DRAFT INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION
FOR THE
GRIDLEY BOAT LAUNCH IMPROVEMENT PROJECT

CITY OF GRIDLEY
685 KENTUCKY STREET
GRIDLEY, CA 96948

OCTOBER 2009

Prepared by:

PMC

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Prepared for:

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685 KENTUCKY STREET
GRIDLEY, CA 96948
(530) 846-3631

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OCTOBER 2009

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1.0 Introduction

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study, which provides justification for the City of Gridley to adopt a Mitigated Negative Declaration for the Gridley Boat Ramp Improvement Project (proposed project). The Mitigated Negative Declaration has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 *et seq*., and the State CEQA Guidelines, 14 California Code Regulations Section 15000 *et seq*.

An Initial Study is conducted by a Lead Agency to determine if a project may have a significant effect on the environment. In accordance with CEQA Guidelines Section 15064, an EIR must be prepared if an Initial Study indicates that the proposed project may have a significant effect on the environment. A Mitigated Negative Declaration is a written statement prepared by the Lead Agency describing the reasons why the proposed project would not have a significant effect on the environment, and therefore would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a Mitigated Negative Declaration shall be prepared for a project subject to CEQA when:

b) The initial study identifies potentially significant effects, but:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and

(2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on the criteria above, the City of Gridley serves as the lead agency for the proposed Gridley Boat Launch Improvement Project.

1.3 DOCUMENT ORGANIZATION

This document is divided into the following sections:

1.0 Introduction - This section provides an introduction and describes the purpose and organization of this document.

2.0 Project Information - This section provides general information regarding the project including the project title, lead agency and address, contact person, brief description of the project location, general plan land use designations, zoning designation, identification of surrounding land uses, and identification of other public agencies whose review, approval, and/or permits that may be required. Also provided is a checklist of the

environmental factors that are potentially affected by the project. Finally, this section provides the environmental determination for the project, identifying that a mitigated negative declaration will be prepared for the project.

3.0 Project Description - This section provides a detailed description of the proposed project and identifies, if agreeable, project alternatives considered and not selected.

4.0 Environmental Checklist - This section describes the environmental setting/overview for each of the environmental subject areas, evaluates a range of impacts classified as "no impact," "less than significant," "less than significant with mitigation incorporated," and "potentially significant" in response to the environmental checklist. Each environmental checklist question is discussed and analyzed. Where appropriate, mitigation measures are identified to mitigate potentially significant impacts to a less than significant level.

Section 4.0 contains the following environmental issue subsections as well as the CEQA Mandatory Findings of Significance:

1. Aesthetics
2. Agricultural Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Geology and Soils
7. Hazards and Hazardous Materials
8. Hydrology and Water Quality
9. Land Use and Planning
10. Mineral Resources
11. Noise
12. Population, Housing and Environmental Justice
13. Public Services
14. Recreation
15. Transportation/Traffic
16. Utilities and Service Systems

Each environmental issue subsection is organized as follows:

The **Overview** summarizes the existing conditions at the regional, sub-regional and local level as appropriate, and identifies applicable plans and technical information for the particular issue area.

The **Checklist Discussion/Analysis** provides a detailed discussion of each of the environmental issue checklist questions. The level of significance for each topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this initial study:

- **No Impact:** No project-related impact to the environment would occur with project development.
- **Less than Significant Impact:** The impact would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.
- **Less than Significant with Mitigation Incorporated:** An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382). However, the incorporation of mitigation

measures would reduce the project-related impact to a less than significant level.

- **Potentially Significant Impact:** An impact that is "potentially significant" as described above, but for which mitigation measures cannot be immediately suggested or the effectiveness of potential mitigation measures cannot be determined with certainty. In such cases, an EIR is required.

Where appropriate, a **Mitigation Measures** section is included that lists mitigation measures for impacts identified as "Less than Significant with Mitigation Incorporated." These measures are designed to avoid, minimize, rectify, compensate for, reduce or eliminate identified potential impacts.

The **Conclusions** section summarizes the potential impacts and mitigation measures of the project on an environmental issue. If mitigation measures are recommended, the potential impacts after the implementation of these measures are assessed.

5.0 Special Studies and References - This section lists all the special studies and other documents either used or referred to in the Initial Study, and persons consulted during preparation of this document.

2.0 Project Information

Project Title:	Gridley Boat Launch Improvement Project
Lead Agency Name and Address:	City of Gridley 685 Kentucky Street Gridley, CA 95948
Contact Person and Phone Number:	Andrea Redamonti Community Development Director (530) 846-3631
Project Location:	Section 4, Township 17 N, Range 3 E, Mount Diablo Base & Meridian, Gridley CA Quad map (Latitude 39°21'43.61"N, Longitude 121°38'18.60"W); adjacent to the City's existing wastewater treatment plant (APN 024-220-023).
Project Sponsor's Name and Address:	City of Gridley 685 Kentucky Street Gridley, CA 96948
General Plan Designation:	Industrial (M)
Zoning:	General Industrial (M-2)
Summary of Project: (See also Section 3.0, Project Description)	The project involves the improvement of the existing City-owned and operated boat launch facility located on the Feather River. The project includes: replacement of the boat launch; construction of additional parking and improved vehicle access; installation of restrooms; and extension of power, water and sewer to serve the facility.
Surrounding Land Uses and Setting:	The project is adjacent to the City's wastewater treatment plant, the Feather River and is surrounded by orchard and field crops.
Other agencies whose approval is required: (e.g. permits, financing approval, or participation agreement)	A 404 permit from the U.S. Army Corps of Engineers, a 401 permit from the CA Water Quality Control Board, a National Pollutant Discharge Elimination System permit from the Central Valley Regional Water Quality Control Board. Permit and approval by the California Department of Boating and Waterways may be necessary.

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is reduced to less than significant through the use of a mitigation measure as indicated by the checklist on the following pages.

☐ Aesthetics	☒ Hazards/Hazardous Materials	☐ Public Services
☐ Agricultural Resources	☐ Hydrology/Water Quality	☒ Recreation
☒ Air Quality	☐ Land Use and Planning	☐ Transportation/Circulation
☒ Biological Resources	☐ Mineral Resources	☐ Utilities and Service Systems
☒ Cultural Resources	☐ Noise	☒ Mandatory Findings of Significance
☒ Geology and Soils	☐ Population, Housing, Environmental Justice	

CEQA Determination

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

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

☐ I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "less than significant impact after mitigation." 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, there WILL NOT be a significant effect in this case because all potentially significant effects a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

October 2, 2009

Andrea Redamonti
Community Development Director

DATE

3.0 Project Description

3.1 PROJECT LOCATION AND OBJECTIVES

The City of Gridley is located along Highway 99 in southern Butte County in Northern California, approximately 30 miles south of the City of Chico and approximately 60 miles northeast of the City of Sacramento. The project is located east of the City, outside the City limits, on the Feather River, and adjacent to the City's wastewater treatment plant.

The City of Gridley owns and maintains an existing day-use boat launch facility, at the project site, accessed via East Gridley Road, on the east bank of the Feather River. The project consists of improvements to, and expansion of, the existing facility which is located in Sections 3 and 4, Township 17 North, Range 3 west, Mount Diablo Base and Meridian, Gridley CA quad [Latitude 39°21'43.61"N, Longitude 121°38'18.60"W]. **Figure 3.0-1, Project Location**.

The existing boat launch facility includes a small day-use area (including picnic tables and fish cleaning station), a boat ramp and limited parking. Access is via a paved road which is gated. Public use is allowed by individual permits, which are available at City Hall. The project objective is to improve the existing recreational access to the Feather River.

3.2 PROJECT FEATURES

The proposed project consists of improvements to the City's existing boat ramp which includes the following: (1) new boat launch facility, (2) a new parking area, (3) restrooms and associated lift station, (4) fish cleaning station, (5) drainage and erosion control measures, (6) extension of utilities to serve the project (**Figure 3.0-2, Site Plan**). The existing access road from East Gridley Road will remain as the access for the boat launch facility.

Project improvements will require removal and disposal of the following existing features: existing concrete boat launch ramp; access road asphalt concrete; existing concrete curb; existing fish cleaning stating; two existing lights, light poles and concrete light pole foundations. The existing water pipe located west of the north-south main line will be capped and left in place.

The project will also result in the removal of approximately 30 trees. Seven (7) cottonwood trees and 25 eucalyptus trees will be removed to accommodate the new parking lot.

BOAT LAUNCH FACILITY

The project includes the installation of a combination cast in-place/pre-cast concrete boat ramp that will extend into the river below low water elevation. Five floating docks will be installed on the southeast edge of the boat ramp and will be secured by steel piles.

PARKING AREA

The parking area will be improved to include a looped access to the boat ramp with a turn-around area and 25 new parking spaces, 8 of which are located in an island and 17 of which are located along the eastern edge of the parking lot. Parking spaces consist of 22 new car/trailer spaces, 2 new handicapped access car/trailer spaces and one new single car space.

RESTROOMS AND LIFT STATION

New prefabricated restrooms will be installed between the parking area and the boat turn-around. Sewer lines, and a new pump station, will be installed to service the restrooms. A 4-inch sewer pipe will be installed to connect the restrooms with the proposed lift station, and discharge sewer pipe will connect the lift station with the City's existing wastewater treatment plant, located adjacent to and east of the proposed project. Power will be extended from existing on-site sources to operate the lift station.

