INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION
EA 2019-0004 (Sun Pacific Fish Screen and Pump Station)

Project Title:	Environmental Assessment EA 2019-0004 (Sun Pacific Fish Screen and Pump Station)
Lead Agency Name and Address:	County of Yuba Planning Department 915 8th Street, Suite 123 Marysville, CA 95901
Project Location:	7222 Dantoni Road, Linda, CA 95901
Contact Person:	Ciara Fisher, Planner II
Phone Number:	(530) 749-5470
Date Prepared	June 2019

Project Description

The proposed project will involve the installation of an electric-powered, turbine-style pump system and associated fish screen on the Yuba River east of the City of Marysville in Yuba County, California. The site is located on the south bank of the river, northwest of the unincorporated area of Dantoni at latitude 39.1731, longitude -121.5268 (Figure 1). The pump is a replacement for the previous owner's pump at a location approximately 100 yards upstream of the old pump structure. The previous pump site location was susceptible to sediment accumulation and flood damage. The new site was chosen to reduce the need for sediment removal and to provide deeper water coverage for the pump.

The pump will consist of a single 18-inch diameter metal pipe, approximately 70 feet long. The pipe will be installed within a 30-inch conductor pipe that will be approximately 50-feet long. The conductor pipe will be mounted on twelve 8-inch piles that will be driven 40 feet deep (or to refusal) using a crane suspended vibratory hammer. Appropriate noise attenuation methods will be used during the driving of the piles. The electric pump motor and controls will be mounted on a 12-foot x 12-foot steel platform with handrails. The platform will be set on four 8-inch pipe piles. The footprint of the whole system will be approximately 70 feet long by 12 feet wide and sit above ground at varying heights. The 18-inch discharge pipe will be installed 4 feet below current grade (Figure 2).

A fish screen is proposed for the pump. The contractor (Intake Screens, Inc.) has proposed an ISI T30-36 cylindrical T screen with a hydraulically driven, self-cleaning brushing system. The screen will sit on a 70-foot long track and will be retrievable with an electric winch. The screen will be constructed with Type 304 stainless steel and 69V wedgewire with 1.75 mm slot widths. The screen is designed for approximately 47 square feet of screen surface area with 50% open

area and a total flow rate of approximately 15.6 cubic feet per second (cfs) at an approach velocity of 0.33 feet per second.

The pump will draw water directly from the Yuba River for delivery to adjacent kiwifruit for the purpose of irrigation and frost protection. The pump will draw frost water typically during the late winter and early spring between January and March; however, it may be used as early as November if conditions necessitate. The pump may be used as needed for irrigation purposes between March and October. A maximum flow of approximately 13.5 cfs (6,000 gallons per minute) will be diverted through this proposed pump.

Construction and installation of the pump is expected to occur during low flow periods in 2019 summer construction time period. Construction of the project will occur during the dry season from April 1- October 15, with an in-water work window of June 1 - October 15 or as otherwise defined by the terms of the California Department of Fish and Wildlife and National Marine Fishers Service's approvals for the project.

Figure 1: Vicinity Map

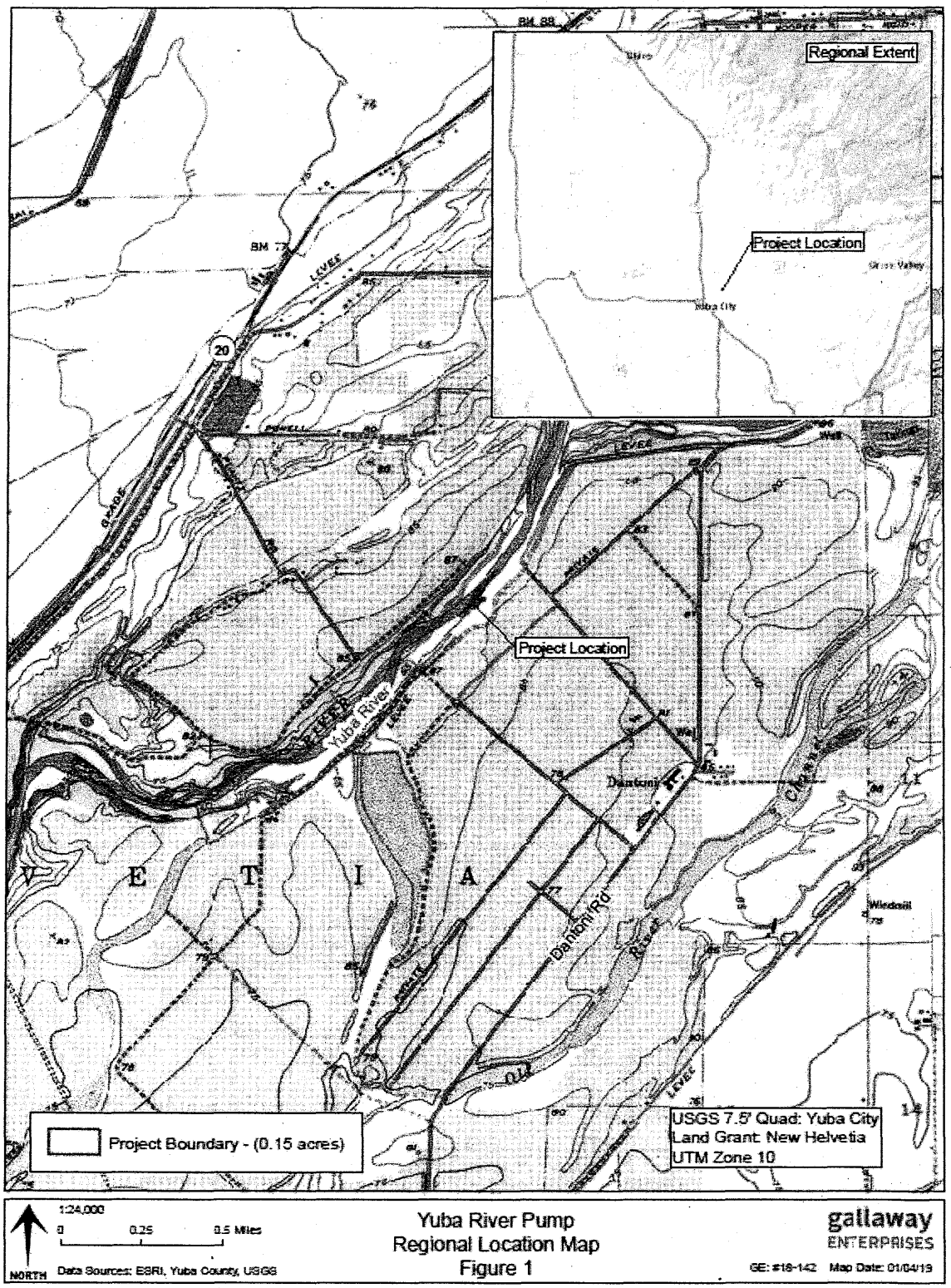
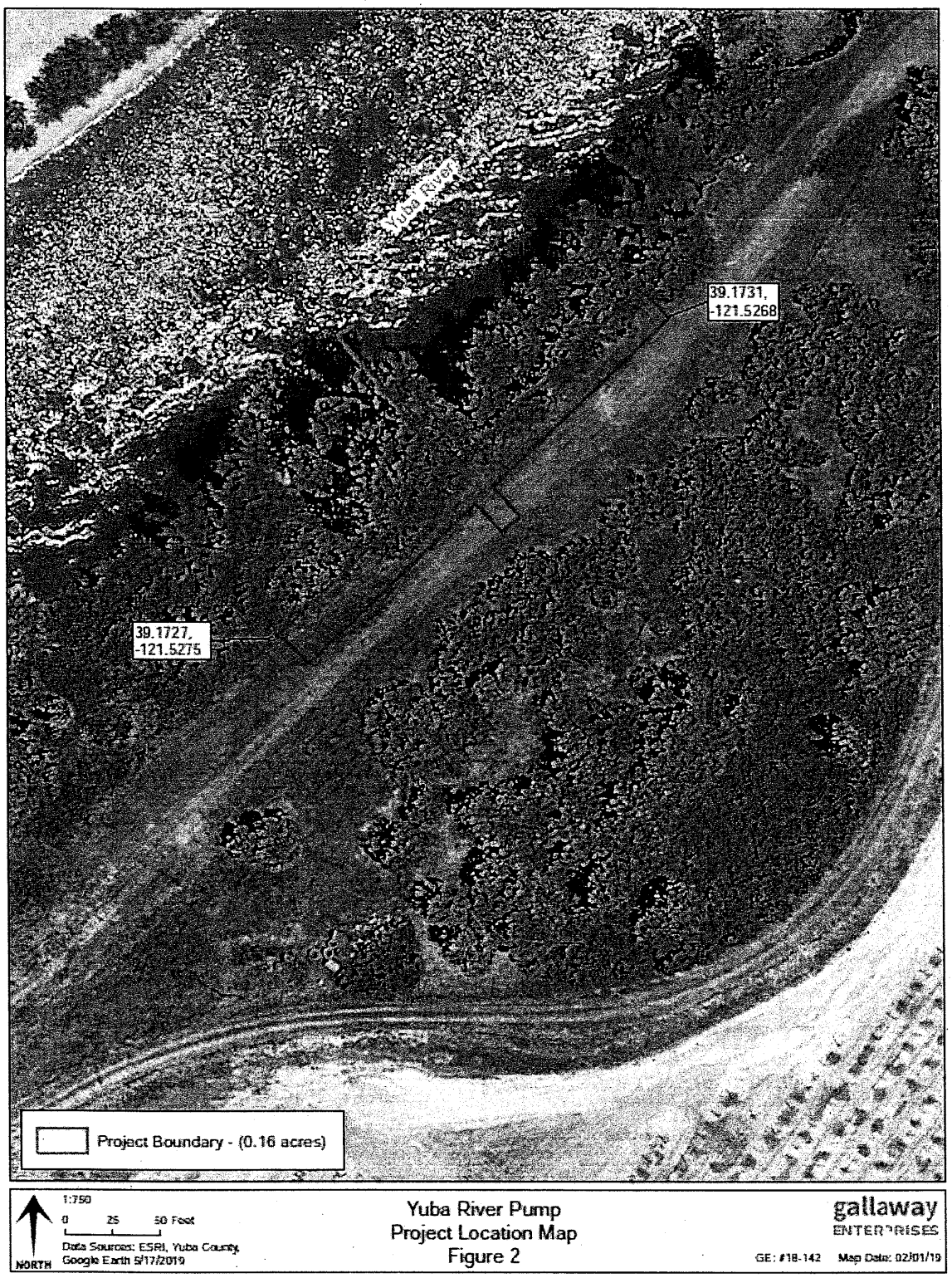


Figure 2: Project Location Map



Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion on the following pages:

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

☒ Mandatory Findings of Signficance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "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 ENVIRONMENTAL IMPACT REPORT 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 NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE

DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Ciara Fisher 7/25/19

Planner's Signature Date

Ciara Fisher'

Planner II

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Environmental Assessment EA 2019-0004 (Sun Pacific Fish Screen and Pump Station), as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of a Mitigated Negative Declaration.

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).
2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c) (3) (D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were

incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, development code). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

I. AESTHETICS **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *Less than Significant* – Scenic vistas in the project vicinity consists of the Yuba River. The proposed location for the new fish screen and pump would not deviate atheistically from the previous pump approximately 100 yards upstream.

b) *Less than Significant* –There will be no substantial effects to rock outcroppings, historic buildings, or trees and the project site is not on a state scenic highway.

c) *Less than Significant* – The upland area where the pump will be installed along the bank has been previously cleared of ground vegetation, but the portions of the Project site where vegetation is undisturbed is dominated by a dense shrub layer and a sparse tree canopy composed of typical riparian species. The pump station will be located along the area with minimal vegetation and therefore will not degrade the existing site and its surroundings.

d) *No Impact* – The proposed project would be conducted during daytime hours; no nighttime construction is proposed. No temporary or permanent lighting is proposed. There would be no effect on nighttime views.

II. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. 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 and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *No Impact* – The proposed project is a pump station replacement project. No farmland conversion would needed for this project. Therefore, no loss or conversion of farmland would result from the proposed project.

b) *No Impact* – The project area is designated Natural Resources by the Yuba County 2030 General Plan. The surrounding project zoning is "AE-80" Exclusive Agricultural, 80 acres minimum. The proposed project is consistent with the General Plan and zoning. The property is not under a Williamson Act contract, as Yuba County has not established a Williamson Act program.

c) *No Impact* – The project does not involve any activities that would result in a rezone or loss of a Timberland Preservation Zone. The long-term use of the property will remain agricultural.

d) *No Impact*- As discussed in the above Environmental Setting section, the proposed project is not located in an area that contains forestland. No conversion of forests would occur because of the project.

e) *No Impact*- The project consists will deliver water to adjacent kiwifruit for the purpose of irrigation and frost protection. Nothing related to the project will lead to the conversion of any type of viable agricultural land.

III. AIR QUALITY

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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
e) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion/Conclusion/Mitigation:

a) *Less Than Significant Impact* – In 2010, an update to the 1994 Air Quality Attainment Plan was prepared for the Northern Sacramento Valley Air Basin (NSVAB), which includes Yuba County. The plan proposes rules and regulations that would limit the amount of certain emissions, in accordance with the 1994 State Implementation Plan (SIP). The 2010 update summarizes the feasible control measure adoption status of each air district in the NSVAB, including the Feather River Air Quality Management District (FRAQMD). The 2010 update was adopted by the FRAQMD, and development proposed by the project would be required to comply with its provisions.

The Air Quality Attainment Plan also deals with emissions from mobile sources, primarily motor vehicles and construction equipment with internal combustion engines. Data in the Plan, which was incorporated in the SIP, are based on the most currently available growth and control data. As is stated in the guidelines of FRAQMD, projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM10.

Pursuant to FRAQMD's Regulation IV, Rule 4-3, equipment used exclusively in agricultural operations may be exempt from FRAGMD Permits and therefore CalEEMod. This exemption

does not apply to agricultural sources of air pollution as defined in California Health & Safety Code 39011.5 that are:

1) Major sources or Major Modifications, as defined in Rule 10.1, New Source Review, or
2) Majors Sources of HAPs (Hazardous Air Pollutants) as defined in Rule 10.7, Toxics New Source Review, or
3) Large confined animal facilities as defined in California Health and Safety Code 40724.6, or
4) An agricultural source of air pollution that emits in any 12-month period air emissions greater than or equal to the following quantities of emissions:
    a) 50 percent of the major source thresholds for regulated air pollutants (excluding Hazardous Air Pollutants (HAPs));
    b) 5 tons per year of a single HAP;
    c) 12.5 tons per year of any combination of HAPs; and
    d) 50 percent of any lesser threshold for a single HAP as the U.S.EPA may establish by rule.

The pump system will exclusively be used for agricultural purposes by providing water to the adjacent kiwifruit orchard. The project will not create hazardous air pollutants or exceed the threshold for equipment for agricultural uses.

b) *Less Than Significant Impact* – The California Air Resources Board provides information on the attainment status of counties regarding ambient air quality standards for certain pollutants, as established by the federal and/or state government.

As of 2004, Yuba County is in non-attainment status for State and national (one-hour) air quality standards for ozone, and State standards for particulate matter less than 10 microns in diameter (PM_{10}).

As discussed above in Section A, under the guidelines of FRAQMD projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM_{10}. ROG and NOx are ingredients for ozone. This project is exempt from FRAQMD Permits because it is agricultural equipment.

c) *Less Than Significant with Mitigation Incorporated* – As previously noted, the project proposes a pump replacement on the Yuba River. There is no future development associated with the project. The only air emissions associated with the project are emissions associated with project construction and idling vehicular traffic associated with construction traffic delays. The proposed project does not exceed any daily air quality thresholds. Nevertheless, Yuba County currently is in non-attainment status for State and federal (one-hour) air quality standards for ozone, and State standards for particulate matter less than 10 microns in diameter (PM_{10}). Therefore, any pollutant contribution may be considered cumulatively considerable, especially when included with emissions from other proposed projects in the County.

The FRAQMD has a list of standard construction-phase Mitigation Measures that apply to all projects. Also, FRAQMD has established a list of Fugitive Dust Control Mitigation Measures applicable to construction activities, from its Indirect Source Review Guidelines. Based on these, the following Mitigation Measures shall be implemented.

Mitigation Measure 3.1 The most current FRAQMD Standard Mitigation Measures applicable to construction activities shall be incorporated as part of the project.

Implementation of **MM 3.1** would further reduce potential pollutant emissions of the project, and further minimize any cumulative impact. Impacts after mitigation would be less than significant.

d) *Less Than Significant Impact* – The proposed project would be located in a sparsely populated rural area in the community of Dantoni. The proposed construction activities are not expected to generate pollutant concentrations at a sufficient level to be noticed by any nearby residences, particularly given the rural nature of the project area.

e) *No Impact* – The project would not allow activities that generate odors considered objectionable. Furthermore, the project is located in a rural area, and as noted above, any odors generated by the project would be temporary and consistent with odors emitted from the surrounding rural residences.

IV. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

Gallaway Enterprises prepared a Biological Resource Assessment for the project and below are the results of the study.

Setting

The project site contains several habitat types consisting of valley foothill riparian, annual grassland, barren, and riverine. The following are descriptions of the extent and locations of each habitat type:

- Valley foothill riparian habitat occurs along the steep bank of the Yuba River. The narrow strip of riparian habitat present in the project site has historically been used as an access point

to the river by the property owners. As such, the area contains very little understory vegetation. A sparse overstory of Fremont's cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*) and white alder (*Alnus rhombifolia*) occurs in the Action Area and the sparse understory vegetation is composed of Himalayan blackberry (*Rubus armeniacus*). Riparian habitat supports the most diverse wildlife and is important for foraging and nesting for many songbirds, mammals, reptiles and amphibians. Annual grassland occurs at the top of the bank and on the side of the access road.

- Annual grassland occurs at the top of the bank and on the side of the access road. The dominant species observed included hedge parsley (*Torilis arvensis*), filaree (*Erodium botrys*), hedge mustard (*Sisymbrium officinale*), yellow star-thistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*) and Johnsongrass (*Sorghum halepense*). This habitat type provides foraging ground for a variety of wildlife species and breeding habitat for several terrestrial reptiles, ground nesting birds, and fossorial mammals.
- Barren habitat occurs within the access road. Vegetation in the road area is regularly managed and the soil has been compacted over time, which has resulted in the presence of sparse to no vegetation within the road. Although some ground-nesting avian species, such as killdeer (*Charadrius vociferous*), and small reptiles, such as western fence lizards (*Sceloporus occidentalis*), can be found breeding in barren habitat, it is typically considered low quality habitat for most wildlife species.
- Riverine habitat is characterized as ephemeral or perennial water bodies, including lakes, stream channels, ephemeral and intermittent drainages, ponds, and other surface water features that exhibit an ordinary high water mark. The extent of riverine habitat within the project site is the portion of the Yuba River where the pump intakes will sit, which is a pool approximately 6 to 10 feet deep during normal summer flows. This riverine habitat is characterized by permanently flowing water that accommodates a range of aquatic life. The project is located on the upstream side of a rip-rap point that protrudes out into the Yuba River approximately 10 to 15 feet, which creates a break in the current and an eddy that circulates back upstream at the proposed pump location. The substrate of the bank within the project site is composed of rock and sand. The fact that the previously existing pump located 100 yards downstream was subject to sedimentation buildup indicates that the riverbed of Yuba River within the project site is composed of a silt or mud substrate. The Yuba River on the northern side, starting at the northwestern edge of the project site, is visibly shallower.

Several special-status species are known to exist or have the potential to exist within or adjacent to the project site based on habitats at the project site. Special-status species are those that are subject to the jurisdiction of one or more of the following:

- Listed as threatened or endangered, or are proposed or candidates for listing under the California Endangered Species Act (CESA, 14 California code of Regulations 670.5) or the federal Endangered Species Act (ESA, 50 Code of Federal Regulations 17.12);

- Listed as a Species of Special Concern by CDFW or protected under the California Fish and Game Code (CFGC, Section 3503.5);
- Included on the California Native Plant Society (CNPS) List 1A, 1B, or 2; or
- Species that are otherwise protected under the policies or ordinances at the local or regional level as required by the California Environmental Quality Act (CEQA, Section 15380).

Survey Methods

Several technical studies were conducted to evaluate biological, botanical, and wetland resources within the project site, including a Biological Resource Assessment, a Biological Assessment, and a draft Delineation of Waters of the United States. Species which are incorporated in Table 1 include species indicated in the United States Fish and Wildlife (USFWS), National Marine Fisheries Service (NMFS), and California Natural Diversity Database (CNDDB) species lists, the CNPS list of rare and endangered plants, and species determined by biological and botanical survey results. Species that have the potential to occur within the project site are based on one or more of the following: (1) the presence of suitable habitat, (2) CNDDB occurrences within a 5 mile radius, and (3) observations made during biological and botanical surveys. Not all species listed within the following table have the potential to occur within the project site based on unsuitable habitat and/or lack of recorded observations within a 5 mile radius.

Table 1: Special-status Species Potential for Occurrence

Common Name *(Scientific Name)*	Status Fed/State/CNPS	Associated Habitats	Potential for Occurrence
SENSITIVE NATURAL COMMUNITIES			
Great Valley Cottonwood Riparian Forest	_/SNC/_	Riparian forest dominated by a dense tree canopy of cottonwoods.	None. The riparian habitat in the project site does not contain suitable habitat elements for this SNC and has not been designated as a SNC by the CDFW.
Great Valley Mixed Riparian Forest	_/SNC/_	Dense riparian forest dominated by a mixed tree canopy.	None. The riparian habitat in the project site does not contain suitable habitat elements for this SNC and has not been designated as a SNC by the CDFW.
PLANTS			
Ferris' milk vetch *(Astragalus tener var. ferrisiae)*	_/_/1B.1	Meadow & seep, Valley & foothill grassland, Wetland. (BP: Apr–May)	None. There is no suitable wetland habitat present in the project site.
Hartweg's golden sunburst *(Pseudobahia bahiifolia)*	FE/SE/1B.1	Clay and often acidic soils in cismontane woodland and valley & foothill grassland. (BP: Mar–Apr)	None. There are no suitable soils or other habitat elements present in the project site.
Recurved lackspur *(Delphinium recurvatum)*	_/_/1B.2	Chenopod scrub, cismontane woodland and alkaline valley & foothill grassland. (BP: Mar-Jun)	None. There is no suitable alkaline habitat present in the project site.

Common Name *(Scientific Name)*	Status Fed/State/CNPS	Associated Habitats	Potential for Occurrence
Sanford's arrowhead *(Sagittaria sanfordii)*	_/_/1B.2	Assorted shallow freshwater marsh and swamp habitat. (BP: May-Nov)	None. There is no suitable wetland habitat present in the project site.
Veiny monardella *(Monardella venosa)*	_/_/1B.1	Heavy clay soils in cismontane woodland and valley & foothill grassland. (BP: May-Jul)	None. There are no suitable soils or other habitat elements present in the project site.
Wooly rose-mallow (*Hibiscus lasiocarpos var. occidentalis*)	_/_/1B.2	Freshwater marshes and swamps, often on sides of levees. (BP: June-September)	None. Not observed within or adjacent to the project site and the riparian habitat present is not suitably wet for this species.
Wright's trichocoronis (*Trichocoronis wrightii var. wrightii*)	_/_/2B.1	Marshes, swamps, seeps and alkaline vernal pools in grassland and riparian habitats. (BP: May-September)	None. There is no suitable wetland habitat present in the project site.
INVERTEBRATES			
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)	FT/_/_	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*).	None. Blue elderberry is not present within the project site.
Vernal pool fairy shrimp *(Branchinecta lynchi)*	FT/_/_	Vernal pools.	None. There are no vernal pools within the project site.
Vernal pool tadpole shrimp *(Lepidurus packardi)*	FE/_/_	Deep vernal pools	None. There are no vernal pools within the project site.
FISH			
Central Valley steelhead *(Oncorhynchus mykiss)*	FT/_/_	Sacramento and San Joaquin rivers and their tributaries.	**Known**. The project site is within critical habitat and adjacent to spawning habitat for this species.
Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha)*	FT/ST/_	Sacramento River and its tributaries.	**Known**. The project site is within critical habitat and adjacent to spawning habitat for this species.
Delta smelt (*Hypomesus transpacificus)*	FT/SE/_	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait & San Pablo Bay.	None. The project site is outside of the known range of this species.
Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha)*	FE/SE/_	Sacramento River and its tributaries.	Low. Population is generally limited to the mainstem Sacramento river and specific tributaries. Occurrences outside of this limited range are likely incidental.

