

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX B

NAHC Response

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



November 26, 2019

Charlane Gross
Analytical Environmental Services

VIA Email to: cgross@analyticalcorp.com

RE: Santa Rosa Public Works Project, Sonoma County

Dear Ms. Gross:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Andrew Green".

Andrew Green
Staff Services Analyst

Attachment

**Native American Heritage Commission
Native American Contacts List
November 26, 2019**

Cloverdale Rancheria of Pomo Indians
Patricia Hermosillo, Chairperson
555 S. Cloverdale Blvd., Suite A Pomo
Cloverdale CA 95425
info@cloverdalerancheria.com
(707) 894-5775
(707) 894-5727

Kashia Band of Pomo Indians of the Stewarts Point Rancheria
Dino Franklin Jr., Chairperson
1420 Guerneville Rd. Ste 1 Pomo
Santa Rosa CA 95403
dino@stewartspoint.org
(707) 591-0580 Office
(707) 591-0583 Fax

Dry Creek Rancheria Band of Pomo Indians
Chris Wright, Chairperson
P.O. Box 607 Pomo
Geyserville CA 95441
lynnl@drycreekrancheria.com
(707) 814-4150
(707) 814-4166

Lytton Rancheria
Marjorie Mejia, Chairperson
437 Aviation Blvd. Pomo
Santa Rosa CA 95403
margiemejia@aol.com
(707) 575-5917
(707) 575-6974 - Fax

Federated Indians of Graton Rancheria
Gene Buvelot
6400 Redwood Drive, Ste 300 Coast Miwok
Rohnert Park CA 94928 Southern Pomo
gbuvelot@gratonrancheria.com
(415) 279-4844 Cell
(707) 566-2288 ext 103

Middletown Rancheria
Jose Simon III, Chairperson
P.O. Box 1035 Pomo
Middletown CA 95461 Lake Miwok
sshope@middletownrancheria.com
(707) 987-3670 Office
(707) 987-9091 Fax

Federated Indians of Graton Rancheria
Greg Sarris, Chairperson
6400 Redwood Drive, Ste 300 Coast Miwok
Rohnert Park CA 94928 Southern Pomo
gbuvelot@gratonrancheria.com
(707) 566-2288 Office
(707) 566-2291 Fax

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road Wappo
Windsor CA 95492
scottg@mishewalwappotribe.com
(707) 494-9159

Guidiville Indian Rancheria
Merlene Sanchez, Chairperson
P.O. Box 339 Pomo
Talmage CA 95481
admin@guidiville.net
(707) 462-3682
(707) 462-9183 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

**This list is only applicable for contacting local Native Americans Tribes for the proposed:
Santa Rosa Public Works Project, Sonoma County.**



VIA CERTIFIED MAIL

August 20, 2020

Federated Indians of Graton Rancheria
ATTN: Buffy McQuillen
6400 Redwood Drive, Suite 300
Rohnert Park, CA 94928

Re: Geysers - Delta Connection Improvement
Project No.: 2111

Dear Ms. McQuillen:

The subject project is being referred to the **Federated Indians of Graton Rancheria** to provide written notification in compliance with Assembly Bill 52 (Native Americans: California Environmental Quality Act). As such, and pursuant to Section 21080.3.1 (d) of the Public Resources Code, please submit your written request for consultation with the City of Santa Rosa regarding this project and its potential impacts to tribal cultural resources within 30 days of the date of this letter. A map of the project location is attached for reference.

Project scope:

Upsize the connection between Delta Pond and the existing 33" Geysers Line which ends just outside the toe of the pond. The length requiring upsizing is approximately 130 feet, and would be expanded from 12" to approximately 24" to 33". Upsizing this connection will allow recycled water to be delivered to Delta Pond using the Geysers pipeline in the event that the aged reclamation piping network is compromised and will provide redundancy.

Within 30 days of receiving the request, the City will begin the consultation process.

We understand that the information you provide may be sensitive, protected or confidential. Any information provided in response to the above questions, or any exchange of information regarding tribal cultural resources as a result of consultation with the City, will be recorded and managed in accordance with state law (Cal. Code Regs. 15120(d), Public Resources Code 5097.9, 5097.993, 21082.3).