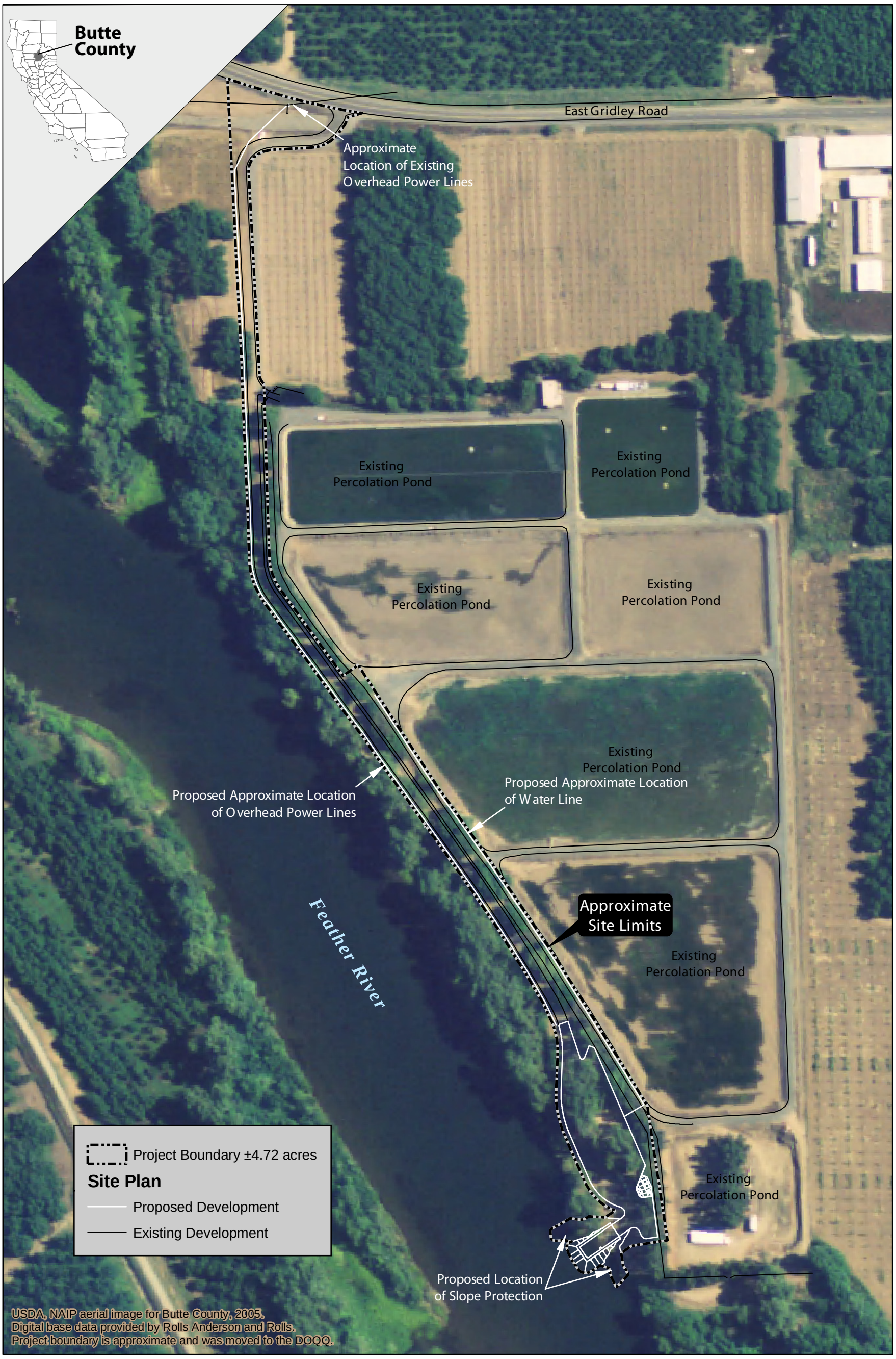
FISH CLEANING STATION

A new fish cleaning station will be installed to replace the existing station, which will be removed. The new facility will include a sink, counter and two faucets located under a roof structure. The fish cleaning station will drain to the new lift station and ultimately to the wastewater treatment plant.

DRAINAGE AND EROSION CONTROL MEASURES

Drainage and erosion control measures will include approximately 400 lineal feet of biofiltration swale along the west edge of the parking lot. The biofiltration swale will be seeded with native grass mixture and watered until grass cover is grown.

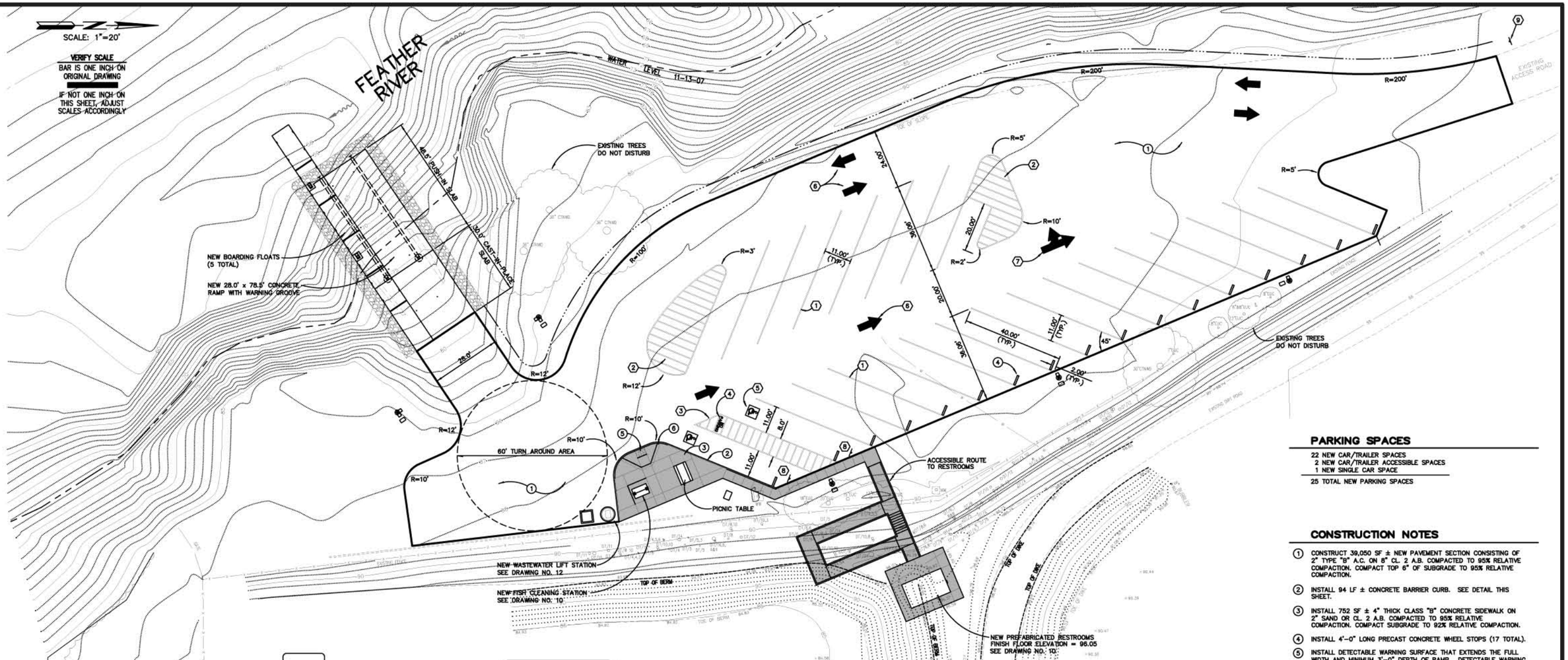
The project will include rock slope stabilization both upstream and downstream of the boat ramp in order to reduce erosion. Rock slope protection will be constructed to extend below the average high water level. Riprap will be installed at the toe of the boat ramp within the high water level. The City will obtain all necessary permits for construction within the high water level.



Source: Foothill Associates, 2009

Figure 3.0-1
Project Location

PMC



PARKING SPACES

22 NEW CAR/TRAILER SPACES
2 NEW CAR/TRAILER ACCESSIBLE SPACES
1 NEW SINGLE CAR SPACE

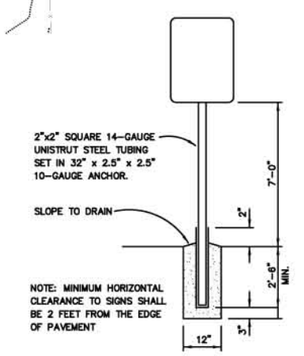
25 TOTAL NEW PARKING SPACES

CONSTRUCTION NOTES

1. CONSTRUCT 39,050 SF ± NEW PAVEMENT SECTION CONSISTING OF 2" TYPE "B" A.C. ON 8" CL. 2 A.B. COMPACTED TO 95% RELATIVE COMPACTION. COMPACT TOP 6" OF SUBGRADE TO 95% RELATIVE COMPACTION.
2. INSTALL 94 LF ± CONCRETE BARRIER CURB. SEE DETAIL THIS SHEET.
3. INSTALL 752 SF ± 4" THICK CLASS "B" CONCRETE SIDEWALK ON 2" SAND OR CL. 2 A.B. COMPACTED TO 95% RELATIVE COMPACTION. COMPACT SUBGRADE TO 92% RELATIVE COMPACTION.
4. INSTALL 4'-0" LONG PRECAST CONCRETE WHEEL STOPS (17 TOTAL).
5. INSTALL DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH AND MINIMUM 3'-0" DEPTH OF RAMP. DETECTABLE WARNING SURFACE SHALL CONFORM TO THE DETAILS SHOWN ON CITY OF GRIDLEY STANDARD NO. S22.
6. SIDEWALK ADJACENT TO THE TOP OF RAMPS SHALL HAVE A 12" WIDE GROOVED BORDER STRIP WITH 1/4" GROOVES AT 3/4" O.C. SEE GROOVED BORDER DETAIL ON CITY OF GRIDLEY STANDARD NO. S22.

PAVEMENT MARKINGS AND SIGNAGE

1. PAINT 4" WIDE WHITE PARKING STALL DELINEATOR STRIPES AS SHOWN (1,102 LF TOTAL).
2. PAINT 4" WIDE WHITE PARKING ISLAND DELINEATOR STRIPES WITH 4" WIDE WHITE CROSSHATCH STRIPES AT 3'-0" ON CENTER.
3. PAINT 4" WIDE WHITE BORDER STRIPE AROUND HANDICAPPED LOADING AREA WITH 4" WIDE WHITE CROSSHATCH STRIPES AT 3'-0" ON CENTER.
4. PAINT THE WORDS "NO PARKING" IN 12-INCH HIGH LETTERS.
5. PAINT HANDICAPPED PAVEMENT SYMBOL IN ACCORDANCE WITH CALIFORNIA BUILDING CODE SECTION 1129B.4 AND FIGURE 11B-18A (TWO TOTAL).
6. PAINT TYPE I ARROW (10'-0") PER CALTRANS STD. A24A (6 TOTAL).
7. PAINT TYPE VII(L) ARROW PER CALTRANS STD. A24A.
8. INSTALL 70 SQUARE INCH ACCESSIBILITY SIGNS PER CALIFORNIA BUILDING CODE SECTION 1129B.4 (2 TOTAL), MOUNT A "VAN ACCESSIBLE" SIGN BELOW THE ACCESSIBILITY SIGN ON THE NORTHERLY SIGN POST.
9. INSTALL SIGN (R100B). SEE DETAIL THIS SHEET.



NOTE: MINIMUM HORIZONTAL CLEARANCE TO SIGNS SHALL BE 2 FEET FROM THE EDGE OF PAVEMENT

SIGN POST DETAIL

NO SCALE

UNAUTHORIZED VEHICLES NOT DISPLAYING DISTINGUISHING PLACARDS OR LICENSE PLATES ISSUED FOR DISABLED PERSONS WILL BE TOWED AWAY AT OWNER'S EXPENSE

TOWED VEHICLES MAY BE RECLAIMED AT (Address)

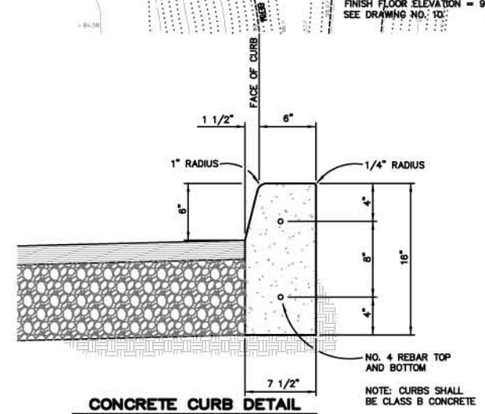
OR BY TELEPHONING (Telephone Number)

STANDARD 1'-6" x 2'-0"

NOTE: ADDRESS AND TELEPHONE NUMBER SHALL BE OBTAINED FROM THE CITY OF GRIDLEY

SIGN (R100B) DETAIL

NO SCALE



NOTE: CURBS SHALL BE CLASS B CONCRETE

CONCRETE CURB DETAIL

NO SCALE

REGISTERED PROFESSIONAL ENGINEER BRUCE A. NASH No. 33381 Exp. 06-30-10 CIVIL State of California

Source: Rolls Anderson & Rolls, 2009

FIGURE 3.0-2
SITE PLAN

PMC

EXTENSION OF UTILITIES

The project includes the extension of City water and sewer to the site and includes the relocation of power poles and power lines on-site. 473 linear feet of sewer pressure main will be installed, extending from the proposed restrooms and lift station, south and east to the City's existing wastewater treatment plant. 255 linear feet of water pipe will be installed to service the fish cleaning station and to provide potable water to the day use area. Water will be extended from the City's existing 2-inch water line located east of the project, along the fence line between the project and the wastewater treatment plant.