Common Name *(Scientific Name)*	Status Fed/State/CNPS	Associated Habitats	Potential for Occurrence
Green sturgeon *(Acipenser medirostris)*	FT/_/_	Klamath/North Coast, Sacramento and San Joaquin rivers and their tributaries.	Known. The project site is within critical habitat and adjacent to spawning habitat for this species.
AMPHIBIANS			
California red-legged frog *(Rana draytonii)*	FT/SSC/_	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	None. The project site is outside of the known range of this species.
REPTILES			
Giant gartersnake *(Thamnophis gigas)*	FT/ST/_	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches.	None. The project site does not contain suitable aquatic habitat for this species due to the high flows and there are no known occurrences of this species on the Yuba River.
Western pond turtle *(Emys marmorata)*	_/SSC/_	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft. elevation.	None. The project site does not contain suitable aquatic habitat for this species due to high flows and the only known occurrences of this species on the Yuba River occur in the upper reaches of the river system.
BIRDS			
Bank swallow *(Riparia riparia)*	_/ST/_	Riparian scrub, Riparian Woodland.	None. Suitable habitat is not present within or adjacent to the project site.
Burrowing owl *(Athene cunicularia)*	_/SSC/_	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran Desert scrub, Valley & foothill grassland.	None. Suitable habitat is not present within or adjacent to the project site.
California black rail *(Laterallus jamaicensis coturniculus)*	_/ST,FP/_	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland.	None. Suitable habitat is not present within or adjacent to the project site.
Least Bell's vireo *(Vireo bellii pusillus)*	FE/SE/_	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	None. The project site is outside of the known range of this species.
Song sparrow (Modesto population) *(Melospiza melodia)*	_/SSC/_	Riparian woodland.	None. The project site is outside of the known range of this species.

Common Name *(Scientific Name)*	Status Fed/State/CNPS	Associated Habitats	Potential for Occurrence
Swainson's hawk *(Buteo swainsoni)*	_/ST/_	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland.	Low. Suitable habitat occurs in close proximity to the project site; an active nest was identified a half-mile southwest of the project site in 2009 (CNDDB Occurrence #2053). There are no suitable nest trees within the project site.
Tricolored blackbird *(Agelaius tricolor)*	_/ST/_	Freshwater marsh, Marsh & swamp, Swamp, Wetland.	None. Suitable habitat is not present within or adjacent to the project site.
Western yellow-billed cuckoo *(Coccyzus americanus)*	FT/SE/_	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	None. Suitable habitat is not present within or adjacent to the project site.

CODE DESIGNATIONS	
FE = Federally-listed Endangered **FT** = Federally-listed Threatened **FC** = Federal Candidate Species **SE** = State-listed Endangered **ST** = State-listed Threatened **SC** = State Candidate Species **SSC** = State Species of Special Concern **FP** =CDFW Fully Protected Species	**SNC** = CDFW Sensitive Natural Community **CRPR 1** = Rare or Endangered in California or elsewhere **CRPR 2** = Rare, Threatened or Endangered in California, more common elsewhere **CRPR 3** = More information is needed **CRPR 4** = Plants with limited distribution, not considered rare, threatened or endangered

Potential for Occurrence: Any bird or bat species could fly over the project site, but this is not considered a potential occurrence. The categories for the potential for occurrence include:

None: The species or natural community does not occur, and has no potential to occur in the project site based on sufficient surveys, the lack suitable habitat, and/or the project site is well outside of the known distribution of the species.

Low: Potential habitat in the project site is sub-marginal and/or the species is known to occur in the vicinity of the project site.

Moderate: Suitable habitat is present in the project site and/or the species is known to occur in the vicinity of the project site. Pre-construction surveys may be required.

High: Habitat in the project site is highly suitable for the species and there are reliable records close to the project site, but the species was not observed. Pre-construction surveys required.

Known: Species was detected in the project site or a recent reliable record exists for the project site.

a) *Less Than Significant with Mitigation* – The following identifies the species and that may be affected by the proposed project, their listing status, and mitigation measures:

Central Valley Spring-Run Chinook Salmon
Chinook salmon are an anadromous species which originate in freshwater environments, such as major streams and tributaries, before migrating to oceanic environments to grow and mature, then returning to their natal freshwater environments to spawn and eventually die. Chinook salmon are the largest of the salmon species. They range in appearance throughout their developmental stages and aquatic environments.

Central Valley spring-run (CVSR) Chinook salmon are considered an Evolutionarily Significant Unit (ESU) by NMFS and their listing status is threatened under the ESA and CESA. Spring-run Chinook salmon are differentiated from the other ESUs or other "runs" of Chinook salmon due to their distinct life history strategy in which natural populations migrate from the Pacific Ocean to their natal spawning habitat in Central Valley tributaries starting in the spring; as early as February for some populations. Unlike other runs of Chinook salmon, spring-run migrate upstream early in the year and then disperse throughout the upper reaches of a river and hold there over the summer months before spawning, instead of spawning quickly upon arrival. Juveniles will then emigrate during late fall and winter with increased flows to make their way to the Pacific Ocean. Key habitat for CVSR Chinook salmon includes moderately deep pools utilized for holding habitat over summer, small cobble or gravel substrate for spawning, and slow, off-channel water with debris or vegetation that juveniles utilize for rearing habitat and refuge. Shade and wood cover have been indicated as important for juvenile Chinook salmon holding habitat (Zajanc *et al.* 2012). Chinook salmon adults utilize deep pools for holding that usually have a large bubble curtain at the head, underwater rocky ledges, and shade cover throughout the day, or hold in smaller "pocket" water behind large rocks in fast water (Moyle 1995).

Survey Results

The project site is located along a migratory tributary with a population of CVSR Chinook salmon (referred to from here on as Chinook salmon). Chinook salmon individuals may be migrating past the project site from April through September.

A study of Chinook salmon spawning habitat of the lower Yuba River found that, while there is suitable spawning habitat for Chinook salmon in the shallow riffle adjacent to the project site, suitable Chinook spawning habitat does not occur within the project site where pile driving activities will occur (Pasternack *et al.* 2014). Additionally, Chinook salmon spawning does not occur until September through mid-October in the lower Yuba River (YARMT 2013). Chinook salmon juveniles reportedly can rear in their natal streams for up to 15 months (Moyle 2002) and are known to be present within the lower Yuba River year-round, indicating that Chinook salmon individuals may be present within or near the project site regardless of project timing (YARMT 2013); however, Chinook salmon juveniles are not expected to hold or rear within the project site due to lack of preferred habitat components. Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks are identified as primary constituent elements (PCEs) for Chinook salmon juvenile rearing and survival, none of which occur within the project site (65 FR 7764).

Central Valley Steelhead

The CCV steelhead (referred to from here on as steelhead) is classified as a Distinct Population Segment (DPS) by NMFS. Steelhead are small-bodied in general compared to their coastal counterparts and rarely exceed 60 centimeters in fork length, which may be an adaptation to the distance inland these fish migrate to reach their spawning areas in some cases (Moyle 2002). Steelhead will spend 1 to 3 years growing in a marine environment before migrating into the Sacramento and San Joaquin River systems, as well as far upstream into the tributaries of these river systems, to spawn. Steelhead generally move quickly through the main stem of the Sacramento River to their respective spawning grounds, where they then seek out suitable spawning habitat. The steelhead population is entirely a "winter-run" fish that enter the river system in November through April as fully reproductively mature adults to spawn before emigrating back to marine habitat (Moyle *et al.* 2008). Adult steelhead require cold, clear, relatively fast-moving water that is usually provided by snowmelt-driven stream systems at the time they are spawning. Depths required for spawning are typically 10 to 150 cm (Moyle 2002 cited in NMFS 2014), and optimum depth for spawning is 14 inches (Bovee 1978 cited in McEwan 2001). Juvenile steelhead may spend from just months up to 7 years rearing in freshwater, with most emigrating to the ocean after 1 to 2 years (NMFS 2016). For the first year or two of life, juvenile steelhead are found in cool, fast-flowing permanent streams and rivers where riffles predominate over pools and there is ample cover from riparian vegetation or undercut banks (Moyle 2002 cited in NMFS 2014).

Survey Results

The project site is located along a migratory tributary with a known population of steelhead. Adult steelhead utilize the Yuba River below Englebright Dam as a migratory tributary from August through March and spawn in the lower Yuba River from January through April (YARMT 2013). Steelhead spawning has been reported to primarily occur in the lower Yuba River upstream of Daguerre Point Dam (NMFS 2014).

Steelhead require shallow water with a maximum depth of about 150 cm or 5 feet for spawning and the area where pile driving will occur is in a deeper pool; estimated to be about 6 to 10 feet deep. Data collected on steelhead in the lower Yuba River during 2002, 2003, and 2004 found approximately 98 percent of the redds located upstream of Daguerre Point Dam (USFWS 2007), indicating low likelihood of steelhead spawning occurring within the project site. Juvenile steelhead are known to rear and move downstream within their natal streams year-round (Moyle 2002, YARMT 2013); however, the project site does not contain natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks that are identified as PCEs for steelhead juvenile rearing and survival (65 FR 7764).

Steelhead will not be spawning during the proposed in-water work window of July 16 through August 31. Steelhead juveniles are not expected to hold or rear within the project boundary due to lack of preferred habitat components. Steelhead adults may begin migrating through the portion of the river where the project boundary is located in August (YARMT 2013), but are expected to avoid project activities by utilizing the other side of the Yuba River that will not be affected by in-water pile driving activities.

Southern Distinct Population Segment Green Sturgeon

The Yuba River is designated as critical habitat for Southern Distinct Population Segment (sDPS) green sturgeon by NMFS (74 FR 52300-52351).

The sDPS green sturgeon (referred to from here on as green sturgeon) is an anadromous species that utilizes riverine, estuarine, and marine habitats along the west coast and is unique in having a mostly cartilaginous skeleton and having scute covering their bodies rather than scales. The green sturgeon is differentiated from the North American white sturgeon (*Acipenser transmontanus*) through several morphological differences, the most notable of which being its olive green coloring (NMFS 2018). The sDPS of green sturgeon spawns in the Sacramento River basin, distinguishing it from the Northern Distinct Population Segment which spawns in the Rogue River in Oregon and the Klamath River in northern California. Green sturgeon are large, long-lived, and reach maturity at around 15 years of age (Van Eenennaam *et al.* 2006). Adult and juvenile green sturgeons require open areas for foraging at night and dark, deep pools or complex structures during the day.