We understand that the information you provide may be sensitive, protected or confidential. Any information provided in response to the above questions, or any exchange of information regarding tribal cultural resources as a result of consultation with the City, will be recorded and managed in accordance with state law (Cal. Code Regs. 15120(d), Public Resources Code 5097.9, 5097.993, 21082.3).

Please respond in writing no later than 30 days from date of letter to THarrell@srcity.org or by mail to:

City of Santa Rosa
Transportation and Public Works Department
Attention: Tammy Harrell
69 Stony Circle
Santa Rosa, CA 95401

If you have any questions, please contact me at (707)543-3812.

Sincerely,



Tammy Harrell
Associate Civil Engineer

Attachment: Location Map

c: Amy Lyle, Supervising Planner
Amy Nicholson, Senior Planner



August 20, 2020

Brenda Tomaras
Tomaras & Ogas, LLP
10755-F Scripps Poway Parkway, #281
San Diego, CA 92131

E-MAIL: btomaras@mtowlaw.com

Re: Geysers - Delta Connection Improvement
Project No.: 2111

Dear Ms. Tomaras:

The subject project is being referred to the **Lytton Rancheria of California** to provide written notification in compliance with Assembly Bill 52 (Native Americans: California Environmental Quality Act). As such, and pursuant to Section 21080.3.1 (d) of the Public Resources Code, please submit your written request for consultation with the City of Santa Rosa regarding this project and its potential impacts to tribal cultural resources within 30 days of the date of this letter. A map of the project location is attached for reference.

Project scope:

Upsize the connection between Delta Pond and the existing 33" Geysers Line which ends just outside the toe of the pond. The length requiring upsizing is approximately 130 feet, and would be expanded from 12" to approximately 24" to 33". Upsizing this connection will allow recycled water to be delivered to Delta Pond using the Geysers pipeline in the event that the aged reclamation piping network is compromised and will provide redundancy.

Within 30 days of receiving the request, the City will begin the consultation process.

We understand that the information you provide may be sensitive, protected or confidential. Any information provided in response to the above questions, or any exchange of information regarding tribal cultural resources as a result of consultation with the City, will be recorded and managed in accordance with state law (Cal. Code Regs. 15120(d), Public Resources Code 5097.9, 5097.993, 21082.3).

Please respond in writing no later than 30 days from date of letter to THarrell@srcity.org or by mail to:

City of Santa Rosa
Transportation and Public Works Department
Attention: Tammy Harrell
69 Stony Circle
Santa Rosa, CA 95401

If you have any questions, please contact me at (707)543-3812.

Sincerely,

Tammy Harrell
Associate Civil Engineer

Attachment: Location Map

c: Amy Lyle, Supervising Planner
Amy Nicholson, Senior Planner



Project Number: 2111

Geysers - Delta Connection Improvement

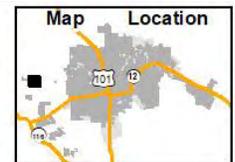
Project Status: Design

Project Areas (IFAS Charge #'s Labeled)

 Subregional



0 100 200 Feet City (2020) & County (2018) Aerials shown.
Map Date: 7/2/2020



- Information and features shown on this map are intended for general location use only and may contain errors. Map produced by City of Santa Rosa, Asset Management Division. -



FEDERATED INDIANS OF
GRATON
RANCHERIA

Submitted via electronic e-mail: THarrell@srcity.org

October 1, 2020

RE: Formal Request for Tribal Consultation Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code section 21080.3.1, subs. (b), (d) and (e) for the *Geysers – Delta Connection Improvement, Santa Rosa, Project No.: 2111*.

Dear Agency Representative:

This letter constitutes a formal request for tribal consultation under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e) for the mitigation of potential project impacts to tribal cultural resource for a project within the Federated Indians of Graton Rancheria's ancestral lands.