Electricity exists on-site and is located underground. Electricity will be extended from this existing line to service the proposed sewer lift station and area lighting. The project will include removal of the two existing light poles and lights, and will replace them with two new lights, approximately 25 feet in height, to be located on either side of the boat ramp. Two existing water meter boxes and one electric box will be salvaged.

The existing fence between the wastewater treatment plant and the boat ramp area will remain.

3.3 PROJECT CONSTRUCTION

CONSTRUCTION TIMING

It is proposed that construction of the boat launch improvements will begin in the fall of 2009 and continue until the fall of 2010.

CONSTRUCTION METHODS

Construction will consist of demolition of the existing facilities and removal of existing asphalt concrete rip-rap materials along the river bank. Construction of new facilities will include vegetation removal, trenching to install water and sewer pipes, paving, and extension of above ground electrical service. A pre-cast concrete boat launch facility, boarding floats, dock piles and slope protection will be installed within the Feather River below the high water elevation.

STAGING AREAS

During construction, it is contemplated that the City will stage construction equipment and materials on the project parcel, which is owned by the City. The parcel the project is located on extends to the north to East Gridley Road. Portions of this parcel are vacant while portions are in active agriculture. No permanent work would be done at staging areas. The only activities that would occur on these sites would be for staging, storage, fueling, and maintenance of equipment. All deliveries and activities in these staging area would occur during normal business hours and would be structured so that they would not substantially obstruct traffic or affect noise levels. No hazardous or

flammable materials would be stored at the site in unsecured locations. Only authorized project staff would be allowed on the site.

3.4 PROJECT APPROVALS

This project as proposed requires the disturbance of land and therefore may be subject to a NPDES Stormwater Pollution Prevention Permit from the Regional Water Quality Control Board if greater than one acre of land is disturbed as a result of the project.

Additionally the project will be required to obtain a 401 permit from the U.S. Army Corps of Engineers for work within Waters of the U.S. and a Streambed Alteration Agreement from the California Department of Fish and Game.

The project may require an encroachment permit from Butte County for construction within the County road right-of-ways.

3.5 RELATIONSHIP OF PROJECT TO OTHER PLANS

CITY OF GRIDLEY GENERAL PLAN

The City's General Plan contains the following policies and implementation programs relating to the boat launch improvements:

Goals

Open Space B.1 Provide outdoor recreation areas adequate to meet local needs.

Policies

Open Space B.1.1 Encourage retention of existing areas of natural vegetation which provide significant wildlife habitat and recreation opportunities, while recognizing that safety may require some existing ditches to be pipes.

Open Space B.1.2 Maintain public access to the Feather River at the City's wastewater treatment plant site to the extent possible.

BASIN PLAN FOR THE CENTRAL VALLEY REGION

The City of Gridley and the project site is located within the Feather River Basin, which is under the jurisdiction of the Regional Water Quality Control Board, Central Valley Region. In 1998, the RWQCB adopted the fourth edition of the *Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region*. The *Basin Plan* defines existing and potential beneficial uses of surface and groundwaters in the Sacramento River Basin, including the Feather River Basin, and sets forth water quality objectives for these waters.

The boat launch improvement project is located within the Feather River watershed, which ultimately flows to the Sacramento River. Existing or potential beneficial uses of the Feather River and the Sacramento River include municipal and domestic water supply, power generation, recreation, cold freshwater habitat, spawning habitat and wildlife habitat. The water quality objectives include standards for bacteria, chemical constituents, color, dissolved oxygen, pH, sediment and suspended materials, temperature and turbidity (*Basin Plan*).

AIR QUALITY MANAGEMENT PLAN

Butte County is located within the Northern Sacramento Valley Air Basin. Also included in the Air Basin are Shasta, Tehama, Glenn, Colusa, Yuba and Sutter Counties. These counties have adopted a uniform air quality attainment plan, which was updated in 2006. The California Clean Air Act of 1988 requires each air pollution control district and air quality management district to attain and maintain California's ambient air quality standards. The Air Quality Element of both the Gridley and Butte County General Plans identify goals, objectives, policies and implementation strategies for air quality. The Butte County Air Quality Management District (BCAQMD) is the local authority for implementing and enforcing air quality programs. These measures would apply to construction-related emissions as well as to emissions related to project operations.

3.6 SCOPE OF DOCUMENT

The project has been designed to avoid or minimize the significant environmental impacts associated with construction and operation of the project. For some of the environmental impacts that have been identified as being potentially significant, mitigation measures are outlined in this document. These mitigation measures would reduce the environmental impacts to levels that are less than significant. As a result, the project is expected to meet the standards for a Mitigated Negative Declaration pursuant to the California Environmental Quality Act.

4.0 Environmental Checklist

EVALUATION OF ENVIRONMENTAL IMPACTS

The project impact on the environmental setting is identified in a checklist format that reviews 16 environmental issues and areas of concern. Each of the questions in the checklist was reviewed for the proposed project and all phases of the project are reviewed: approval, construction and operation. The following explains the methodology for the responses in the checklist.

1) A brief explanation is provided for all answers except "No Impact" answers. No impact answers are supported by the information sources cited 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 is 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 a project-specific screening analysis). The "No Impact" answer may also be explained through reference to the project itself (e.g. the project involves the extension of utilities within a road right of way and will not affect previously undisturbed lands). "No Impact" means that no project-related impact to the environment would occur with project development.
2) All answers take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) "Potentially Significant Impact" is appropriate if there is "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382). If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required. The test for significance for a specific impact is based on Appendix G Significant Effects of the California Environmental Quality Act Guidelines. In some cases the test for significance may be based on community standards adopted in a General or Specific Plan, ordinance, resolution or other instrument of the community. When these standards are applied they will be referenced in the appropriate section of the checklist.
4) "Less than Significant Impact With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced the project related impact from "Potentially Significant Impact" to a "Less than Significant Impact." The mitigation measure is described and a brief explanation of how the measure(s) will reduce the impact to a less than significant level is provided. Occasionally, federal, state and city standards may be referenced or listed as mitigation. The listing of a specific section of federal or state law or the municipal code does not excuse the project from the remainder of the applicable law or codes.
5) Earlier environmental 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. CEQA Guidelines §15063(c)(3)(D).
6) All references to a previously prepared or outside document will include a reference to the page or pages where the statement is substantiated. Section 5.0 will identify the source and a location where the material may be reviewed. Individuals contacted in preparation of the initial study are also listed in Section 5.0.

The following checklist is based on Appendix G from the 1998 version of the CEQA Guidelines. The City of Gridley reserves the right to modify the checklist to meet local needs.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
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 that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

OVERVIEW:

The City of Gridley is located within the northeastern extent of the Sacramento Valley, in the southwest portion of Butte County. The City is located approximately 2 miles west of the Feather River with the Northern Sierra Nevada foothills to the east. West of the City is the Sacramento River Valley rising to the Coast Ranges. The Sutter Buttes, which are located southwest of Gridley, are visible throughout most areas of the City.

Trees and other riparian vegetation are found along the banks of the Feather River. The Feather River, associated riparian areas and the adjacent agricultural fields are the most scenic portion of the project area. The City's wastewater treatment plant is located immediately to the east of the project. No scenic roadways are identified within the project area.

The project will result in the removal of seven cottonwood trees between 24 and 30 inches diameter at breast height (dbh). The project will also result in the removal of eucalyptus trees, a non-native species to California.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project would involve improvements to the existing City-owned and maintained boat launch facility. Although the project has been designed to reduce potential tree removal, cottonwood and eucalyptus trees will need to be removed in order to accommodate the larger parking area for the boat launch facility. Since the project is located in an area of dense vegetation, and tree removal will be located approximately one-fourth mile from East Gridley Road, the City considers this impact to be **less than significant.**

b) See a) above. **Less than significant.**

c) See a) above. The removal of trees at the project area would have a **less than significant** impact on the visual character of the project area.

d) The project involves the installation of three new area lights and replacement of two existing area lights. All lights will be a maximum of 25 feet high and will be shielded to direct light to the immediate area. The nearest residence is approximately one-quarter mile from the project area, and dense riparian vegetation within the project area will provide additional shielding to any on-site lighting; therefore, day or nighttime views in the area would not be adversely affected. **Less than significant.**

CONCLUSIONS RELATING TO AESTHETICS:

The proposed project will have a **less than significant** impact on aesthetics and visual resources within the project vicinity.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURE 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

OVERVIEW:

The project is surrounded by the unincorporated area of Butte County, though the boat ramp is owned and operated by the City of Gridley. The area surrounding the facility is utilized for agricultural purposes and is cultivated in orchard and row crops. Most of the land surrounding Gridley is open space and agricultural land.

The California Department of Conservation manages a Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland. The classification of farmland as Prime Farmland, Unique Farmland and Farmland of Statewide Importance is based upon the suitability of soils for agricultural production, as determined by a soil survey conducted by the Natural Resource Conservation Service (NRCS). An FMMP map has been prepared for Butte County, including the Gridley area, and was last updated in 2006.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project consists of improvements to the City's existing boat ramp. The project is bound to the east by the existing wastewater treatment plant, to the south and west by the Feather River. Although the project will expand the parking area for the boat ramp the project is entirely within an area mapped as Urban and Built-Up Land by the FMMP (CDC, FMMP, 2008). Therefore, there is **no impact** to important farmlands as identified by the Department of Conservation.

b) See a) above. The project site is not under any Williamson Act contract. **No impact.**

c) See a) above. The project would not result in the conversion of any farmland. **No impact.**

CONCLUSIONS RELATING TO AGRICULTURAL RESOURCES:

The project would have **no impact** on agricultural resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. 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:				
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 in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

OVERVIEW:

The climate of the project area is characterized by hot, dry summers and cool, wet winters. During the summer months from mid-April to mid-October, significant precipitation is unlikely. Temperatures during the summer range from daily maximums approaching 100 degrees Fahrenheit to evening lows in the high 50s and low 60s. During the winter, high temperatures are typically in the 60s with low temperatures in the 30s.Wind direction is primarily north-south, due to the channeling effect of the mountains on each side of the valley. During the summer months, surface air movement is from the south, particularly during the afternoon hours. During the winter months, wind direction is more variable.