Survey Results

Despite the critical habitat designation made in 2009, green sturgeon were not reliably detected within the lower Yuba River below Daguerre Point Dam until recently. The Daguerre Point Dam, upstream of the project site, acts as a barrier for green sturgeon and is acknowledged to limit the distribution of the species within the upper reaches of the Yuba River (74 FR 52300). Green sturgeon have been observed in the lower Yuba River downstream of Daguerre Point Dam and spawning immediately below Daguerre Point Dam has been documented as recently as 2018 (NMFS 2018). The exact location of confirmed spawning activities within the Yuba River has not been disclosed. Green sturgeon spawn in the Sacramento and Feather Rivers primarily from April through early July, in deep pools averaging 8 to 9 meters in depth (Wyman et al. 2018 cited in NMFS 2018). Post-spawn fish may hold for several months before outmigration. Green sturgeon larvae are suspected to remain near spawning habitat; however, distribution can extend approximately 100 km (60 miles) downstream from spawning habitats during high flow years (NMFS 2018). Green sturgeon juvenile individuals are present within the Yuba River year-round (YARMT 2013). Green sturgeon require pools 5 meters (16.4 feet) or deeper for adult or subadult holding (74 FR 52300).

Based on the stream morphology within the project site, which indicates a pool depth between 6 to 10 feet during the summer, the water is not deep enough to support green sturgeon spawning or holding activity in the project site where Project activities will take place. Green sturgeon individuals may occur incidentally within the project site, however, they are not expected to spawn or hold within the project site and will not be migrating through the project site during planned in-water pile driving (July 16 through August 31).

Project Impacts to Listed Anadromous Fish Species

Construction will take place during the dry season (April 1 to October 15), with an in-water work window of July 16 to August 31. During this time period, green sturgeon are not expected to be spawning or migrating within the lower Yuba River, and steelhead and Chinook salmon are not expected to be spawning or incubating within the lower Yuba River.

Green sturgeon, steelhead, and Chinook salmon individuals are expected to be present with the lower Yuba River where Project activities will take place; however, individuals are not likely to

suffer physical injury or behavioral effects by pile driving activities as they are expected to swim or move away from in-water work activities. The opposite side of the river will be unaffected by pile driving activities, including bio-acoustical effects, and will provide a safe corridor for anadromous fish species passage. The installation of piles within the Yuba River may cause sedimentation, however, sedimentation will only occur at the time of the action and is not expected to exceed the level of sedimentation that may occur during normal stormwater events.

A fish screen that complies with NMFS *1997 Fish Screening Criteria for Anadromous Salmonids* will be fitted to the pumping system, and the future operational effects of the pump system are not expected to adversely affect fish species. The operation of the irrigation pump will not produce acoustic levels exceeding effective quiet (150db). There will be no indirect effects that will cause physical injury or behavioral effects to listed anadromous fish species or adversely affect migration patterns or juvenile foraging behavior and refuge areas for listed anadromous fish species.

With the implementation of Mitigation Measure 4.1, potential impacts to Chinook salmon, steelhead, or green sturgeon as a result of the proposed project will be less than significant.

Mitigation Measure 4.1 Anadromous Fish Species

The following are avoidance and minimization measures recommended in order to avoid and minimize impacts to listed anadromous fish species and their associated critical habitat:

- In-water construction activities within the Yuba River, including pile driving, shall be limited to a work window of July 16 to August 31 during daylight hours.
- Piles shall be installed using equipment that will most efficiently reduce acoustical effects underwater so as to not exceed acoustical thresholds for salmon (i.e. 183 dB). The project proponent proposes the use of a vibratory hammer for pile driving.
- Pile driving shall only occur during daylight hours to allow 'noise refugia' and time for fish to migrate out of or past the area of Project noise occurrence. There shall be non-work periods of at least eight hours at night to allow quiet migration conditions for anadromous fish.
- All riparian vegetation to be removed as a result of project activities will be restored onsite to pre-project conditions.
- Channel disturbance shall be kept to a minimum during construction activities within the channel and only occur within designated areas.
- Any large woody debris (i.e dead trunk or branch diameter >6 inches in diameter) that is removed during construction should be placed back into the active Yuba River.
- An erosion control plan that incorporates erosion Best Management Practices (BMPs) shall be created and implemented prior to the wet season (October 15 – April 1) in order to avoid sediment from entering into the waters of the U.S.
- Best Management Practices shall be implemented that are necessary to minimize the risk of sedimentation, turbidity, and hazardous material spills. Applicable BMPs will include permanent and temporary erosion control measures, including use of straw bales, mulch or wattles, silt fences, filter fabric, spill remediation material such as absorbent booms, and ultimately seeding and revegetating.

- All fueling and/or equipment maintenance shall occur 250 feet from all water bodies and riparian areas, except for pile drivers or other stationary equipment, and a spill prevention plan (SPP) and cleanup will be created and implemented if a spill or equipment leak occurs during construction activities. Any spill within the active channel of the Yuba River will be reported to NMFS, CDFW, and other appropriate resource agencies within 48 hours.
- A spill prevention plan (SPP) and storm water pollution prevention plan (SWPPP) shall be developed and implemented by the contractor. Spill prevention measures will include stockpiling absorbent booms, staging hazardous materials at least 25 feet away from the river, and maintaining and checking construction equipment to prevent fuel and lubrication leaks. SWPPP measures will utilize applicable BMPs such as use of silt fences, straw bales, other methods necessary to minimize storm water discharge associated with construction activities.
- The contractor should have absorbent booms available within 250 feet of the live channel during all in channel work to be further prepared for quick containment of any spills within or adjacent to the Yuba River.

Compensatory Mitigation

No compensatory mitigation is proposed in regards to listed anadromous fish species, as all impacts will be less than significant with the implementation of avoidance and minimization measures; however, through the permitting process compensatory mitigation may be required by NMFS or CDFW.

Chinook Salmon, Steelhead, and Green Sturgeon Critical Habitat

The Yuba River is designated as critical habitat for California CVSR Chinook salmon, CV steelhead, and sDPS green sturgeon by NMFS (70 FR 52488-52627, 74 FR 52300-52351). The ESA requires that critical habitat be designated for all species listed under the ESA. Critical habitat is designated for areas that provide essential habitat elements that enable a species survival and which are occupied by the species during the species listing under the ESA. Areas outside of the species range of occupancy during the time of its listing can also be determined as critical habitat if the agency decides that the area is essential to the conservation of the species.

Project Impacts to Anadromous Fish Species Critical Habitat

There will be direct impacts to anadromous fish (green sturgeon, steelhead, and Chinook salmon) critical habitat. A total of 0.0012 acres of riverine habitat will be permanently displaced with the installation of the irrigation pumping system. This pumping system is replacing a preexisting pumping system that was located approximately 100 yards downstream from the current proposed project location. The proposed project will not impede fish movement or adversely affect overall rearing habitat.

Overall impacts to critical habitat for anadromous fish are considered minimal in comparison to available designated critical habitat. There is approximately 3,466 miles of riverine habitat designated for CVSR Chinook and CCV steelhead (70 FR 52488). Of the approximate 3,466 miles of designated critical habitat for Chinook salmon and steelhead, the Project will impact approximately 14.8 linear feet (0.003 miles). This equates to a total of 0.0000009% impacts to Chinook and steelhead critical habitat from the proposed Project. There is 320 miles of freshwater riverine habitat designated for the sDPS green sturgeon (74 FR 52300). Of the 320

miles of designated critical habitat for green sturgeon, the Project will impact approximately 14.8 feet (0.003 miles). This equates to a total of 0.000009% impacts to green sturgeon critical habitat from the proposed project.

The implementation of avoidance and minimization measures contained within Mitigation Measure 4.1 will reduce effects to critical habitat during construction to a less than significant impact with mitigation.

Compensatory Mitigation

No compensatory mitigation is proposed in regards to listed anadromous fish species critical habitat, as all impacts will be less than significant with the implementation of avoidance and minimization measures; however, through the permitting process mitigation may be required by NMFS.

Migratory Birds

Nesting birds are protected under the Migratory Bird Treaty Act (MBTA, 16 USC 703) and the CFGC (3503). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance has the potential to affect bird species protected by the MBTA.

The CFGC (§3503.5) states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto". Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto".

Survey Results

There is suitable nesting habitat for a variety of ground, shrub, and tree nesting avian species within the project site. A pre-construction survey is recommended prior to construction activities to determine potential locations of active avian species nests within or in close proximity of the project site.

Project Impacts

With the implementation of Mitigation Measure 4.2, impacts to avian species of special concern or avian species protected under the MBTA and CFGC will be less than significant.

Mitigation Measure 4.2 Migratory Birds

To avoid impacts to avian species of special concern or avian species protected under the MBTA and the CFGC, the following avoidance and minimization measures are recommended:

- Grubbing and vegetation removal shall be initiated outside of the bird nesting season (February 1 – August 15).
- If grubbing and vegetation removal cannot be initiated outside of the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 250 feet of the project site, where accessible, within 7 days of starting Project activities.
- If an active nest (i.e. containing egg(s) or young) is observed within the project site or in an area adjacent to the project site where impacts could occur, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist based on the species, nest type and tolerance to disturbance. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored by a qualified biologist once per week.

- If construction activities stop for more than 10 days, then another migratory bird and raptor survey shall be conducted within 7 days prior to the continuation of construction activities.
- All staging and construction activity will be limited to designated areas within the project site and designated routes for construction equipment shall be established in order to limit disturbance to the surrounding area.

b), c) *Less Than Significant with Mitigation* – The Yuba River qualifies as Waters of the United States within the project boundary. No wetlands were found to occur within the project boundary. There are approximately 0.02 acres of traditionally navigable waters within the project boundary; however, the US Army Corps of Engineers (USACE) has not issued a jurisdictional determination, so acreages of jurisdictional Waters of the US under the Clean Water Act (CWA) are approximate until verified by the USACE.

The USACE regulates the discharge of dredged or fill material into waters of the United States under the CWA. Waters of the US includes a range of wet environments such as lakes, rivers, streams (including intermittent), mudflats, sandflats, wetlands (including vernal pools and swales), sloughs and wet meadows. The proposed project would be required to obtain approval from the USACE per §404 of the Clean Water Act. Project approval from the USACE is indicative of adherence to that agency's "no net loss" policy for Waters of the US.

The Clean Water Act (§401) mandates acquisition of water quality certification and authorization for placement of dredged or fill material in Waters of the United States. In accordance with §401, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. The project would be required to obtain §401 water quality certification from the Central Valley Regional Water Quality Control Board (RWQCB) as a condition of §404 permit acquisition.

Pursuant to §1602 of the CFGC, the project must comply with the Streambed Alteration Agreement requirements established by the CDFW. The performance standards of the CDFW's Streambed Alteration Agreement program ensure less than significant potential riparian impacts relative to the CFGC. In addition, as described in this study, the performance standards of the USACE ensure the retention of native vegetation to the maximum extent and adequate mitigation for any unavoidable impacts to riparian vegetation.

Project Impacts

Approximately 0.0012 acres of permanent impacts to jurisdictional waters are anticipated due to the placement of the pump structure below the ordinary high water mark of the Yuba River.

A small amount of riparian vegetation will be removed as a result of project activities and will be restored to pre-project conditions.

Mitigation Measure 4.3 Wetlands and §404, §401, and §1602 Compliance

All waters and aquatic features that may be impacted by the project shall be avoided during construction activities to the greatest extent practicable. To ensure the adequate mitigation of all unavoidable impacts, the following shall be required:

1. The proponent shall enter into consultation with the USACE. A §404 permit will be obtained before any filling, dredging or modification of jurisdictional waters can occur. The permit will be conditional and will contain minimization and mitigation measures developed through consultation with the USACE.
2. The proponent shall enter into consultation with the RWQCB. A §401 permit will be obtained before any discharges of dredged or fill material to Waters of the United States occur including wetlands and other water bodies.
3. Per §1602 of the CFGC, the applicant shall enter into consultation with the CDFW. A Streambed Alteration Agreement will be obtained before in-stream construction activities commence. If required, the agreement would contain site-specific minimization and mitigation measures identified through consultation with the CDFW.

Compensatory Mitigation

Compensatory mitigation for impacts to water resources are not proposed due to less than significant impacts of less than one-tenth of an acre; however, this is subject to modification during the permitting process pending review by USACE and RWQCB.