Receiving this letter sets forth the Tribe's formal request for consultation on the following topics checked below, which shall be included in consultation if requested (Public Resources Code section 21080.3.2, subd. (a):

- Alternatives to the project
- Recommended mitigation measures
- Significant effects of the project

The Tribe also requests consultation on the following discretionary topics checked below (Public Resources Code section 21080.3.2, subd. (a):

- Type of environmental review necessary
- Significance of tribal cultural resources, including any regulations, policies or standards used by your agency to determine significance of tribal cultural resources
- Significance of the project's impacts on tribal cultural resources
- Project alternatives and/or appropriate measures for preservation or mitigation that we may recommend, including, but not limited to:

- (1) Avoidance and preservation of the resources in place, pursuant to Public Resources Code section 21084.3, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks or other open space, to incorporate the resources with culturally appropriate protection and management criteria;
- (2) Treating the resources with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resources, including but not limited to the following:
 - a. Protecting the cultural character and integrity of the resource;
 - b. Protection the traditional use of the resource; and



FEDERATED INDIANS OF
GRATON
RANCHERIA

- c. Protecting the confidentiality of the resource.
- (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- (4) Protecting the resource.

Additionally, the Tribe would like to receive any cultural resources assessments or other assessments that have been completed on all or part of the project's potential "area of project effect" (APE), including, but not limited to:

- 1). The results of any record search(es) conducted at an archaeological information center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - (a) Any known cultural resources that have already been recorded on or adjacent to the potential APE;
 - (b) Whether the probability is low, moderate or high that cultural resources are located in the potential APE; and
 - (c) If a survey is required to determine whether previously unrecorded cultural resources are present in the potential APE.
- 2). The results of any archaeological inventory survey that was conducted of all or part of the potential APE, including, but not limited to:
 - (a) Any report that may contain site forms, site significance, and suggested mitigation measures.
- 3). The results of any Sacred Lands File searches conducted through the Native American Heritage Commission for all or part of the potential APE;
- 4). Any ethnographic studies conducted for any area including all or part of the potential APE; and
- 5) Any geotechnical reports regarding all or part of the potential APE.

We would like to remind your agency that CEQA Guidelines section 15126.4, subdivision (b)(3) states that preservation in place is the preferred manner of mitigating impacts to archaeological sites. Section 15126.4, subd. (b)(3) of the CEQA Guidelines has been interpreted by the California Court of Appeal to mean that "feasible preservation in place must be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of impacts." *Madera Oversight Coalition v. County of Madera* (2011) 199 Cal.App.4th 48, disapproved on other grounds, *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439.



FEDERATED INDIANS OF
GRATON
RANCHERIA

The Tribe would like to begin consultation within 30 days of your receipt of this letter. Please contact my office at (707) 566-2288 or by email at bmcquillen@gratonrancheria.com as the person who will serve as the lead contact on behalf of the Tribe.

Sincerely,

Buffy McQuillen, THPO/NAGPRA
Federated Indians of Graton Rancheria

From: [Brenda L. Tomaras](#)
To: [Harrell, Tammy](#)
Subject: [EXTERNAL] Lytton Rancheria Response for Project No. 2111
Date: Thursday, September 3, 2020 1:48:03 PM

Ms. Harrell:

This shall serve as the Lytton Rancheria's acknowledgment of receipt of the above-referenced referral for AB52 purposes. Based on the information provided, the Tribe is not requesting further consultation.

Thank you.

Brenda L. Tomaras
Tomaras & Ogas, LLP
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San Diego, CA 92131
(858) 554-0550
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**CITY OF SANTA ROSA
GEYSERS-DELTA POND CONNECTION IMPROVEMENTS PROJECT**

MITIGATED NEGATIVE DECLARATION

MITIGATION MONITORING AND REPORTING PROGRAM

Introduction

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to Section 21081.6 of the California Public Resources Code. A MMRP is required for the Approved Project because the Mitigated Negative Declaration (MND) has identified potential adverse effects that will be reduced to less-than-significant levels through the implementation of mitigation measures. The numbering of the individual mitigation measures follows the numbering sequence as found in the MND.

Mitigation Monitoring and Reporting Program

The MMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in the MND.