The environmental conditions of Butte County contribute to adverse air quality. The basin area traps pollutants between two mountain ranges to the east and the west. This problem is sometimes exacerbated by a temperature inversion layer that traps air at lower levels below an overlying layer of warmer air.

Butte County has been designated as a nonattainment area for state and federal standards for ozone particulate matter (PM10). Butte County was designated as an attainment or unclassified area for all other state and federal ambient air quality standards.

The Butte County Air Quality Management District (BCAQMD) monitors air quality within the County, and it serves as the lead agency responsible for implementing and enforcing federal, state, and County air quality regulations. The primary source of air pollution within the NSVAB is motor vehicles, although some pollution can be attributed to the seasonal burning of agricultural fields and dust from agricultural operations.

In response to pollutants emitted from motor vehicles, the state legislature adopted the California Clean Air Act, which requires local air districts to develop measures to reduce emissions from mobile sources. The BCAQMD has adopted the Indirect Source Review Guidelines (ISR Guidelines) to reduce emissions resulting from vehicular activity and to identify mitigation strategies for new development projects that affect air quality.

Federal Air Quality Regulation

Under the Federal Clean Air Act of 1970, the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for several air pollutants, referred to as "criteria pollutants." The six criteria pollutants are ozone (O_3), carbon monoxide (CO), inhalable particulate matter (PM_{10}), nitrogen oxides (NO_x), sulfur dioxide (SO_2), and lead. The specific standards are based on medical evidence that indicates that exposure to certain air pollutants is harmful to public health. The ambient standards are two-tiered; primary standards are designed to protect public health, while secondary standards are designed to protect the environment (e.g., damage to vegetation or property). Recently, the EPA issued new standards for ozone and for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$).

Butte County has been designated an "Attainment" area for three out of five federal ambient air quality standards (NO_2, SO_2, and PM_{10}). The County has also been designated a "Transitional Non-attainment" for O_3 and a "Moderate Non-attainment" for CO.

State Air Quality Regulation

In 1988, California passed the California Clean Air Act (CCAA). Like its federal counterpart, the CCAA establishes ambient air quality standards. The state standards differ from the federal standards in two ways: (1) the state standards are more stringent; and (2) the state list of criteria pollutants includes: sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility reducing particles. As with federal standards, California standards are keyed to certain averaging periods. The California Air Resources Board (CARB) is responsible for establishing air quality standards. The CARB also regulates mobile emission sources and oversees the activities of the air pollution control districts (APCDs) and the air quality management districts (AQMDs).

According to state air quality standards Butte County has been designated an "Attainment" area for CO, NO_2, and SO_2. It was also designated a "Moderate Non-attainment" for O_3 and a "Non-Attainment" for PM_{10}.

Climate Change

Human activities are exerting a major and growing influence on climate by changing the composition of the atmosphere and by modifying the land surface. Particularly, the increased consumption of fossil fuels (natural gas, coal, gasoline, etc.) has substantially increased atmospheric levels of greenhouse gases. Measured atmospheric levels of certain greenhouse gases such as carbon dioxide, methane, and nitrous oxide have risen substantially in recent decades. This increase in atmospheric levels of greenhouse gases unnaturally enhances the "greenhouse effect" by trapping more infrared radiation as it rebounds from the Earth's surface and thus trapping more heat near the Earth's surface. Eleven of the last 12 years rank among the hottest years on record (since 1850, when reliable worldwide temperature measurements began). Most of the warming in recent decades is likely the result of human activities. Other aspects of the climate are also changing such as rainfall patterns, snow and ice cover, and sea level.

Climate change is a global problem, and greenhouse gases (GHGs) are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Worldwide, California is the 12th to 16th largest emitter of CO_2, and is responsible for approximately two percent of the world's CO_2 emissions. In 2004, California produced 492 million gross metric tons of carbon dioxide-equivalent.

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs the California Air Resources Board (ARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

While AB 32 requires ARB to develop thresholds of significance for GHGs by the end of 2008, no air district in California has identified either a significance threshold for GHG emissions or a methodology for analyzing air quality impacts related to greenhouse gas emissions at this time. The state has identified 1990 emission levels as a goal through adoption of AB 32. To meet this goal, California would need to generate lower levels of GHG emissions than current levels. However, no standards have yet been adopted quantifying 1990 emission targets. It is

recognized that for most projects there is no simple metric available to determine if a single project would help or hinder meeting the AB 32 emission goals.

In 2003, an updated Air Quality Attainment Plan was prepared for the Northern Sacramento Valley Air Basin (NSVAB). This plan applies to Butte County, as it is part of the Basin. The plan proposes rules and regulations that would limit the amount of emissions of ozone, in accordance with the 1997 State Implementation Plan (SIP) for ozone. Since the proposed upgrading of wastewater treatment infrastructure, including the installation of a new diesel generator for emergency power source, and sewer pipe replacement would not emit any pollutants, nor would any new traffic be created as a result of the project, it would not affect the objectives of the plan.

Project Emissions

The proposed project air quality emissions were estimated using the computer model URBEMIS 2007, version 9.2.4 (**Appendix A**). Criteria pollutant emissions were estimated for demolition, grading, paving, construction worker trips and equipment utilization for construction activities associated with the project. Estimates were made for the project both without and with mitigation incorporated. Construction related mitigation measures utilized in estimating the mitigated emissions include utilization of soil stabilizers, replacement of ground cover and watering exposed surfaces during construction. Implementation of these standard mitigation measures reduces project emissions of PM10 and PM2.5 (**Table 4.3.1**).

TABLE 4.3.1

ESTIMATE OF PROJECT EMISSIONS

Criteria Pollutant	ROG (lbs/day)	NOx (lbs/day)	CO (lbs/day)	SO2 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	CO2 (lbs/day)
Unmitigated	10.01	62.36	62.52	0.06	28.96	8.74	9,433.37
Mitigated	10.01	62.36	62.52	0.06	9.63	4.7	9,433.37

*Source: URBEMIS 2007 Version 9.2.4 (**Appendix A**)*

DISCUSSION OF CHECKLIST ANSWERS:

a) The proposed project will not obstruct implementation of any applicable air quality plans. The project will have **no impact** on the air quality plan.

b) Earth moving activities will occur as a result of the proposed project. The construction component of the project will include the removal of existing asphalt concrete, grading of approximately five acres and ultimate paving of the majority of the graded area. These activities would generate dust, a source of PM_{10}. The County is currently in non-attainment status for state standards for PM_{10}. In addition, construction vehicles and equipment may generate reactive organic gases (ROG), which are a component of ozone. Ozone is a pollutant for which the County is in moderate non-attainment status under state standards. Although construction-related air quality impacts are temporary and would cease once construction is completed, construction activities nevertheless would have a potentially significant impact on air quality. The Implementation of **MM 3.1** and **MM 3.2**, in addition to

implementation of BCAQMD regulations, will result in impacts that are considered to be **less than significant with mitigation incorporated**.

c) With implementation of **MM 3.1** and **MM 3.2,** the project would not result in a cumulatively considerable increase of air pollutants. This impact is considered to be **less than significant with mitigation incorporated**.

d) The closest residences to the project site are approximately one-quarter mile to the east. Construction activities are limited to grading and paving require minimal earth moving activities. With implementation of **MM 3.1** and **MM 3.2,** the project would result in a **less than significant with mitigation incorporated** impact on sensitive receptors.

e) The project involves improvements to the existing boat launch facility, including installation of restrooms and a new fish cleaning station. Both of these facilities will be connected to the City's sewer system. It is not anticipated that any objectionable odor impacts would occur as a result of this project, however there may be some odor as the new facilities are connected to the existing sewer line. These odors would be limited to the immediate area, would be temporary and would cease once construction is completed. The project will have a **less than significant impact** on odor**.**

MITIGATION MEASURES:

MM 3.1 The following mitigation measures shall be implemented as appropriate during the construction phase of the project:

- Water all active construction sites at least twice daily, or as needed. Frequency should be based upon the type of operation, soil, and wind exposure.
- Land clearing, grading, earth moving, or excavation activities shall be suspended when winds exceed 15 miles per hour, as determined by an anemometer on-site or at the direction of BCAQMD.
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.
- Plant vegetative cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Paved roadways shall be swept or washed at the end of each day as necessary to remove excessive accumulations of silt and/or mud which may have accumulated as the result of construction activities.
- Use alternatives to open burning of vegetative material on the project site, such as chipping, mulching, or conversion to biomass fuel, unless otherwise deemed infeasible by the BCAQMD.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.

Timing/Implementation: *Upon commencement of grading and construction activities.*

Enforcement/Monitoring: *City of Gridley Planning Department, Butte County Air Quality Management District.*

MM 3.2 To mitigate impacts of diesel equipment emissions during construction, the following mitigation measures shall be implemented:

- The primary contractor shall be responsible for ensuring that all construction equipment is properly tuned and maintained.
- Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators when feasible.
- Minimize idling time to 10 minutes.

Timing/Implementation: *Upon commencement of grading and construction activities.*

Enforcement/Monitoring: *City of Gridley Planning Department, Butte County Air Quality Management District.*

CONCLUSIONS RELATED TO AIR QUALITY:

The project could have temporary impacts on air quality during construction activities. With implementation of **MM 3.1** and **MM 3.2**, impacts to air quality are considered **less than significant with mitigation incorporated.**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 U.S. Fish and Wildlife Service?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 wetlands, 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?	☐	☐	☐	☒

OVERVIEW:

A *Section 7 Biological Assessment* and a *Request for Preliminary Jurisdictional Determination for Waters of the US* were completed in February 2009 for the proposed project by Foothill Associates (**Appendix B** and **Appendix C**, respectively). Additionally, a Valley Elderberry Longhorn Beetle Survey Report and a Migratory Bird and Raptor Nest survey were completed in April 2009 as part of an improvement project planned at the City's WWTP located adjacent to the proposed Boat Launch Improvement Project (**Appendix D** and **Appendix E**, respectively).

For the purposes of this section "special status species" are those that fall into one of the following categories:

- Listed as rare, threatened or endangered by the state or federal governments (endangered Species Act, 50 CFR 17.12 for listed plants and various notices in the Federal Register; California Endangered Species Act, 14 CCR 670.5).
- Proposed for rare, threatened or endangered status.
- Designated as Species of Special Concern by state or federal governments.
- Included on the California Native Plant Society List of 1A, 1B and 2 (Skinner and Pavlik 2001).

- Plants and wildlife that meet the definitions of rare and endangered species under the California Environmental Quality Act (CEQA) (State CEQA Guidelines, Section 15380).

- Birds protected under the Migratory Bird Treaty Act of 1918.

Under CEQA, a project that substantially adversely affects any riparian habitat or other sensitive natural community identified in local, regional plans, policies, regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS) will have a significant impact on the environment. For this assessment, the term "sensitive natural community" includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. CDFG-identified sensitive natural communities in the Sacramento Valley include but are not limited to, Great Valley Valley Oak Riparian Forest, Great Valley Cottonwood Riparian Forest, Great Valley Mixed Riparian Forest, Great Valley Willow Scrub and California oak woodland (Foothill Associates, 2009 (A)).