Per Mitigation Measure 4.1, all riparian vegetation to be disturbed as a result of project activities will be restored onsite to pre-project conditions and will ensure that the loss of riparian vegetation is reduced to a less than significant level. Compensatory mitigation for impacts to riparian habitat are not proposed due to less than significant impacts; however, this is subject to modification during the permitting process pending review by CDFW.

d) *Less Than Significant with Mitigation* – As described in sections 4a)-b), there will be no modifications to the Yuba River that will impede salmonid movement or adversely affect overall holding and spawning habitat. Migratory bird species with potential to occur in the project site may use the site for local migration or nursery sites, however they have the ability to disperse from the area during construction activities and/or be screened for absence during pre-construction surveys. Upon completion, there will be no new barriers to native residents or migratory wildlife species. With the implementation of mitigation measures 4.1, 4.2, 4.3, there will be less than significant impact.

e) *No Impact:* The project would not conflict with any local policies or ordinances protecting biological resources.

f) *No Impact:* The project would not conflict with any approved conservation plans relevant to the area that will be affected.

V. CULTURAL RESOURCES **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion/Conclusion/Mitigation:

Gallaway Enterprises conducted a Cultural Resource Assessment for the Yuba River Pump Station Project (Project) consisting of an approximately ±0.16-acre project boundary located within unincorporated Yuba County, California, off of Dantoni Road on the southern bank of the Yuba River (Figure 1). The Project site is located within the US Geological Survey (USGS) Yuba City Quadrangle in the New Helvetia Land Grant approximately within Section 4, Township 15N, Range 4E.

The cultural resource assessment consists of an archival records search, a pedestrian survey of the entire Project and Native American outreach. This cultural resource investigation was designed to identify any cultural resources that occur within the Project and potential eligibility for the National Register of Historic Places (NRHP) and/or California Register of Historical Resources (CRHR). Additionally, this report is designed to assess potential impacts to any historic properties that occur within the Project.

Project Location and Environment

To access the site from the Sacramento area, take I-5 N/State Hwy 99 to Redding/Yuba City. Merge onto CA-99 North to Yuba City/Marysville. Merge onto CA-70 North to Marysville/Oroville. Take exit 18B and turn left onto Lindhurst Avenue then turn right onto North Beale Road. From North Beale Road turn left onto Hammonton Smartsville Road then stay straight to continue on Simpson Lane. Turn right onto Simpson Dantoni Road. Continue on Dantoni Road for approximately 1.8 miles. The Project site is accessed via farm roads off of Dantoni Road (See Figure 1).

The Project site is located in the northern Sacramento Valley in unincorporated Yuba County, just northeast of Marysville, California. The site is located along the southern bank of the Yuba River and is composed of disturbed barren and annual grassland along a narrow access road, a narrow disturbed riparian zone along the bank of the Yuba River and river cobble within the riverine habitat. The access road occurs within and adjacent to the southeastern boundary of the Project site. The portion of the Yuba River within the Project site had a steep bank. Prior to the January site visit, the minimal amount of vegetation present along the portion of the bank in the Project boundary had been removed. The main bed of the Yuba River continues to the

north/northwest of the Project site and agricultural land surrounds the remaining portions of the Project site.

The average annual precipitation is 20.96 inches and the average annual temperature is 62.15° F (Western Regional Climate Center 2019) in the region where the Project site is located. The Project site occurs at an elevation of approximately 87 feet above sea level. The site is sloped between 0 and 80 percent. Soils within the site were sands with a restrictive layer occurring more than 80 inches deep.

Native American Consultation

Native American outreach for this Project was conducted to elicit knowledge or concern of potential cultural resources that could be affected by the Project undertaking. A letter was sent to the NAHC Commission on January 8, 2019 requesting a sacred lands search and a contact list of Native American parties with interest or ties to the Project site. The sacred lands search identifies any sacred sites, or burials known within the Project site. The search returned no listed sites within the Project APE.

The contact list identified several tribes with potential concerns with the Project site. All parties were informed, by letter sent January 9, 2019, of the Project undertaking and location so that they may contribute any information regarding sites or areas of cultural significance within the APE and voice any concerns. Follow up calls were made by Gallaway Enterprises on February 1, 2019.

Gallaway Enterprises received a response via email on January 24, 2019 from Cherilyn Neider, of the United Auburn Indian Community. Ms. Neider requested the contact information for the Lead agency as well as a copy of the completed cultural resource assessment. Additionally, as a result of the follow up phone calls, Mr. Coney of the Tsi Akim Maidu expressed no concerns with the project and Ms. Lopez, Chairperson of the Konkow Valley Band of Maidu, asked to receive the original notification letter sent on the 9th of January via email.

CULTURAL CONTEXT

Ethnography

The APE is located in the traditional territory of the Nisenan who occupied the Yuba, Bear, and American River, and the lower drainages of the Feather River. The Nisenan are part of the Penutian linguistic family and have been divided into three dialects, the Northern Hill Nisenan, the Southern Hill Nisenan, and the Valley Nisenan (Wilson and Towne 1978; Kroeber 1925). Nisenan territory was bounded to the west by the west bank of the Sacramento River, to the east by the crest of the Sierra Nevada and the boundary to the south a few miles south of the American.

Nisenan settlements were concentrated along the rivers that ran through their territory. Villages were placed along ridges or higher land along the waterway. Villages ranged from 15-25 people living in a village to 500 people in a single village. Each village had a headman and during large important occasions such as group hunts, major decision making, and ceremony, one headman would take leadership over a larger territory.

Valley Nisenan lived in villages ranging from 3- 7 houses to upwards of 40 – 50 houses. Valley Nisenan houses were done shaped and 10 – 15 ft. across. Framework consisted of poles covered in grass or tule reed mats and earth. Dance houses were found in larger villages and were semi subterranean structures. Hill Nisenan houses were cone shaped structures covered in bark and skins. Other buildings common in Nisenan villages were sweathouses and acorn granaries. Subsistence consisted of hunting, gathering, and fishing. Acorn gathering was a communal activity taking place in extended family networks or by entire villages. Berries, native fruits, wild onion, sweet potato, garlic, carrot, grasses and herbs were all foraged for. Large game consisted of deer, elk, black bear, and wildcats. Small games such as rabbits were often hunted by traps, snares, and nets. Fishing was done through the use of canoes, nets, harpoons, traps, and gorgehooks and fresh water clams and mussels were also collected along the larger rivers (Wilson and Towne 1978).

Along with above mentioned technology, tools included knives, arrows, spears, clubs, scrapers, pestle and mortar. Baskets were used for storage, cooking, traps, cradles, cages, and seed beaters. Baskets were usually created by senior women during winter months and designs were often a reddish brown color and valued by composition and accuracy. Baskets were made from willow, redbud, hazel shoots, and roots of yellow pine.

The first expedition into Nisenan territory is recorded as in 1808 when Gabriel Moraga crossed into Nisenan territory. By the 1820s the Hudson Bay Company trappers began to trap and camp in Nisenan territory. In 1833 with the epidemic that swept through the Sacramento valley, entire Nisenan villages were wiped out. As much as 75% of the population was decimated by the epidemic, leaving little population to resist the onslaught of settlers who would flock to the region in the coming years. As the number of settlers increased with the gold rush and following settlements, the Hill Nisenan, who had largely been previously little affected were now hunted and forced out of their territory (Wilson and Towne 1978).

Prehistory

Archaeological data has shown human occupation in California, including the Sacramento Valley, for at least the past 10,000–12,000 years. Due to the varied environmental conditions throughout California, technological adaptations are greatly varied both geographically and temporally. The following cultural chronology has been synthesized from work by Moratto (1984), and Rosenthal, White, and Sutton (2007). The prehistory of this region is defined in five major periods, the Paleo-Indian, Lower Archaic, Middle Archaic, Upper Archaic, and Emergent.

The Paleo-Indian Period (11,500 BC–8550 BC) – Represented by relatively few known sites. Sites are located along the shores of large lakes. Traditionally, Paleo-Indian subsistence and land use has been tied to the hunting. Fluted projectile points and concave base points.

The Lower Archaic Period (8550 BC–5550 BC) - Generally, drier conditions prevailed bringing about a reduction in the size and number of large pluvial lakes. Subsistence focus shifted to the consumption of plant foods. Assemblages represented by stemmed points, chipped stone crescents, and other flaked stone. Valley floor assemblages also seem to vary from the Coast Range foothills where unlike the absence of milling implements in valley floor assemblages, the

Coast Range Foothills sites often contain accumulations of milling slabs, hand stones, and other milling implements.

The Middle Archaic Period (5550 BC– 550 BC) – this period is represented by a marked change in environmental temperature to a warmer drier climate resulting in the declines of lakes throughout the region. Along with the shrinking of lakes came the birth of the Sacramento- San Joaquin Delta. Research done on this period has led to the identification of two settlement-subsistence adaptations, those being the foothills and valley floor adaptations. Foothill Traditions are marked by expedient cobble-based pounding, chopping, scraping, and mulling tools. Assemblages are composed of flaked and ground stone tools. Valley Traditions assemblages are rare in number especially compared to those associated with the foothill tradition. The assemblages of this tradition are marked by increasing year round settlement along the river corridors of the Sacramento and San Joaquin Rivers marked by an archaeological assemblage of specialized tools and trade objects.

Upper Archaic Period (550 BC–1100 AD) - Upper Archaic environmental conditions are marked by cooler, wetter weather, and a more stable climate. Archaeological assemblages represent more cultural diversity evidenced by differences in burials and material cultures. Bone tools, beads, ceremonial blades, polished ground stone plummets are all common in this period. Substantial village settlements evidenced by mound sites in the region.

Emergent Period (1000 AD– Historic) – The emergent period is marked by the Sweetwater and Shasta Complexes in the northern Sacramento Valley. This period is also representative of the most substantial artifact assemblage. Several technological and social changes distinguish this period. The bow and arrow were introduced. Territorial boundaries between groups became well established and settlement patterns were highly sedentary. Exchange of goods between groups is more regular with more resources, including raw materials, entering into the exchange networks. During the latter years of this period, large-scale European settlement began to greatly impact traditional Native American lifeways.

Historic

The project lies in Yuba County northeast of Marysville. Yuba County was one of the original counties founded in the State of California, formed in 1850.The earliest explorations by Europeans in the Sacramento valley area were by a few Spanish explorations, incursions by American traders from east of the Sierra, and Mission recruitment expeditions as early as the 1770s. These early expeditions proved devastating to the Native American population. These expeditions were devastating due to the hostilities of mission recruitment, and through the introduction and spread of non-native diseases (Delay 1924; Arsenault et. al. 2018).

Prior to the formation of the state of California, the territory that would become Yuba County was administered by the Spanish and later Mexican governments. A number of land grants were issued by the Mexican government to encourage settlement throughout Northern California. The project is located in a portion of the New Helvetia Land Grant; a land grant issued the Mexican government to John Sutter in 1841. The New Helvetia Land Grant spanned 48,839 acres and encompassed lands that would become part of Sacramento, Sutter, and Yuba Counties.

In addition to the acquisition of land grants in the area, the influx in population of the area is attributed to the discovery of gold and the Homestead Act of 1862. At the time of the 1849 Gold Rush, the native presence in the Sacramento Valley had been all but decimated. Hydraulic and hard rock mining were introduced to the region in the early 1850s as miners pressed to extract more gold from the region. Hydraulic mining produced gold via access to older placer deposits along river terraces and became the primary means of gold extraction in the Sacramento Valley in the 1850s. Eventually, hydraulic mining destroyed river bars along the Yuba River (Mehls et al. 2011; Holliday 1999).

With the rise of mining in the region, came the rise of local communities surrounding these efforts and mining is one of the main attributing factors to the settlement and development of the region. Agricultural production in the area increased as the need to supply mining populations grew. Marysville, southwest of the project APE, became a center for trade for northern mines. Marysville, incorporated in 1851, quickly grew mirroring the rapid boom of the mining industry. In the 1860s came a shift from mining to agriculture and ranching. With the completion of the California and Oregon and California Pacific railroad lines to Marysville in 1869 and 1870, Marysville aided in the development of the Sacramento Valley. Increased population in the region spurred on the arrival of the Central Pacific Railroad.