The City of Santa Rosa (City) will be the primary agency responsible for implementing the mitigation measures. The City may choose to require the project contractor to implement specific mitigation measures prior to and/or during construction. In some cases, the City or other public agencies will implement measures.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below:

- **Mitigation Measures:** The mitigation measures are taken verbatim from the MND, in the same order that they appear in the MND.
- **Timing/Frequency of Action:** Identifies at which stage of the project mitigation must be completed and how it will be implemented.
- **Responsible of Implementing:** Identifies the agency or department within the City responsible for implementing the mitigation measure.
- **Responsible for Monitoring:** Identifies the agency or department within the City responsible for mitigation monitoring and enforcement.
- **Verification of Compliance:** Identifies the initials of the responsible agency's representative and the date the representative verified implementation of the specific mitigation measure.

Mitigation Monitoring and Reporting Plan

	Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
3.3	AIR QUALITY					
AQ-1	The following BMPs will be implemented during dredging and construction.	During Geysers and Diffuser Projects	A Construction contractor	TPWD/BAAQMD	Site inspection to verify compliance with mitigation measures during dredging and construction; applicable forms submitted to BAAQMD	
	a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.					
	b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.					
	c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.					
	d. All vehicle speeds on unpaved roads shall be limited to 15 mph.					
	e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.					
	f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure CCR Title 13, Section 2485). Clear signage shall be provided for construction workers at all access points.					
	g. All dredging and construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.					
	h. A publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints shall be posted. This person shall respond and take corrective action within 48 hours. The BAAQMD phone number shall also be visible to					

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	Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
	ensure compliance with applicable regulations.					
3.4	BIOLOGICAL RESOURCES					
BIO-1	<p>No more than 14 days prior to ground-disturbing activities, a biologist shall conduct a pre-construction survey of the project site for all terrestrial special-status species listed above within Question A listed as having a potential to occur within the project site. If habitat suitable to support CTS or CRLF (i.e. occupied new small mammal burrows) are identified during the pre-construction survey, the applicable agencies shall be notified. Whether or not special-status animal species are identified on the project site, exclusionary fencing shall be installed to prevent their entrance during work activities. If CTS, CRLF, RBN, or WPT or other listed animal species are observed on the project site, they shall be allowed to move out of the project site on their own accord prior to installation of exclusionary fencing. If the species does not move out of the project site on its own, follow-up surveys will be conducted on additional days to verify that the species is no longer present within the project site. Additionally, a biological monitor will be present during all ground disturbing activities to ensure “take” of special-status species does not occur. The biologist will monitor ground-disturbing activities and conduct daily inspections of all construction related equipment for special-status species prior to the start of daily construction activities.</p>	<p>Prior to construction of Geysers and Diffuser Projects</p>	<p>Construction contractor</p>	<p>TPWD /CDFW</p>	<p>Verify completion of surveys and additional stipulated mitigation if necessary</p>	
Bio-2	<p>Should construction activities associated with the Proposed Project occur during the general nesting season (February 15 to September 15), a pre-construction nesting bird survey shall be conducted no more than 14 days prior to the start of construction. Areas within 500 feet of construction shall be surveyed for active nests.</p> <p>Should an active nest be identified, an avoidance buffer shall be established based on the needs of the species identified and pursuant to consultation with the USFWS as appropriate prior to initiation of construction activities. Avoidance buffers may vary in size depending on habitat characteristics, project-related activities, and disturbance levels. Avoidance buffers shall remain in place until the</p>	<p>Prior to construction of Geysers and Diffuser Projects if commencing between February 15th and September 15th.</p>	<p>Construction contractor</p>	<p>TPWD /CDFW</p>	<p>Verify completion of surveys and additional stipulated mitigation if necessary</p>	