A migratory bird and raptor nest survey was completed in April 2009 as part of the construction activities that are planned at the adjacent WWTP. One songbird nest and one red-tailed hawk nest were identified within the vicinity of the proposed boat ramp project (PMC B, 2009).

Vegetation Communities

Four vegetation communities exist within the project area, including developed/ornamental, valley foothill riparian, orchard and jurisdictional waters of the U.S.

- The majority of the site is developed with the existing river access facility and access road. Ornamental plantings occur within the project area, including eucalyptus, sweetgum and honeysuckle. A few naturally occurring Fremont cottonwood occur in this area.

- Valley foothill riparian habitat occurs along the Feather River, adjacent to the western side of the project site. Riparian habitat within the vicinity of the project site is relatively narrow, restricted to the immediate river bank. Vegetation found in associate with these communities includes Himalayan blackberry, Fremont cottonwood, willow, arundo, California grape, tree-of-heaven and blue elderberry.

- Jurisdictional Waters of the U.S. within the project area include 0.19-acre of perennial drainage (Feather River) and 0.01-acre fresh emergent wetland which occurs along the river bank adjacent to the existing boat ramp. Vegetation found in association with these communities includes box elder, California mugwort, willow, canary grass, California tule, horsetail, rabbits foot grass, big leaf sedge, Baltic rush, redroot nutgrass, bulrush, and arrowhead.

- Orchard exists along the access road and entry from East Gridley Road. No orchards will be removed as part of this project.

Special Status Species

The project may affect the following four special status species: (1) valley elderberry beetle (*Desmocerus californicus dimorphus*), (2) Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), (3) Central Valley steelhead (*Onchorhynchus mykiss*) and (4) Southern Distinct Population Segment of North American green sturgeon (*Acipsenser medirostris*).

- Valley elderberry beetle (D*esmocerus californicus dimorphus*) is a federally listed threatened species, occurring solely in associatin with its host plant the elderberry. Suitable habitat for the beetle occurs within 100 feet of the project site.

- Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*) is a federally listed threatened species. The species occurs in Central Valley drainages while migrating, spawning and rearing. The species occurs seasonally in the Feather River.

- Central Valley steelhead (*Onchorhynchus mykiss*) is a federally listed threatened species. The salmonid occurs in Central Valley drainages while migrating, spawning and rearing. The species occurs year-round in the Feather River at various life stages.

- Southern Distinct Population Segment of North American green sturgeon (*Acipsenser medirostris*) is federally listed threatened. The fish occurs in Central Valley drainages, including the Feather River, while migrating, spawning and rearing.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project has the potential to affect four federally listed special status species including (1) valley elderberry beetle (*Desmocerus californicus dimorphus*), (2) Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), (3) Central Valley steelhead (*Onchorhynchus mykiss*) and (4) Southern Distinct Population Segment of North American green sturgeon (*Acipsenser medirostris*). The project impacts to these species and conservation measures designed to minimize project impacts are thoroughly discussed in the Biological Assessment prepared for this project (**Appendix B**). Mitigation Measure **MM 4.4.1** will reduce impacts to a level that is considered to be **less than significant with mitigation incorporated**.

b) The project impacts to valley foothill riparian habitat have been minimized by design, as the majority of the project is located to the east of the existing riparian vegetation as described in the Biological Assessment completed for the project (**Appendix B**). Although the project will result in the removal of up to seven cottonwood trees 24 to 30 inches dbh, cottonwoods are not a listed species. Conservation measures have been designed for the project to reduce potential impacts to riparian vegetation, and are discussed in the Biological Assessment prepared for the project (**Appendix B**). Implementation of **MM 4.4.1** through **MM 4.4.3** will reduce impacts to a level that is considered to be **less than significant with mitigation incorporated.**

c) The project may impact up to 0.19-acre of perennial drainage (Feather River) and 0.01-acre fresh emergent wetland which occurs along the river bank, resulting in total potential project impacts to 0.20-acres of Waters of the U.S. The City will be required to obtain permits from the U.S. Army Corps of engineers prior to proceeding with project construction, as identified by **MM 4.2**. Best management practices and permit conditions will be required as part of these permits. The City is confident that permit requirements will reduce project impacts to a level that is considered to be **less than significant with mitigation incorporated.**

d) As identified in c) above, the project may impact up to 0.19-acre of the Feather River, which is identified as critical habitat for spring-run Chinook salmon, Central Valley steelhead and green sturgeon. This area is also identified as essential fish habitat for Central Valley spring-run Chinook salmon. **MM 4.1** will reduce project impacts to critical and essential fish habitat to a level that is considered to be **less than significant with mitigation incorporated**.

The project will also result in the removal of cottonwood and eucalyptus trees as well as the removal of riparian vegetation. Migratory birds utilize riparian areas for breeding, foraging

and as migratory stop-over sites between winter and summer breeding grounds. **MM 4.4.3** will reduce project impacts to migratory birds to a level that is considered **less than significant with mitigation incorporated.**

e-f) The Butte Regional Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) is currently being coordinated by the Butte County Association of Governments. The HCP/NCCP has not yet been drafted, and therefore the proposed project will have **no impact** on any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional or state habitat conservation plan.

Mitigation Measures:

MM 4.1: Implement the pertinent measures of the **Biological Resources Mitigation Program** (BRMP), attached to and incorporated into this Initial Study/Mitigated Negative Declaration.

Timing/Implementation: As specified in the BRMP.
Enforcement/Monitoring: As specified in the BRMP.

Conclusions Related to Biological Resources:

The proposed project may impact special status and protected species as a result of project construction. Implementation of **MM 4.1**, the Biological Resources Mitigation Program, would reduce impacts from the project to **less than significant with mitigation incorporated**.

GRIDLEY BOAT LAUNCH IMPROVEMENT PROJECT

BIOLOGICAL RESOURCE MITIGATION PROGRAM

Note: The following Biological Resources Mitigation Program (BRMP) contains mitigation measures concerning biological resources for the City of Gridley's Boat Launch Improvement Project. Collectively, implementation of the BRMP is ***Mitigation Measure 4.1*** *of the Initial Study/Mitigated Negative Declaration for the project. For a more detailed discussion of the related impacts and background for these mitigation measures, please refer to* ***Section 4.4, Biological Resources****, of the Initial Study.*

MM 4.1: Prior to the initiation of any grading activities related to the project, the City shall obtain all required permits from the U.S. Army Corps of Engineers.

Timing/Implementation: Prior to construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. ACOE.

Migratory Birds

MM 4.2: The City of Gridley shall implement the following measure to reduce impacts to migratory birds:

- If feasible, tree falling and ground-disturbing construction activities shall be limited to the period of September 1 through February 14, which is the non-breeding season for migratory birds.

- If construction or tree falling activities will occur during the breeding season (February 15 through August 31), a qualified wildlife biologist shall conduct two preconstruction surveys to ensure that no nests of migratory birds will be disturbed during construction. The first survey can occur as early as February 1, and the second should occur no more than one week prior to commencement of construction activities. The survey area shall include the construction zone, including all staging areas, and a 500 foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm any nesting raptors (birds of prey) or migratory birds.

- If an active nest is located within the proposed disturbance area, the wildlife biologist shall consult with the U.S. Fish and Wildlife Service (USFWS) to establish a suitable buffer zone. If a raptor is located within 250 feet or migratory bird nest is located within the 100-feet of disturbance, and the disturbance must take place during the breeding season, a buffer zone shall be established by the biologist and confirmed by the appropriate resource agency (CDFG and/or USFWS). The buffer area requirements will be 250 feet for any active raptor nest and 100 feet for any migratory bird nest or as defined by the USFWS and/or CDFG. A qualified wildlife biologist shall monitor the nest to determine when the young have fledged and submit bi-weekly reports throughout the nesting season. The biological monitor shall have the authority to cease construction if there is any sign of distress to any raptor or migratory bird. Reference to this requirement and the MBTA shall be included in the construction specifications.

- If the establishment of a suitable buffer zone is not feasible, the City shall apply for a take permit under the MBTA from the USFWS.

Timing/Implementation: Prior to construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. ACOE.

Stormwater Runoff

MM 4.3: Prior to the initiation of any grading activities the City, or their contractor, shall obtain a Construction Stormwater Pollution Prevention Permit from the Central Valley Regional Water Quality Control Board. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Proposed Project (as required by the Permit), with the following objectives:

(a) to identify pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges from the construction of the project;

(b) to identify BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction;

(c) to outline and provide guidance for BMPs and stormwater monitoring;

(d) to identify project discharge points and receiving waters;

(e) to address post-construction BMP implementation and monitoring; and

(f) to address sediment / siltation / turbidity and non-visually detectable pollutant monitoring, and outline a sampling and analysis strategy.

Best Management Practices included in the SWPPP may include, but are not limited to the following:

(a) Check heavy equipment daily for leaks. Do not use equipment until leaks are fixed.

(b) Refuel outside of active stream channel or above ordinary high water at designated sites.

(c) Follow a spill prevention and control plan developed specifically for the program.

(d) Petroleum products, chemicals, cement, or water contaminated with the aforementioned materials shall not be allowed to enter flowing waters.

(e) No work during wet weather or when saturated grounds exist.

(f) Locate staging areas outside of active stream channel or above ordinary high water at designated sites.

(g) Develop a tracking system for erosion control projects conducted pursuant to this project.

(h) Develop an implementation, and effectiveness monitoring plan.

(i) Consult with resource agencies to review proposed projects for consistency with the project description and applicable regulatory requirements.

(j) Existing natural vegetation shall be retained, protected and supplemented where necessary. Existing trees greater than 12-inches in diameter will be preserved whenever possible and practical.

(k) Exposure of soil to erosion by removal of vegetation shall be limited to the smallest area practical and for the shortest time practical.

(l) Seeding, mulching or other suitable stabilization measures shall be used to protect exposed erodible areas a minimum of two weeks in advance of the wet weather season.

(m) Straw bales or sandbags stacked at the job site for emergency erosion control work during rainstorms.

(n) Velocity check-dams in all unpaved roadways shall be provided at the necessary intervals to control and minimize erosion.

(o) All erosion control devices shall be in place at the end of each working day during the wet weather season and directed by the City during the dry season when there is a forecasted probability of rain.

Timing/Implementation: Prior to construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, Central Valley Regional Water Quality Control Board.

Valley Elderberry Longhorn Beetle

MM 4.4: To minimize potential negative effects of the project on the Valley Elderberry Longhorn Beetle, the City and their contractor will enact the following Protective Measures as outlined in the Valley Elderberry Longhorn Beetle Conservation Guidelines (1999):

1) Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the Service, the proponent will tailor utility pole placement to provide a minimum setback of at least 20 feet from the dripline of each elderberry plant.

2) Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.

3) Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a federally threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.

4) Instruct work crews about the status of the beetle and the need to protect its elderberry host plant. In addition, to these Protective Measures, the Project Proponent will also:

5) Perform construction in the vicinity of the elderberry shrubs onsite outside the emergence window of the beetle (May-June).