With the arrival of the railroad, agricultural goods could also be produced for export to the wider California and National economies. Flood plains and raised uplands adjacent to local waterways, such as the Yuba River, provided prime agricultural lands suitable for farming. Later, the Central Valley Project (CVP) in the early 1930s provided a great amount of job opportunities during the Great Depression throughout the Sacramento Valley region promoting large scale, high profit agriculture. Irrigation along the Central Valley expanded and by 1955 millions of acres of land was being irrigated (Holliday 1999).

The Project APE lies adjacent to the access road for the South Yuba Levee and adjacent fields. Portions of the South Yuba Levee are believed to have been constructed in 1876, with construction beginning south of Marysville. The levee first appears in the area of the APE in topographical maps on the 1952 Yuba City 7.5' quad map (Kraft and White 2002). The current alignment of the levee and access road first appear on the 1974 Yuba City topographical map.

METHODS

Archival Research

A record search at the North Central Information Center (NCIC) at California State University, Sacramento, was performed by NCIC staff, on January 10, 2019. The search included all previously recorded cultural resources and reports within a ½ mile radius of the Project. The record search was conducted to determine if any portion of the Project has been previously surveyed and if any cultural resources have been previously recorded within the Project. In addition to the record search and various historical maps, topographic quadrangles, land grants, and patents, Gallaway Enterprises reviewed the following resources:

- National Register of Historic Places (NRHP)
- California Register of Historic Resources (CRHR)

- General Land Office Plat maps and land patents
- Historic United States Geological Survey (USGS) topographic maps

Field Methods
An intensive-level pedestrian survey was conducted on January 10, 2019 by Gallaway Enterprises archaeologist Catherine Davis, M.A., RPA. Due to the small size of the APE, the entire APE was surveyed by foot to identify presence or absence of historic resources and to evaluate the significance of any identified archaeological resources.

RESULTS

Archival Research Results
The record search from the NCIC returned a negative result for cultural resources within the project APE and two cultural resources within half a mile of the APE. Two cultural resource assessments have been recorded within a half mile buffer of the project APE and no cultural resource assessments have been recorded within any portion of the APE.

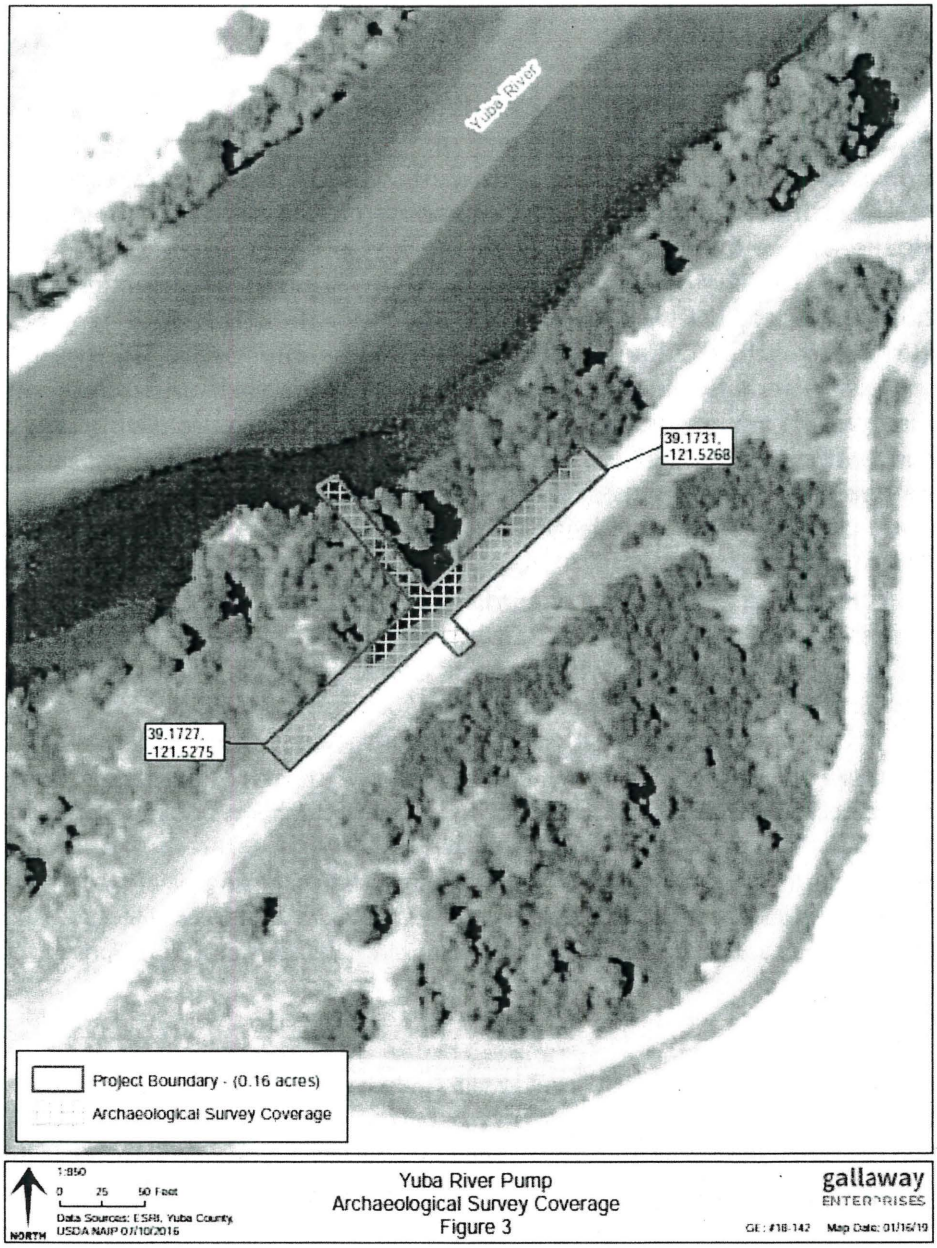
Of the recorded resources within a half mile of the project APE, one consists of a historic portion of the South Yuba Levee. The levee runs along the southern bank of this portion of the Yuba River and the levee was recorded as part of assessment completed in 2002 by CSU, Chico Department of Anthropology. The historic portions of the South Yuba Levee are recorded as occurring to the southwest and northeast of the APE. The portion of levee east of the project was not recorded as a portion of the historic levee. The second cultural resource recorded within half a mile of the APE was a recorded as a historic isolate north of the Yuba River.

No resources were listed on the NRHP or the CRHR within the project APE. Additional archival research indicates the APE lies on a portion of the bank of the Yuba River that once abutted the South Yuba Levee. The area south of the APE was first converted to agriculture between 1934 and 1952. The levee referred to as the South Yuba Levee also first appears on USGS Marysville topographical map in 1952. The original alignment of the levee runs directly adjacent to the project APE. First indications of a change in the alignment directly south of the project APE occurs in the 1974 Yuba City USGS topographical. The existing levee south of the project APE is currently in the same alignment as it appears in the 1974 Yuba City topographical map. The portion of the level that once abutted the APE now serves as an access road. Archival research indicates no structure was ever present within the APE.

Survey Results
On January 10, 2019 Catherine Davis, M.A., RPA conducted an intensive level pedestrian survey of the entire Project (see Figure 3). The pedestrian survey was designed to survey for and record any cultural resources present in the Project. Ground visibility was excellent and the weather was clear and sunny. Groundcover throughout the APE was primarily open grassland and river cobble. Vegetation within the APE had been removed prior to the survey. Ground disturbance was visible within the planned staging area. The bank had a steep slope into the Yuba River and the bank of the river within the APE was covered in river cobbles. No debris was observed within the bank of the river within the APE.

One site was recorded within APE due to the amount of historic period artifacts present during the pedestrian survey. No prehistoric resources were observed during the survey. Historic period artifacts included a can scatter containing one pull tab beverage can, dating no earlier than 1964. In addition to the can scatter, the historic era debris included cobalt blue fiesta ware fragments (1936–1951), fragments of a mug with the Baker Hart & Stuart's popular "Blue Goose" pattern, circa 1980s, specifically a Barth & Dreyfuss brand, carried by Mervyns of California. Also present in the scatter was a post 1980s typewriter and several small shards of clear glass. Dates of the historic debris align with the appearance of agricultural fields within the area and appear to be debris discarded along the access road throughout its use.

Figure 3: Archeological Survey Coverage



CONCLUSIONS

a) b) *Less Than Significant With Mitigation Incorporated* – The pedestrian survey resulted in a finding of one cultural resource present within the Project. A record search at the NCIC resulted in no previously recorded cultural resources within the Project APE. GE-19001 is recommended not eligible for the national register or California register. In consideration of these findings, Gallaway Enterprises proposes the Project would not impact any historic properties. Field work and the corresponding record search are not infallible and the previously described research and field methods are not designed to test the presence of subsurface remains. In the event of an inadvertent discovery of cultural resources or human remains during Project related activities, Staff recommends the following actions.

Post-Ground Disturbance Site Visit

Mitigation Measure 5.1 A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the applicant shall notify the CEQA lead agency representative of the proposed earthwork start-date, in order to provide the CEQA lead agency representative with time to contact the United Auburn Indian Community (UAIC). A UAIC tribal representative shall be invited to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days of ground breaking activity. During this inspection, a site meeting of construction personnel shall also be held in order to afford the tribal representative the opportunity to provide tribal cultural resources awareness information. If any tribal cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during this initial inspection or during any subsequent construction activities, work shall be suspended within 100 feet of the find, and the project applicant shall immediately notify the CEQA lead agency representative. The project applicant shall coordinate any necessary investigation of the site with a UAIC tribal representative, a qualified archaeologist approved by the City, and as part of the site investigation and resource assessment the archeologist shall consult with the UAIC and provide proper management recommendations should potential impacts to the resources be found by the CEQA lead agency representative to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the CEQA lead agency representative by the qualified archaeologist. Possible management recommendations for tribal cultural resources, historical, or unique archaeological resources could include resource avoidance or, where avoidance is infeasible in light of project design or layout or is unnecessary to avoid significant effects, preservation in place or other measures. The contractor shall implement any measures deemed by CEQA lead agency representative staff to be necessary and feasible to avoid or minimize significant effects to the cultural resources, including the use of a Native American Monitor whenever work is occurring within 100 feet of the find.

Inadvertent Finds

Mitigation Measure 5.2 Should any previously unknown historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable soils, glass, metal, ceramics, wood, privies, trash deposits or similar debris, be discovered during ground disturbing activities, work within 25 feet of these materials should be stopped until a qualified professional archaeologist has an opportunity to

evaluate the potential significance of the find and to consult with the lead agency about what appropriate mitigation would be appropriate to protect the resource.

Human Remains

Mitigation Measure 5.3 In the event that human remains, or possible human remains, are encountered during Project-related ground disturbance, in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, that the remains are not subject to the provisions of §27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in §5097.98 of the Public Resources Code.

Public Resource Code 5097 outlines the protection of Native American cultural resources. Should Native American sites or burials be discovered during Project construction not on federal land, it is necessary to comply with State laws and fall within the jurisdiction of the Native American Heritage Commission (NAHC) (PRC 5097).

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the NAHC within 24 hours. The Commission has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

Implementation of the above Mitigation Measure would reduce potential adverse impacts on uncovered cultural resources. Impacts after mitigation would be less than significant.

c) *No Impact* – No known record exists of any paleontological resources on the project site and no known unique geological features were identified or are known to exist on the project site.

d) *Less Than Significant* – There are no known burial sites within the project site. If human remains are unearthed during construction, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this section, no further disturbance of the remains shall occur until the County Coroner has made the necessary findings as to origin, pursuant to California Public Resources Code Section 5097.98. If the remains are determined to be Native American, the County Coroner shall contact the Native American Heritage Commission within 24 hours.