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Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>end of the general nesting season or upon determination by a qualified biologist that young have fledged or the nest has failed.</p> <p>Additionally, a bat emergence survey will be conducted prior to the removal of any trees. If emergence of bats is detected, tree trimming and removal shall happen in a two-step process. Felled trees and trimmed branches shall be allowed to lay on the ground for a period of 24 hours after the initial cut. Once a 24-hour period has passed, the felled trees and trimmed branches can be removed from the site. Due to no trees over a 4-inch needing to be cut, no bat roosting habitat will likely be impacted.</p>					
<p>Bio-3 To avoid impacts to Santa Rosa Creek and the Delta Pond, from stormwater or other project activities, BMPs shall be implemented to address any runoff issues. BMPs would include but not be limited to silt fencing along Santa Rosa Creek and the access road and the eastern perimeter of the Delta Pond near the staging area, as well as appropriate stockpile management. Additionally, BMP's will encompass designated areas for the dewatering of dredge sediment as to prevent sediment latent water from entering Santa Rosa Creek. A the "U" shaped fishery sediment curtain in Mitigation Measure Bio 5 will be deployed within Santa Rosa Creek and will also limit suspended sediment, caused by dredging activities, from continuing downstream.</p>	<p>Prior to and during construction of Geysers and Diffuser Projects</p>	<p>Construction contractor</p>	<p>TPWD/City</p>	<p>Verify installation of BMPs by City Inspector</p>	
<p>Bio-4 A pre-construction rare plant survey shall be conducted prior to ground disturbance. An April bloom survey would address all identified plant species of concern. If special-status species are observed within the project site during any of the pre-construction surveys, an updated biological memorandum will be prepared by a qualified biologist, and if necessary site plans will be revised with items such as but not limited to developing alternate routes around identified special-status plant species or relocating the staging to eliminate impacts to identified special-status plant species. If avoidance of special-status plants are unavoidable, consultation with CDFW and or USFWS shall be initiated and mitigation may be necessary.</p>	<p>Prior to construction of Geysers and Diffuser Projects</p>	<p>Construction contractor</p>	<p>TPWD</p>	<p>Verify completion of surveys and additional stipulated mitigation if necessary</p>	

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	Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Bio-5	<p>Dredging operations will be conducted outside of the known salmonid fall and winter runs, known to occur during the months of November to February for the region. By avoiding this window, impacts to migrating salmonids will be greatly reduced as the majority of the salmonids will have completed their migration. A “U” shaped sediment curtain will be installed to fully contain the dredging area preventing any fish from entering the dredge area and preventing silt from leaving the immediate area until it settles during either hydraulic or mechanical dredging. A qualified biological monitor will be present during the installation of the sediment curtain to ensure that any fish or other aquatic species are out of out of harm’s way until the sediment curtain is fully installed. Instauration will begin on the upstream side to enable fish to escape naturally outside of the work area. In consultation with appropriate fisheries agencies, removal of sediment from around the diffuser nozzles will be conducted using the hydraulic and mechanical dredging methods where the dredge spoils will be conveyed to a dewatering area as adjacent as feasible to the dredge location within the floodplain in order to minimize sediment mobilization back to the stream. The dredge material will be placed on the floodplain with runoff contained to minimize sediment discharge into Santa Rosa Creek. Material from hydraulic dredging will be allowed to dewater from the Geotube, with mechanical dredging material being stockpiled and allowed to dewater naturally prior to being hauled off site. Once the soils are adequately dewatered, the spoils not hauled off site will be spread to the surrounding soils at a depth of not more than 0.2 feet in a manner that does not allow them to return to the Creek. To offset impacts to riparian vegetation within the work area of the dredging, mitigation planting of native vegetation along Santa Rosa Creek will be planted at a 3:1 ratio. The target area for this mitigation should be in areas infested with invasive species such as Himalayan blackberry, and replaced with native willows to help shade the stream. Additionally, 404, 401, and 1600 permits will be obtained. If additional mitigation measures</p>	Implementation of the Diffuser Project	Construction contractor	TPWD /CDFW	Verify completion of monitoring and consultations	