6) Prior to ground disturbing activities in the vicinity of elderberry shrubs adjacent to the project area, these areas will be watered to help prevent dust, which can negatively affect the beetle, if present.

Timing/Implementation: Prior to and during construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service.

CV Spring-Run Chinook Salmon, CV Steelhead and Green Sturgeon

MM 4.5: The in-water work shall be limited to June 15 to September 15 when juvenile CV spring-run Chinook salmon will be absent or at very low levels in the Feather River. CV spring-run Chinook salmon and CV steelhead occurring within the river at this time will be at developmental stages that are easily capable of avoiding construction activities that might result in take of individuals. CV spring-run adults holding in the river at this time will primarily be located at the fish barrier dam, several miles upstream, or in deep pools holding for the summer.

Timing/Implementation: During construction activities.

Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service.

MM 4.6: When placing small rock to establish a level foundation for the new pre-cast boat ramp, small rock shall be placed in the water utilizing an excavator or similar machinery, not end dumped from a dump truck or dropped into the water. This will allow any potential fish in the Action Area to disperse and not be impacted by the placement of base rock.

Timing/Implementation: During construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service.

MM 4.7: Existing large pieces of concrete utilized for bank stabilization, primarily sidewalks, shall be layered over with smaller rock in the 4-9 inch size class. Larger debris, like discarded sidewalk, is known to provide cover for in-water predators of juvenile salmon.

Soil and plantings shall accompany the installation of smaller size rock for slope protection. Plantings will increase the amount of shaded riverine aquatic (SRA) habitat in the immediate vicinity of the boat ramp, which is presently barren of vegetation. These planting, over time, will also contribute to instream woody

material (IWM), as trees and shrubs grow into the water or portions of the plants break and fall into the river and create flow refuge and foraging surfaces.

Timing/Implementation: During and following construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service.

MM 4.8: The following measures (taken from *National Marine Fisheries Service Preliminary Design Recommendations for Small Erosion Repair Projects* dated February 8, 2006) shall be implemented during construction of bank stabilization structures to minimize affects to critical habitat for salmonids and green sturgeon in the Feather River and essential fish habitat.

Repair/Maintain Existing Bank Protection Above ordinary high water mark

- Footprint of repair shall be no larger than the old protection.
- If rock is used, apply the smallest size required to achieve desired bank protection.
- Mix soil into stabilization rock.
- Removal of vegetation is minimized to the maximum extent possible.
- If site conditions permit, plant grass, woody, or emergent vegetation, and encourage growth of vegetation types that do not have an adverse effect on levee stability and levee inspections.

Repair/Maintain Existing Bank Protection Below ordinary high water mark:

- Footprint of repair shall be no larger than the old protection.
- Where feasible, and where site-specific engineering and hydraulic conditions allow, incorporate biotechnical methods to create and support a periodically inundated, vegetated floodplain with a mosaic of SRA cover, and instream woody material.
- Rock used is the smallest size required to achieve desired bank protection.
- Mix soil into stabilization rock.
- Removal of vegetation is minimized to the maximum extent possible. If removal is required for access, replace onsite to achieve 1:1 successful revegetation. To achieve successful 1:1 revegetation, trees removed can be planted at 3:1 replacement to removal ratio, or site can be monitored for 2 years and replanted until 1:1 is reached.
- Removal of instream woody material is avoided or minimized. If removal is required to safely access or construct erosion repair project, then a similar woody material will be replaced onsite and in-kind.

- For large trees that fall into the active channel, a rock/soil mix may be placed into root hole or erosion hole if tree is left in place. No revegetation required.

- Plant, on average, 1 willow or other native tree or plant that is appropriate for the local site conditions, per square meter of bank protection.

New Bank Protection on levee profile above ordinary high water mark:

- If rock is used, apply the smallest size required to achieve desired bank protection.

- Mix soil into stabilization rock.

- Removal of vegetation is minimized to the maximum extent possible.

- If site conditions permit, plant grass or woody vegetation and encourage growth of vegetation types that do not have an adverse effect on levee stability and levee inspections.

New Bank Protection On natural bank and unprotected levee profile below ordinary high water mark:

- Project shall be designed to meet the dual objectives of protecting and maintaining the flood control system, and protecting and creating instream and near shore habitat conditions that are beneficial to anadromous salmonids.

- Site design will be limited to engineering and hydraulic constraints, but will incorporate biotechnical practices to create and support a periodically inundated, vegetated floodplain with a mosaic of SRA cover, and instream woody material.

- Use of rock should be minimized. Rock size should be minimized to achieve bank protection goals while minimizing predator habitat. Rock placement should be designed to create near-shore, shallow-water habitat through the construction of berms or other simulated floodplain habitats that are seasonally inundated and capable of supporting riparian vegetation.

- Rock berms and stabilized banks should be planted with, on average, 1 willow or other native tree or plant that is appropriate for the local site conditions, per square meter of bank protection.

- Removal of instream woody material is avoided or minimized. If removal is required to safely access or construct erosion repair project, then a similar woody material will be replaced onsite and in-kind.

- Removal of vegetation is minimized to the maximum extent possible. If removal is required for access, replace onsite to achieve 1:1 successful revegetation. To achieve successful 1:1 revegetation, trees removed can be planted at 3:1, or site can be monitored for 2 years and replanted until 1:1 is reached.

Timing/Implementation: Prior to, during and after construction activities.
Enforcement/Monitoring: City of Gridley Planning Department, City of Gridley Public Works Department, U.S. ACOE.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
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 geological feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

OVERVIEW:

An *Archaeological Inventory Survey for the Proposed Gridley Boat Ramp Project* was completed in 2008 by Sean Jensen, M.A (Included as **Appendix F**). A complete-coverage, intensive pedestrian survey of the project area, records search at the Northeast Information Center of the California Historical Resources Information System, consultation with affected Native American representatives and consultation with the Native American Heritage Commission (NAHC) were completed in preparation of the Archaeological Inventory Survey.

Neither the existing records, consultations with tribal representatives, consultation with the NAHC, nor the pedestrian field survey have documented or identified any prehistoric or historic sties, artifacts, traditional use area or sacred land listings within the project area or vicinity. The existing boat ramp and associated facilities have been constructed after 1970 (Jensen, 2008).

DISCUSSION OF CHECKLIST ANSWERS:

a) The project is largely within previously disturbed areas. Structures at the existing boat ramp facility were constructed post 1970 and are not considered to be historic structures. Since no historic properties are known to exist in the proposed project site, there will be **no impacts** to historical resources.

b-c) Earthmoving activities will be within areas that have been previously disturbed, either during the construction of the existing boat ramp, existing WWTP or adjacent agricultural activities. No archaeological, paleontological or unique geologic features have been identified on-site or within vicinity of the project. Although it is not likely any resources exist, **MM 5.1** and **MM 5.2** have been included in the event of an accidental find of cultural resources. Therefore this impact is considered to be **less than significant with mitigation incorporated.**

d) No known human remains exist within the project vicinity. Should previously unknown human remains be discovered during project activity **MM 5.3** will reduce impacts to a level **less than significant with mitigation incorporated**.

MITIGATION MEASURES:

MM 5.1: If, during the course of project implementation, cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features) are discovered, work shall be halted immediately within 50 feet of the discovery. The City of Gridley Planning Department shall be immediately notified, and a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery. The City shall consider mitigation recommendations presented by a professional archaeologist and implement a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The Native American Heritage or other applicable Native American tribes shall also be notified and consulted on appropriate measures.

Timing/Implementation: *During all earth moving activities*
Enforcement/monitoring: *City of Gridley Public Works Department*

MM 5.2: Prior to the commencement of project ground-disturbing activities, all construction personnel shall be informed of the type(s) of cultural resources that might be inadvertently uncovered in the area and protocols to be implemented to protect Native American human remains and any subsurface cultural resources.

Timing/Implementation: *Prior to construction activities*
Enforcement/monitoring: *City of Gridley Public Works Department*

MM 5.3: If human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *During all earth moving activities*
Enforcement/monitoring: *City of Gridley Public Works Department*

CONCLUSIONS RELATING TO CULTURAL RESOURCES:

The proposed project area is located in an area that has been previously disturbed. Although the cultural resource review and survey completed for the project did not identify any cultural resources within the project area, with implementation of mitigation measures **MM 5.1** through **MM 5.3** potential impacts to unknown cultural, archaeological and paleontological resources will be **less than significant**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. Would the project:				
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 Table 18-1-B of the Uniform Building Code (1994), 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?	☐	☐	☐	☒

OVERVIEW:

Seismic risk within the Gridley area and Butte County results both from faults within the County and from faults outside the County that are near enough so that the County may experience potentially damaging ground motion from earthquakes on these faults.

The nearest faults to the project area are located in the Sutter Buttes to the southwest of the City. Most of these faults are inactive, with only two minor faults indicating any activity within the last 1.6 million years (California Division of Mines and Geology, 1994). Currently, there is only one fault classified as "active" by the California Mining and Geology Board located within Butte

County. This is the Cleveland Hills Fault, located in the foothills south of Lake Oroville. This fault was the location of the epicenter of the 1975 Oroville earthquake, which registered 5.7 on the Richter scale. Ground motion from the earthquake was experienced at Gridley that corresponded to VII on the Modified Mercalli Intensity Scale (**Table 4.7-1**). Active faults located outside the County that could affect the area include the San Andreas Fault System, the Midland-Sweitzer Fault approximately 40 miles southwest of the County, and several faults located in the eastern Sierra Nevada. The Midland-Sweitzer Fault, in particular, is considered capable of producing a 7.0 magnitude earthquake that would be experienced in Butte County at a Modified Mercalli Scale intensity of IX (Butte County, 1996).

TABLE 4.7-1
MODIFIED MERCALLI INTENSITY SCALE FOR EARTHQUAKES

Richter Magnitude	Modified Mercalli Scale	Effects of Intensity
0.1 – 0.9	I	Earthquake shaking not felt
1.0 – 2.9	II	Shaking felt by those at rest.
3.0 – 3.9	III	Felt by most people indoors, some can estimate duration of shaking.
4.0 – 4.5	IV	Felt by most people indoors. Hanging objects rattle, wooden walls and frames creak.
4.6 – 4.9	V	Felt by everyone indoors, many can estimate duration of shaking. Standing autos rock. Crockery clashes, dishes rattle and glasses clink. Doors open, close and swing.
5.0 – 5.5	VI	Felt by all who estimate duration of shaking. Sleepers awaken, liquids spill, objects are displaced, and weak materials crack.
5.6 – 6.4	VII	People frightened and walls unsteady. Pictures and books thrown, dishes and glass are broken. Weak chimneys break. Plaster, loose bricks and parapets fall.
6.5 – 6.9	VIII	Difficult to stand. Waves on ponds, cohesionless soils slump. Stucco and masonry walls fall. Chimneys, stacks, towers, and elevated tanks twist and fall.
7.0 – 7.4	IX	General fright as people are thrown down, hard to drive. Trees broken, damage to foundations and frames. Reservoirs damaged, underground pipes broken.
7.5 – 7.9	X	General panic. Ground cracks, masonry and frame buildings destroyed. Bridges destroyed, railroads bent slightly. Dams, dikes and embankments damaged.
8.0 – 8.4	XI	Large landslides, water thrown, general destruction of buildings. Pipelines destroyed, railroads bent.
8.5 +	XII	Total nearby damage, rock masses displaced. Lines of sight/level distorted. Objects thrown into air.