VI. ENERGY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

DISCUSSION/CONCLUSION/MITIGATION:

a) b) *Less Than Significant* – The proposed project is an electric-powered, turbine-style pump system that would supply water to adjacent kiwifruit for irrigation purposes.

VII. GEOLOGY AND SOILS **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Section 1803.5.3 to 1808.6 of the 2010 California Building Code, creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a

i) *Less Than Significant* - Yuba County 2030 General Plan describes the potential for seismic activity potential within Yuba County as being relatively low and it is not located within a highly active fault zone. No Alquist-Priolo Earthquake Fault Zones are located within the County. The faults that are located within Yuba County are primarily inactive and consist of the Foothills Fault System, running south-southeastward near Loma Rica, Browns Valley and Smartsville. Faults within the Foothill Fault System include Prairie Creek Fault Zone, the Spenceville Fault, and the Swain Ravine Fault.

ii) *Less Than Significant* – Within Yuba County, the Swain Ravine Lineament of the Foothills Fault system is considered a continuation of the Cleveland Hill Fault, the source of the 1975 Oroville earthquake. The Foothill Fault System has not yet been classified as active,

and special seismic zoning was determined not to be necessary by the California Division of Mines and Geology. While special seismic zoning was not determined to be necessary, the Foothill Fault system is considered capable of seismic activity. In addition, the County may experience ground shaking from faults outside the County.

The pump system will be constructed to meet all applicable State of California seismic building codes and design as applicable to the project.

iii) *Less than Significant* – Gallaway Enterprises collected soil data at various pit locations throughout the Project site. Field observations of soil characteristics included soil color, texture, structure, and the visual assessment of soil features (e.g. the presence, or absence of redoximorphic features and the depth of restrictive layers such as hardpans). Gallaway's soil texture evaluations rendered predominately sands. Iron concentrations were found along pore spaces in the soil matrix at varying depths within the surface horizons. The depth of the hand dug soil pits were dug deep enough to determine or rule out the presence/absence of hydric soil indicators.

The geographic region in which the Project site is found is often characterized as having a naturally deep restrictive layer found at a depth of more than 80 inches.

Gallaway queried the National Cooperative Soil Survey database to further evaluate the current soil conditions. One soil map units occur within the Project site. The identified map unit is listed below in Table 1. Based on Gallaway's review, the soil map unit identified within the Project site contains only minor amounts of hydric components (10%) which are typically found within flood plains. Ground failures, such as differential compaction, seismic settlement and liquefaction, occur mainly in areas that have fine-grained soils and clay. The proposed project would not result in liquefaction because no hydric soil indicators were found.

Table 1. Soil Map Units, NRCS hydric soil designation, and approximate totals for the Yuba River Pump Station Project, Yuba County, CA.

Map Unit Symbol	Map Unit Name	% Hydric Component in Map Unit	Landform of Hydric Component	% Map Unit in Survey Area
251	Tujunga sand, 0 to 1 percent slopes, occasionally flooded	10	Flood Plains	100%

iv) *Less Than Significant* – Landslides are most likely to form when the ground is sloped. The Yuba River within the Project site has a steep bank which has been historically used as an access point to the river. The site is sloped between 0 and 80 percent. The proposed project location will be at a 30 percent slope and therefore below the threshold of 60 percent where landslides may occur.

b) *Less Than Significant* –As part of the construction process, projects are required to submit plans for the disposition of surface runoff and erosion control to the County's Public Works Department. In addition, the Feather River Air Quality Management District has standard Mitigation Measures that address earth-disturbing activities. Mitigation Measures in the Air Quality section have incorporated these measures.

c) *Less Than Significant* – The proposed project may be subject to significant hazards associated with landslides, lateral spreading, liquefaction, or collapse because the activities that would be caused from groundwater pumping. A number of avoidance and minimization measures have been identified and will be implemented in the construction planning and operations for this project to reduce the risk of sedimentation, turbidity, and hazardous materials spills to avoid reduction in the value of critical habitat. To avoid and minimize potential effects to water quality, standard erosion Best Management Practices (BMPs) will be applied and implemented, including a spill prevention plan (SPP) and a storm water pollution prevention plan (SWPPP). Prior to commencement of any in-stream construction, a silt screen will be fully established and functioning properly in order to contain any construction related turbidity and suspended sediments.

d) *No Impact* – Expansive soils could cause damage to structures; however, the project will be required to meet all applicable State of California building code requirements.

e) *No Impact* – The project does not propose any residential uses and would not generate any wastewater. No septic systems are proposed.

VIII. GREENHOUSE GAS EMMISSIONS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *Less Than Significant*- Global Warming is a public health and environmental concern around the world. The predominant opinion within the scientific community is that global warming is currently occurring, and that it is being caused and/or accelerated by human activities, primarily the generation of "greenhouse gases" (GHG).

In 2006, the California State Legislature adopted AB32, the California Global Warming Solutions Act of 2006, which aims to reduce greenhouse gas emissions in California. Greenhouse gases, as defined under AB32, include carbon dioxide, methane, nitrous oxide, hydro-fluorocarbons, perfluorcarbons, and sulfur hexafluoride. AB 32 requires that the state's GHG emission be reduced to 1990 levels by 2020.

In 2008, the California Air Resources Board (CARB) adopted the Scoping Plan for AB32. The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020, and requires ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. The Scoping Plan also recommends, but does not require, an emissions reduction goal for local governments of 15% below "current" emissions to be achieved by 2020 (per Scoping Plan current is a point in time between 2005 and 2008). The Scoping Plan also recognized that Senate Bill 375 Sustainable Communities and Climate Protection Act of 2008 (SB 375) is the main action required to obtain the necessary reductions from the land use and transportation sectors in order to achieve the 2020 emissions reduction goals of AB 32.

SB 375 complements AB 32 by reducing GHG emission reductions from the State's transportation sector through land use planning strategies with the goal of more economic and environmentally sustainable (i.e., fewer vehicle miles travelled) communities. SB 375 requires that the ARB establish GHG emission reduction targets for 2020 and 2035 for each of the state's 18 metropolitan planning organizations (MPO). Each MPO must then prepare a plan called a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its SB 375 GHG reduction target through integrated land use, housing, and transportation planning.

The Sacramento Area Council of Governments (SACOG), the MPO for Yuba County, adopted an SCS for the entire SACOG region as part of the 2035 Metropolitan Transportation Plan

(MTP) on April 19, 2012. THE GHG reduction target for the SACOG area is 7 percent per capita by 2020 and 16 percent per capita by 2035 using 2055 levels as the baseline. Further information regarding SACOG's MTP/SCS and climate change can be found at http://www.sacog.org/2035/.

While AB32 and SB375 target specific types of emissions from specific sectors, and ARBs Scoping Plan outlines a set of actions designed to reduce overall GHG emissions it does not provide a GHG significance threshold for individual projects. Air districts around the state have begun articulating region-specific emissions reduction targets to identify the level at which a project may have the potential to conflict with statewide efforts to reduce GHG emissions (establish thresholds). To date, the Feather River Air Quality Management District (FRAQMD) has not adopted a significance threshold for analyzing project generated emissions from plans or development projects or a methodology for analyzing impacts. Rather FRAQMD recommends that local agencies utilize information from the California Air Pollution Control Officers Association (CAPCOA), Attorney General's Office, Cool California, or the California Natural Resource Agency websites when developing GHG evaluations through CEQA.

GHGs are emitted as a result of activities in residential/commercial buildings when electricity and natural gas are used as energy sources. New California buildings must be designed to meet the building energy efficiency standards of Title 24, also known as the California Building Standards Code. Title 24 Part 6 regulates energy uses including space heating and cooling, hot water heating, ventilation, and hard-wired lighting that are intended to help reduce energy consumption and therefore GHG emissions. Building a pump system will not create any new sources of GHG outside of the small emission that would take place during project construction that are within the limits allowed in the Yuba County 2030 General Plan.

Therefore installation of an electric-powered, turbine-style pump system would likely not generate significant GHG emissions that would result in a cumulatively considerable contribution to climate change impacts.

b) No Impact- Yuba County is currently preparing a Resource Efficiency Plan that will address Greenhouse Gas emissions; however there is not a plan in place at this time. The project is consistent with the Air Quality & Climate Change policies within the Public Health & Safety Section of the 2030 General Plan therefore, the project does not conflict with any applicable plan, policy or regulation.

IX. HAZARDS AND HAZARDOUS MATERIALS **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
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 for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *Less than Significant*–Construction equipment typically uses only a minor amount of hazardous materials, primarily motor vehicle fuels and oils. Because of their limited quantity, these materials would present a minor hazard, and only if spillage occurs. Standard spill prevention and control measures will be maintained by the contractor. Use of these materials would cease once project construction is completed.

b) *Less than Significant* – A number of avoidance and minimization measures have been identified and will be implemented in the construction planning and operations for this project to reduce the risk of sedimentation, turbidity, and hazardous materials spills to fishes and to avoid reduction in the value of critical habitat. To avoid and minimize potential effects to fishes related to water quality, standard erosion Best Management Practices (BMPs) will be applied and implemented, including a spill prevention plan (SPP) and a storm water pollution prevention plan (SWPPP). Prior to commencement of any in-stream construction, a silt screen will be fully established and functioning properly in order to contain any construction related turbidity and suspended sediments.

c) *No Impact* – There are no schools located near the project site. As noted in a) above, the only hazardous materials associated with proposed project are motor vehicle fuels and oils which would not present a significant hazard. The project would not include any activities that would generate hazardous material emissions or use acutely hazardous materials.

e) *No Impact*-. The project is proposing a pump along the Yuba River and does not have a land-use element that is inconsistent with the BAFB or Yuba County Airport Land Use Compatibility Plans or base operations. The project site is located within BAFB Safety Zone 6.

d) *No Impact* – The project is not located on a site known for having any hazardous materials.

f) *No Impact* – There are no private airstrips located near the project site. Therefore, the project will not have any potential safety impacts related to private airstrips.

g) *No Impact* – The County is currently developing a Pre-Disaster Multi-Hazard Mitigation Plan (MHMP), in accordance with the Disaster Mitigation Act of 2000, to develop activities and procedures to reduce the risk of loss of life and property damage resulting from natural and man-made hazards and disasters. The 2030 General Plan contains safety and seismic safety policies. The project is not expected to have an impact on any of the County's emergency response plans or policies. The project does not propose any development that would have to evacuate and would not interfere with an emergency evacuation of the area.

h) *No Impact* – The project is not located in a Fire Severity Zone pursuant to CalFire. All heavy equipment used during the construction of the project will be mandated to possess fire extinguishers and all construction personal training to use the fire extinguishers.

X. HYDROLOGY AND WATER QUALITY **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Source:	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *Less Than Significant* – A number of avoidance and minimization measures have been identified and will be implemented in the construction planning and operations for this project to

reduce the risk of sedimentation, turbidity, and hazardous materials spills to avoid reduction in the value of critical habitat. To avoid and minimize potential effects to water quality, standard erosion Best Management Practices (BMPs) will be applied and implemented, including a spill prevention plan (SPP) and a storm water pollution prevention plan (SWPPP). Prior to commencement of any in-stream construction, a silt screen will be fully established and functioning properly in order to contain any construction related turbidity and suspended sediments.

b) *No Impact* – The project will not affect groundwater supplies or interfere with any groundwater recharge. The pump system will draw water directly from the Yuba River and not groundwater supplies.

c) *Less than Significant* – The proposed construction plan would not substantially alter the existing drainage pattern of the site or area. There were indicators of a "drainage pattern" due to water from precipitation sheet flowing down the bank, but no other indicators.

d) *No Impact* – As stated above, the proposed project would not substantially alter the existing drainage pattern of the site. No future development such as the construction or structures or houses is proposed; however a small increase in impervious surfaces would occur. Therefore, flooding is unlikely to be generated by the additional impervious surfaces.

e) *No Impact* – As noted in d) above, the proposed project would not generate higher runoff rates.

f) *No Impact* – The project would not have any effect on water quality other than those impacts discussed above.

g-h) *No Impact* – The project is located within a 100-year flood plain, as mapped by the Federal Emergency Management Agency (FEMA). The project is not placing any housing on the project site, therefore there is no impact. Moreover, the structure will not impede the flow of water because the pump will divert the flows.

i) *Less Than Significant* –The pump is a replacement for the previous owner's pump at a location approximately 100 yards upstream of the old pump structure. The previous pump site location was susceptible to sediment accumulation and flood damage. The new site was chosen to reduce the need for sediment removal and to provide deeper water coverage for the pump and therefore reduce the risk of flooding.

j) *No Impact* – Seiche and tsunami hazards occur only in areas adjacent to a large body of water. The project site is not located in such an area. There are no steep slopes in the project area; the landslide potential of the project site is minimal and the mudflow hazard is minimal.