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Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>are required they shall also be implemented. The project will consult with CDFW and National Marine Fisheries Service regarding the need for a CESA ITP or federal authorization and will obtain such authorizations if warranted prior to project construction. Such consultation may be combined with the permitting process for this project.</p>					
<p>Bio-6 Tree removal and trimming of tree limbs will be necessary in order to conduct the proposed activities along Santa Rosa Creek, to allow for equipment access to the Diffuser Improvements Project area. The Santa Rosa City Code, Title 17 Environmental Protection, Chapter 17-24.030 will be followed. This ordinance states that no person shall trim or remove any tree, situated in the City, without a permit. A tree removal application will be submitted to the City in seeking approval for vegetation trimming and removal along the Santa Rosa Creek to the Director of Recreation and Parks.</p>	Implementation of the Diffuser Project	Construction contractor	TPWD /City	Verify installation of BMPs by City Inspector	
<p>3.5 CULTURAL</p>					
<p>CR-1 A qualified professional archeologist and Native American monitor shall be retained to monitor ground-disturbing work associated with the Geysers component of the Proposed Project as well as any work associated with the access road and clearing for machinery needed to remove sediments near the Diffuser. If the archeologist or monitor observes cultural materials or features, all work within 50 feet of the find shall halt until the monitoring team can identify the materials, determine their possible significance, and formulate appropriate measures for their treatment; these measures shall be implemented by the City prior to the resumption of construction. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, avoidance of the resources through changes in construction methods or project design or implementation of a program of testing and data recovery, in accordance with all applicable federal and State requirements. Any efforts shall be documented in a cultural resources report to be filed with the NWIC.</p>	During Construction of Geysers and Diffuser Projects	TPWD	TPWD	Verify that a qualified archaeologist and Native American monitor would be available to monitor ground-disturbing work. If any find is determined to be significant, verify completion and implementation of treatment plan according to current professional standards	

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	Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
CR-2	Work shall halt within 50 feet if human remains are uncovered during construction, the significance of the find shall be assessed, and the appropriate management shall be pursued. California law recognizes the need to protect interred human remains, particularly Native American burials and items of cultural patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code §§ 7050.5 and 7052 and PRC § 5097. If remains are uncovered, the City and County coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code § 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code § 7050[c]). The project applicant, or its appointed representative and the professional archaeologist shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the City shall determine the ultimate disposition of the remains and any associated artifacts.	During Construction of Geysers and Diffuser Projects	TPWD	TPWD	In the event of discovery of human remains, verify City and County Coroner is contacted and NAHC is notified if remains are of Native American origin.	
3.9 HAZARDS AND HAZARDOUS MATERIALS						
HAZ-1	Construction equipment shall contain spark arrestors, as provided by the manufacturer.	During construction of Geysers and Diffuser Projects	Construction contractor	TPWD	Site inspection to verify compliance with mitigation measure during construction	
HAZ-2	Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared or dried vegetation or other materials that could serve as fire fuel.	During construction of Geysers and Diffuser Projects	Construction contractor	TPWD	Site inspection to verify compliance with mitigation measure during construction	
HAZ-3	During construction, the project site shall be cleaned daily of trash and debris to the maximum extent practicable	During construction of Geysers and Diffuser Projects	Construction contractor	TPWD	Site inspection to verify compliance with mitigation measure during construction	
3.10 HYDROLOGY & WATER QUALITY						
HYD-1	Dischargers whose projects disturb one or more acres of	During construction of	Applicant and/or	TPWD	Site inspection to verify	

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Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>soil are required to obtain coverage under the General Permit for Dischargers of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading and disturbance to the ground such as stockpiling or excavation. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan. The following BMPs shall be included in the SWPPP or SWPPPs prepared for Project construction in accordance with the General Construction Permit.</p>	<p>Geysers and Diffuser Projects</p>	<p>Construction Contractor</p>		<p>compliance with mitigation measure during construction</p>	
<ol style="list-style-type: none"> 1. The construction contractor shall install a containment boom around the work area to contain floating debris, and shall provide a vessel to retrieve debris from the containment area at the end of each work day. 2. Straw bales, wattles, fiber rolls, gravel bags, or equivalent devices shall be installed around the perimeter of the staging area of where the diffuser is located and stockpiled materials that are exposed to the environment to prevent debris from being transported to the Santa Rosa Creek via runoff. 3. The use of hazardous materials during construction shall be minimized to the extent practical, and the amount of hazardous materials stored on or adjacent to the shoreline shall be limited to what is needed to immediately support construction activities. 4. Inactive material stock piles must be covered 					

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Mitigation Measure	Timing/Frequency of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
and bermed at all times.					
5. All construction activities will be prohibited from taking place during the rainy season (November-March).					
6. In the case of a rain event, active debris boxes shall be covered during rain events to prevent contact with rainwater.					
HYD-2 A hydrologic and hydraulic analysis must be performed prior to the start of development, and must demonstrate that the development would not cause any rise in base flood levels.	Prior to construction of Geysers and Diffuser Projects	TPWD/ Construction Contractor		Report completed prior to construction and submitted to TPWD	

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