Source: California Division of Mines and Geology

There are a number of faults in Butte County, along with a large number of relatively nearby faults, which could be considered "potentially active", either by the fairly restrictive criteria of the California Mining and Geology Board or by more conservative criteria. Within the County, the Big Bend Fault Zone, located in northeastern Butte County and considered potentially active by some geologists, could produce a magnitude 7.0 earthquake with a Modified Mercalli Intensity of IX or X. Approximately 35 miles west of Butte County, the Coast Ranges Thrust Zone could potentially produce an earthquake that would be experienced in Butte County as a Modified Mercalli Intensity of IX or X. Earthquakes on faults in the Sierra foothills could potentially produce similar intensities. However, it should be noted that Butte County has experienced only two damaging earthquakes in recent history - 1940 and 1975. In both cases, the most severe damage occurred to un-reinforced masonry buildings (Butte County, 1996). The City of Gridley has not experienced any significant damage from earthquakes in its history.

Liquefaction during an earthquake requires strong shaking continuing for a relatively long time period and loose, clean granular materials (particularly sands) that may settle and compact because of the shaking. Areas paralleling the Sacramento River, which contain clean sand layers with low relative densities, are estimated to have generally high liquefaction potential. The City is located in an area classified as having a "generally moderate" liquefaction potential. The granular layers underlying the City and other areas outside the Sacramento River have higher relative densities. However, local sites within the moderate potential area where loose, clean granular layers are present, or areas adjacent to the Sacramento River may have high liquefaction potential (Butte County, 1996).

The greatest potential subsidence areas in Butte County are those where heavy groundwater withdrawal is occurring, and in gas-producing areas. According to investigations by the U.S. Geological Survey, one of the areas of heaviest groundwater withdrawal is in a one-mile radius of the City of Gridley (Butte County, 1996).

Expansive soils are soils that have a potential to undergo significant changes in volume with changes in moisture content, either shrinking or swelling. Periodic shrinking and swelling of expansive soils can cause extensive damage to roads, buildings and other structures. The potential volume change of an expansive soil is governed by the moisture content and the percentage and type of clay minerals present in the soil. Soils in the Gridley area are considered to have a moderate expansive soil potential (Butte County, 1996).

A review of the current United States Department of Agriculture (USDA) Soil Survey provided by the Natural Resource Conservation Service (NRCS) indicates the project area is primarily underlain with Gianella fine sandy loam, 0 to 1 percent slopes, occasionally flooded. Gianella soils are characterized as very deep, moderately well drained soils with a clay content of approximately 4 to 20%, negligible runoff, moderate to moderately rapid saturated hydraulic conductivity. Hydrology in these soils has been altered both from extensive leveling and by protection from frequent flooding by the Sacramento and Feather River levee systems (NRCS).

DISCUSSION OF CHECKLIST ANSWERS:

a)

i) The proposed project will be constructed in compliance with the California Building Code Standards to ensure earthquake suitability of all structures. Therefore this impact is considered **less than significant**.

ii) The project area is in Seismic Zone 3, as noted in the Uniform Building Code, and all construction would be consistent with this zone. Following standard construction practices, seismic impacts on the project would be **less than significant**.

iii) See ii) above. The project will require engineering of all structures to be constructed. Alluvial soils that may be subject to liquefaction do exist within the project area. All structures, asphalt and footings will be engineered to accommodate for the potential effect of liquefaction Therefore the project will have a **less than significant impact** related to the potential effects of liquefaction.

iv) The project area is located on flat terrain that is not prone to landslides. Impacts from the proposed project will have **no impact** on landslides.

b) Soils within the proposed project area are predominantly Gianella fine sandy loam. During earthmoving activities there is the hazard of soil erosion; therefore **MM 4.1** requires the City or their contractor to obtain a Stormwater Pollution Prevent Permit which includes BMPs reduce the impacts associated with soil erosion. With implementation of **MM 4.1** this impact is considered **less than significant with mitigation incorporated**.

c) The soils within the Study Area tend to be stable and not prone to geologic or seismic hazards. Subsidence typically occurs with a significant drawdown of groundwater. No subsidence is expected as a result of the project. **No impact**.

d) Although the Gridley area has a high groundwater table and some clay soils, the soils beneath the project area are well drained and contain little clay and therefore a low hazard for expansiveness. Therefore this impact is considered **less than significant**.

e) The project includes a restroom that will be connected with the City's wastewater collection and treatment system. The project will have **no impact** on the use of septic tanks within the project area.

Conclusions Related to Geology and Soils:

With implementation of **MM 4.1,** which required the City or their contractor to obtain a SWPPP, impacts to geology and soils as a result of the proposed project are considered **less than significant with mitigation incorporated**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☐	☒
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 §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 area or, where such a plan has not been adopted, within two miles of a public airport or a 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?	☐	☐	☐	☒

OVERVIEW:

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code, Section 25501 is as follows:

"Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (California Health and Safety Code, Section 25501).

The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies. Most hazardous materials regulation and enforcement is the responsibility of the Butte County Department of Public Works, Solid Waste Division, which refers large cases of hazardous materials contamination or violations to the Central Valley Regional Water Quality Control Board (RWQCB) and the State Department of Toxic Substances Control (DTSC). It is not at all uncommon for other agencies to become involved when issues of hazardous materials arise such as the Air Pollution Control District, and both the federal and state Occupational Safety and Health Administrations (OSHA).

Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese list", includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. The most recent Cortese list, from 2003, identified no hazardous materials sites in the vicinity of Gridley.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project does not involve the routine transport, use or disposal of hazardous materials. Therefore the project will have **no impact**.

b) Potential releases of motor vehicle fuels and oils could occur during construction. A SWPPP, as required by **MM 4.1** included in **Section, Biological Resources**, would include BMP measures to minimize the effects of such spills. No hazardous or flammable materials would be stored in the site in unsecured locations, which would be limited to authorized personnel only. The proposed project will have an impact that is considered to be **less than significant with mitigation incorporated**.

c) The nearest school to the project site is located in the City of Gridley over two miles away from the project. Therefore the project will have **no impact** on schools with regard to hazardous materials.

d) The California Department of Toxic Substances Control *Envirostor* database shows no sites within the vicinity of the City of Gridley. Thus, the project would have **no impact** on Cortese list sites.

e) There are no public airfields within vicinity of the project area and no airport land use plans. **No impact**.

f) There are no private airstrips in the project vicinity. **No impact**.

g) Upgrade to the WWTP would not impact response plans or emergency evacuation plans within the City. Although traffic would be temporarily diverted during the replacement of the sewer pipes on specific streets, Gridley' grid pattern circulation system would allow for sufficient detours and would therefore have **less than significant impact** on response plans and emergency evacuation plans.

h) The proposed project will have **no impact** on fire hazards.

Conclusions Related to Hazards and Hazardous Materials:

With implementation of **MM 4.1,** included in **Section 4.4, Biological Resources**, impacts to hazards and hazardous materials as a result of the proposed project are considered **less than significant with mitigation incorporated**.

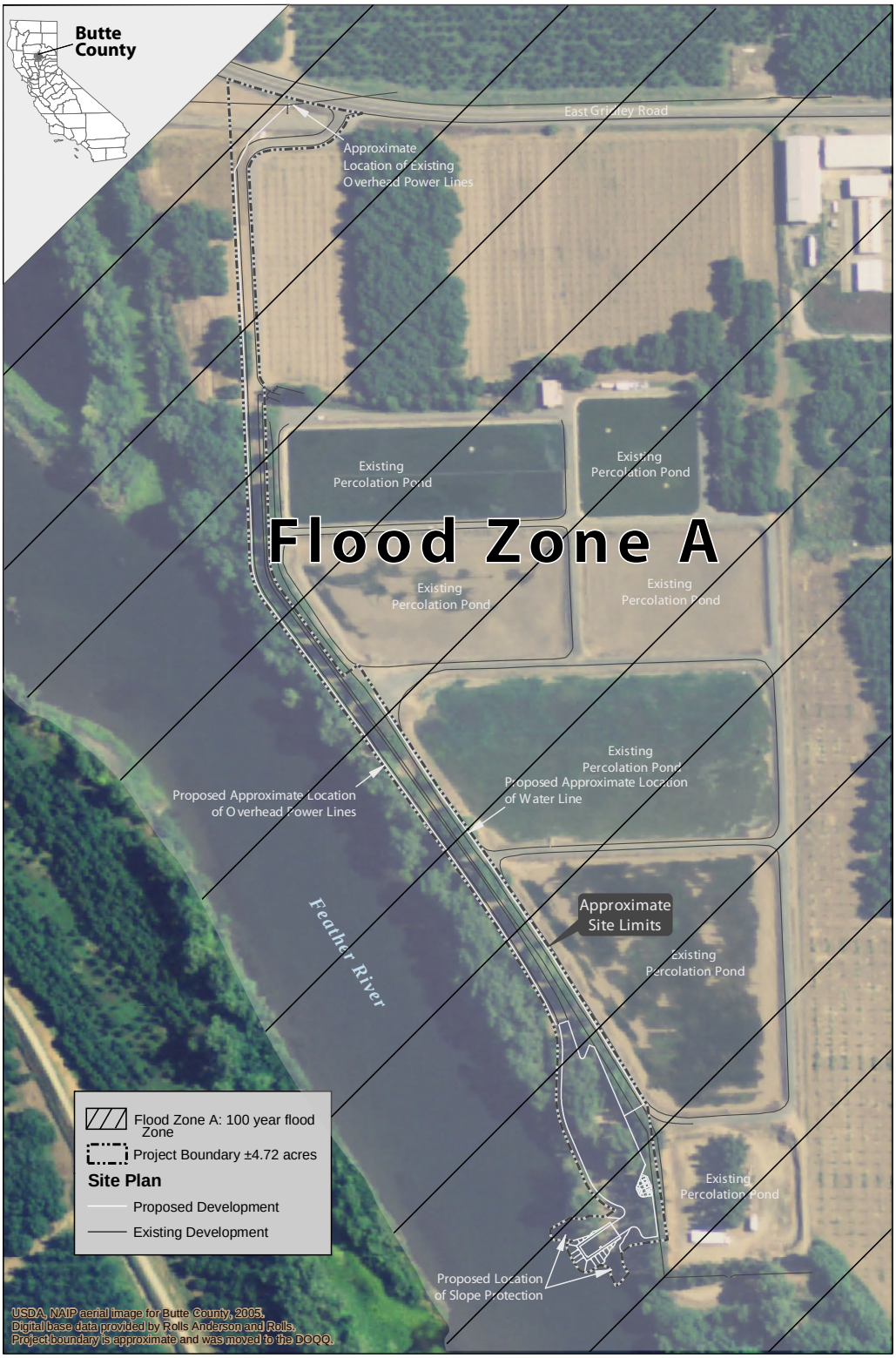
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies 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 that would result in flooding on- or off-site?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that 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 a failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami or mudflow?	☐	☐	☐	☒

OVERVIEW:

Although the City of Gridley is located approximately 2 miles west of the Feather River, a major tributary to the Sacramento River, the project is located on the east bank of the Feather River. The Feather River is controlled by the Oroville Dam, located approximately 20 river-miles upstream of the project site. The dam was constructed in 1968 as part of the California State Water Project. The project site is located within Flood Zone A [area inundated by 100 year flood, no base elevation] as determined by the Federal Emergency Management Agency (FEMA, Map No. 06007C1110C, 1998) (See **Figure 4.0-1, FEMA Flood Zones**).