XI. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation

a) *No Impact* – The project site consists of the installation of an electric-powered, turbine-style pump system and associated fish screen on the Yuba River and is located in a rural area and there would be no change in land use. The project would not physically divide an established community.

b) *No Impact* – The Yuba County General Plan designates the project site as Rural Community. The project site is surrounded by properties zoned "AE-80" Exclusive Agricultural 80 Acres Minimum and meets all the requirements and intents for this zone. No rezoning to accommodate the project is required. The project is consistent with the current General Plan policies and zoning designations.

c) *No Impact* – As discussed in the Biological Resources section, no habitat conservation plans or similar plans currently apply to the project site. Both Yuba and Sutter Counties recently ended participation in a joint Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The project site was not located within the proposed boundaries of the former plan and no conservation strategies have been proposed to date which would be in conflict with the project.

XII. MINERAL RESOURCES **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) and b) *No Impact* – Exhibit GS-5, Mineral Resource Locations, of the Yuba County 2030 General Plan Geology and Soils Background Report, identify known and expected mineral resources within Yuba County, respectively. The project site is not located with an active mining area or a mineral resource zone in Exhibit GS-5. Moreover, the Delineation of Jurisdictional Waters of the United State Report prepared by Gallaway Enterprises indicates no soil of value will be lost. The project is expected to have no impact on mineral resources.

XIII. NOISE **Would the project result in:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *Less Than Significant* – The Yuba County 2030 General Plan contains recommended ambient allowable noise level objectives. The plan recommends a maximum allowable ambient noise level of 50 dB in both daytime and evening hours. Temporary construction noise associated with project construction would be minimal and be conducted solely during daylight hours. During construction, noise levels are expected to remain well below these thresholds of significance. After construction is complete, noise levels will drop to existing levels.

To avoid and minimize acoustic effects to fishes, pile driving activities will only occur during daylight hours followed by non-work periods of at least eight hours at night to allow quiet migration conditions for anadromous fishes. This will allow substantial periods of noise refugia during the evening and at night when migration is most likely to occur. Piles will be installed using a vibratory hammer to most efficiently reduce acoustic effects underwater so as to not exceed the acoustical thresholds for salmon. Underwater sound pressures are not expected to exceed the acoustical thresholds for salmon (206 dB).

b) *No Impact* – Primary sources of groundborne vibrations include heavy vehicle traffic on roadways and railroad traffic. There are no railroad tracks near the project site. Traffic on

roadways in the area would include very few heavy vehicles, as no land uses that may require them are in the vicinity.

c) *Less Than Significant* – The pump will consist of a single 18-inch diameter metal pipe, approximately 70 feet long. The pipe will be installed within a 30-inch conductor pipe that will be approximately 50-feet long. The conductor pipe will be mounted on twelve 8-inch piles that will be driven 40 feet deep (or to refusal) using a crane suspended vibratory hammer. Appropriate noise attenuation methods will be used during the driving of the piles.

d) *Less Than Significant* – Construction activities associated with the project may cause a temporary increase in noise levels in the vicinity. However, these noise levels would be temporary and would cease once construction activities end. In addition, the temporary construction noise associated with grading activities would be similar to noise generated by other rural residential activities. There are few residences on the surrounding parcels and construction noise is expected to have little impact on these parcels. The County noise ordinance requires that both agriculture and low- density residential zones not exceed an ambient noise level of 50 decibels from 10:00 pm to 7:00 am. This would further reduce construction noise impacts on the few residences adjacent to the project site, particularly at nighttime when residents are most sensitive to noise.

e) *No Impact* – The nearest airport to the project site is the Beale Air Force Base (BAFB) Airport. The property is located within BAFB Safety Zone 6, the farthest zone from but the existing and future land use will not change as a result of this project and the project would not expose people residing or working in the project area to excessive noise levels.

c) *No Impact* – The project site is not located within the vicinity of a private airstrip.

XIV. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *No Impact* – The project does not include the construction of homes or any infrastructure that would be required to foster population growth near the project area; therefore, there would be no increase in population.

b-c) *No Impact* – The project does not include the demolition of any housing; therefore it would not displace any housing or people and would not require the construction of replacement housing.

XV. PUBLIC SERVICES **Would the project result in:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *No Impact* – The proposed project does not include the construction of any housing or land uses that would require a change or increase in fire protection. There would be no impact on fire protection services.

b) *No Impact* – The Yuba County Sheriff's Department would continue to provide law enforcement services to the project site. The proposed project does not include the construction of any housing or land uses that would result in a change or increase in the demand for law enforcement.

c) *No Impact* – The proposed project does not include the construction of any housing and would not generate any students. The project would not increase the demand on school districts.

d) *No Impact* – The proposed project does not include the construction of housing and would not generate an increased demand for parks.

e) *No Impact* – Other public facilities that are typically affected by development projects include the Yuba County Library and County roads. However, since there is no development proposed by the project, there would be no increased demand for these services. The temporary traffic generated by construction activities would not generate any additional roadway maintenance.

XVI. RECREATION **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a-b) *No Impact* – The proposed project does not include the construction of any housing and therefore would not increase the demand for parks or recreational facilities. The project also does not include the construction of any new recreational facilities.

XVII. TRANSPORTATION/TRAFFIC **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) Less Than Significant – The proposed project would generate a temporary increase in traffic during construction. It is expected that the roadway can accommodate the temporary increase in traffic during construction. The project would not significantly increase traffic in the area. However, there could be upwards to a fifteen-minute traffic delay during construction activities.

b) *Less Than Significant* – The location of the pump station will be accessed from a private road from Dantoni Road. Very minimum traffic will occur and therefore will not increase the level of service (LOS) on Dantoni Road. Temporary traffic associated with project construction will only be temporary and will not result in any permanent change to the current LOS rating for Dantoni Road.

c) *No Impact* – As noted in the Hazards and Hazardous Materials section, the project site is located within BAFB Safety Zone 6. The use is allowed in the BAFB Land Use Compatibility Plan, and therefore the project would have no influence on flight patterns.

d) *Less Than Significant* – Dantoni Road is an existing road that currently provides access to the project site. Dantoni Road is used by the surrounding rural community and for traffic traveling through the unincorporated community of Dantoni. Dantoni Road would be used by construction equipment accessing the project site; however, there would be no substantial increase in hazards due to this temporary use of the road.

e) *No Impact* – Emergency access to the project site would be via Danotni Road. There would be no change in emergency access as a result of the project.

f) *No Impact* – The County has not adopted alternative transportation plans for this area of Yuba County.

XVIII. TRIBAL CULTURAL RESOURCES **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion/Conclusion/Mitigation:

a) (i-ii) *Less Than Significant with Mitigation Incorporated* – The County was contacted by the United Auburn Indian Community (UAIC) on May 10, 2019 requesting formal notification and information on proposed projects for which the County will serve as the lead agency under the California Environmental Quality Act (CEQA) in accordance with Public Resources Code Section 21080.3.1 subd. (b), otherwise known as Assembly Bill 52 (AB 52). Before receiving the UAIC request, the County had previously started the formal consultation process on April 18, 2019 as formal notification was provided to the UAIC, including all project information documents. The County received a response from UAIC requesting copies of any cultural resource surveys and/or cultural resource assessments performed as part of the project and a copy of the environmental document. On May 17, 2019, UAIC did not request a field visit to address potential concerns related to cultural sensitivities for this project. However, they requested to add Mitigation Measure 5.1 to allow a UAIC representative to visit the site once ground disturbing work has started. While there were no resources identified in the APE during the survey, there is an expressed concern that there may be subsurface resources in the APE. Additionally, although the record search did not reveal any resources within the immediate vicinity of the project area, oral histories tell of three village sites around the project area. A post-ground disturbance visit would allow a UAIC representative to check subsurface soils in the APE and then appropriately treat any finds. Please let me know if I can provide any additional information on the concerns and the attached measure.

With mitigation measure **Mitigation Measure 5.1, Mitigation Measure 5.2, and Mitigation Measure 5.3** in the event of the accidental discovery or recognition of tribal cultural resources in

the project area the impact upon tribal cultural resources would be ***less than significant impact with mitigation incorporated.***

XIX. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion/Conclusion/Mitigation:

a) *No Impact* – The project does not propose the construction of any structures that would generate wastewater.

b) *Less Than Significant* – The project does not result in the construction of new water or wastewater facility. The project does not require the use or wastewater treatment facilities. The project is a pump system that will supply existing water from the Yuba River into the adjacent kiwifruit orchard.

c) *Less Than Significant* – As discussed in the Hydrology and Water Quality section, there would be little increase in impervious surfaces as a result of the project; therefore, the project would minimally increase runoff.

d) *Less Than Significant* – As discussed earlier, the pump will draw water directly from the Yuba River for delivery to adjacent kiwifruit for the purpose of irrigation and frost protection. The

pump will draw frost water typically during the late winter and early spring between January and March; however, it may be used as early as November if conditions necessitate. The pump may be used as needed for irrigation purposes between March and October. A maximum flow of approximately 13.5 cfs (6,000 gallons per minute) will be diverted through this proposed pump.

e) *No Impact* – The project does not require the use of water or wastewater treatment facilities.

f-g) *No Impact* – The project is not anticipated to result in the generation of any solid waste.

XX. WILDFIRE **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including down slope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

DISCUSSION/CONCLUSION/MITIGATION:

a,b,c,d) *Less than Significant* – The project is a pump facility project that is intended to replace a structurally deficient pump facility that will water to the adjacent kiwi field. The project would not prevent occupants or emergency services from utilizing Dantoni Road. Project related impacts to the adopted emergency response plan and emergency evacuation plan would be less than significant.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Does the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to 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, 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?	☐	☒	☐	☐
b) 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)?	☐	☒	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion/Conclusion/Mitigation:

a) *Less Than Significant With Mitigation Incorporated* – As discussed in the Biological and Cultural Resources sections, construction associated with the project could potentially have impacts on cultural resources, and to small animal and bird species as discussed in both sections. Proposed mitigation measures would lessen the impact this project would have on both biological and cultural resources.

b) *Less Than Significant Impact with Mitigation Incorporated* – Construction of the project, in combination with other proposed projects in the adjacent area, may contribute to air quality impacts that are cumulatively considerable. However, when compared with the thresholds in the Air Quality section, the project would not have a cumulatively significant impact on air quality.

The project is consistent with the Yuba County 2030 General Plan land use designation for the project site and the zoning for the project site. With the identified Mitigation Measures

Mitigation Measure 3.1 in place, cumulative impacts would be less than significant. No other cumulative impacts associated with this project have been identified.

c) *Less Than Significant Impact with Mitigation Incorporated* – Due to the nature and size of the proposed project, no substantial adverse effects on humans are expected. The project would not emit substantial amounts of air pollutants, including hazardous materials. The project would not expose residents to flooding. The one potential human health effects identified as a result of project implementation were minor construction-related impacts, mainly dust that could affect the few scattered residences near the project site. These effects are temporary in nature and subject to Feather River Air Quality Management District's Standard Mitigation Measures that would reduce these emissions to a level that would not be considered a significant impact.

REFERENCES

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