The City is within the jurisdictional boundaries of the Central Valley Regional Water Quality Control Board (RWQCB), one of nine regional boards in the state. The Central Valley RWQCB, with an office in Redding, develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Specifically, the RWQCB identifies potential water quality problems, confirms and characterizes water quality problems through assessments, remedies problems through imposing or enforcing appropriate measures, and monitors problem areas to assess effectiveness of remedial measures. Remedies for problems include their prevention or cleanup. Common means of prevention are the issuance of National Pollution Discharge Elimination System (NPDES) permits, waste discharge requirements (WDRs), and discharge prohibitions and restrictions. Cleanup is implemented through enforcement measures such as Cease and Desist Orders and Cleanup and Abatement Orders.



Source: Foothill Associates, 2009 and FEMA Map No. 06007C1110C, June 1998

FIGURE 4.0-1
FEMA MAP

PMC

One of the duties of the RWQCB is the development of "basin plans" for the hydrologic area over which it has jurisdiction. In 1998, the Central Valley RWQCB issued the fourth edition of its Water Quality Control Plan for the Central Valley Region, also known as the Basin Plan. The Basin Plan covers both the Sacramento River Basin and the San Joaquin River Basin, including the Feather River. It sets forth water quality objectives for both surface and ground waters for the region, and it describes implementation programs to achieve these objectives. The Basin Plan provides the foundation for the regulations and enforcement actions of the Central Valley RWQCB.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project is designed to improve the existing boat launch facility on the east bank of the Feather River. The project includes construction of stormwater protection measures including a stormwater bioswale that will be reviewed by the Regional Water Quality Control Board. The bioswale is designed to accommodate runoff water from the project area once construction is completed and will reduce the impacts of first flush pollutants on area waterways by detaining runoff water, therefore allowing pollutants to settle out and be filtered by vegetation. Construction activities will be required to obtain a Storm Water Protection and Pollution Permit from the Regional Water Quality Control Board, which requires the utilization of best management practices (BMPs) during construction to reduce the effects of erosion and stormwater runoff. Additionally **MM 4.1** included in **Section 4.4, Biological Resources**, requires a Stormwater Pollution Prevention Plan which will include BMPs to reduce project construction impacts to water quality. With these permit requirements and **MM 4.1**, this project will result in a **less than significant** impact**.**

b) The project involves improvements to the existing boat launch facility and does not include the use or pumping of groundwater. The project will result in approximately 3 acres of additional pavement, though a stormwater detention basin is included in the project design and is intended to allow for stormwater recharge into the groundwater table. The project will have a **less than significant** impact on groundwater**.**

c) The project will result in the replacement of the existing boat launch facility which will require construction work within the Feather River, below the high water and the low water elevations. Work within the Feather River is subject to permit by the U.S. Army Corps of Engineers. The project includes rock armoring around the toe of the new boar ramp as well as upstream and downstream of the proposed boat ramp. Rock armoring is designed to reduce the potential for future erosion around the boat ramp. The project consists of replacement of the existing boat ramp and is not anticipated to alter or re-direct flow of the Feather River. This impact is considered **less than significant**.

d) See b) and c) above. The total surface runoff after the project would be the same as before the project. **Less than significant impact.**

e) See a) through d) above. The project would not generate additional runoff or exceed the capacity of existing or planned stormwater drainage system. **No impact.**

f) See a) through e) above. No other substantial water quality degradation is expected to occur as a result of the proposed project. **Less than significant.**

g) The project does not involve the construction of any housing. Thus, no housing would be placed within a 100-year floodplain as a result of the project. **No impact.**

h) The project involves the construction of a restroom. The restroom finish floor will be located at least one foot above the 10-year flood water elevation. The project will therefore have a **less than** significant impact with regard to impeding or redirecting flood flows.

i) See g) and h) above. The project is located within Flood Zone A, as mapped by FEMA. The proposed restroom structure will be located at least one foot above the 100-year flood water elevation and therefore the project will have a **less than significant impact.**

j) Please refer to **Section 4.6, Geology and Soils**, in which the hazards from landslides were evaluated and found to be less than significant. The project is located downriver of the Oroville Dam, which may experience seiche as a result of earthshaking activities, thus increasing flows in the Feather River. The facility is located within the Oroville Dam Failure Inundation Area (FERC, 2002). This hazard is addressed in the Butte County General Plan and the California Division of Safety of Dams inspects the Oroville dam on a regular basis. The proposed project will have **no impact** on this potential hazard.

Conclusions Related to Hydrology and Water Quality:

The proposed project will be required to obtain applicable permits for construction including a permits from the U.S. Army Corps of Engineers and the Regional Water Quality Control Board. With these permit requirements, the project design to minimize impacts and **MM 4.1**, impacts to hydrology and water quality will be **less than significant.**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. LAND USE AND PLANNING. Would the project:				
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?	☐	☐	☐	☒

OVERVIEW:

The proposed Gridley Boat Launch Improvement Project is located on City of Gridley property, surrounded by the unincorporated area of Butte County. The wastewater treatment plant is owned and operated by the City of Gridley and the basis for land use planning at the project site is therefore the City of Gridley General Plan. The City General Plan was last revised in 1999. The Land Use Element of the General Plan designates the project area as Industrial (M), while

City zoning for the project site is General Industrial (M-2). The project site is surrounded by agricultural lands.

DISCUSSION OF CHECKLIST ANSWERS:

a) All work for the proposed project will occur within City-owned land and will not physically divide any portion of the community. **No impact.**

b) The project would be consistent with the Land Use designations identified in the City of Gridley General Plan. **No impact.**

c) See **Section 4.4, Biological Resources**. No Habitat Conservation Plans or Natural Community Conservation Plans apply to this area of Butte County. Therefore, there is **no impact**.

Conclusions Related to Land Use and Planning:

The project would have **no impact** on existing or planned land uses on the site or in the vicinity, and would not significantly conflict with any existing land use plans.

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

OVERVIEW:

There has been no significant mining activity in the Gridley area. The California Division of Mines and Geology publication *Mines and Mineral Producers Active in California (1994-1995)* does not show any mines in the vicinity. The project area is not located within a mineral resource area identified by the *Butte County General Plan*.

DISCUSSION OF CHECKLIST ANSWERS:

a) No mineral resources have been identified within the project area, and no mining operations are located there. Therefore, the project would have **no impact** on mineral resources.

b) See a) above. Although one historic, non-reporting (not operating) mine is known to have existed along the Feather River to the north of the project site Butte County, has not delineated any location within the project area as a mineral resource recovery site within any of its land use plans. **No impact.**

CONCLUSIONS RELATED TO MINERAL RESOURCES:

The project would have **no impact** on mineral resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of 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 area or, where such a plan has not been adopted, within two miles of a public airport or a 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?	☐	☐	☐	☒

OVERVIEW:

In 2002, the City Council adopted a Noise Ordinance for the City (Gridley Municipal Code Section 9.40). The Noise Ordinance regulates noise generated by various activities, and sets forth procedures for the handling of complaints related to noise. One provision of the Noise Ordinance (9.40.160) regulates the time that construction activities may occur, prohibiting such activity on weekdays from 7:00 p.m. to 6:00 a.m. on weekdays or at any time on Sundays or holidays.

The City of Gridley Noise Element establishes land use compatibility criteria for a variety of land uses in terms of Day/Night Average Noise Levels (Ldn). The uses with the highest degree of sensitivity have the lowest corresponding land use compatibility criteria with respect to noise. For

each of these noise sensitive uses, noise levels exceeding 70 dB Ldn are considered "Normally Unacceptable".

The project is located adjacent to the City's existing wastewater treatment plant, an area surrounded by agricultural land use. There are no sensitive receptors within the vicinity of the proposed project. The nearest residents are approximately one quarter mile to the east of the project area.

DISCUSSION OF CHECKLIST ANSWERS:

a) According to the General Plan, construction activities shall be limited to the hours of 7:00 am to 5:00 pm, unless an exemption is received from the City to cover special circumstances. Compliance with this policy would make construction noise impacts less than significant, as it would limit noise to daytime hours only. It is possible that, due to the type of construction involved, there may be a need to construct during periods outside of the General Plan policy. This would be needed to take advantage of low flow periods in the collection system. This need is expected to be localized to essential connections, such as the lift station or connection to the sewer system, and would be temporary. Since the bulk of the construction would occur during typical business hours, and there would only be a few instances where work might occur outside of those periods, impacts are considered **less than significant**.

b) Ground-borne vibrations resulting from the demolition and removal of existing asphalt concrete at the project site may occur. These impacts would be temporary in nature, as discussed in (a) above. Impacts generated would be considered **less than significant.**

c) The project will not result in any new noise generating sources, and therefore the project would have **no impact** on permanent noise levels.

d) Temporary increase in noise levels would occur during construction work, mainly from vehicles and equipment. As discussed in (a) above, construction would be required to comply with noise requirements set forth in the General Plan. Impacts to noise levels would be temporary in nature and are considered to be **less than significant**.

e) There is no public airfield in the vicinity; thus, there would be **no impacts** that pertain to public airfields.

f) There is no private airfield in the vicinity; thus, there would be **no impacts** that pertain to private airfields.

CONCLUSIONS RELATED TO NOISE:

Noise impacts associated with the project will be **less than significant**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., 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?	☐	☐	☐	☒

OVERVIEW:

According to the California Department of Finance, E-5 Report, the estimated 2009 population for the City of Gridley is 6,417 persons. The 2000 U.S. Census population for the City of Gridley was 5,408 persons. This represents an increase of 1009 persons in the past 9 years, or 18.7 percent growth from 2000 to 2009. The average annual growth rate between 2000 and 2009 was approximately 2.07 percent (California Department of Finance).

The project will not add directly to the housing stock or population in the City of Gridley. The project would provide improved day-use access to the Feather River at the existing boat ramp facility.

DISCUSSION OF CHECKLIST ANSWERS:

a) The proposed project will improve wastewater treatment and will not increase capacity at the existing treatment plant. Therefore the project will have **no impact** on population growth.

b) No housing would have to be removed during project construction, and thus would eliminate the necessity for construction of replacement housing elsewhere. Therefore, there will be **no impact** to displacement of people or housing as a result of the proposed project.

c) See b) above. **No impact.**

CONCLUSIONS RELATED TO POPULATION AND HOUSING:

The project would have **no impact** on population and housing.

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

OVERVIEW:

Police protection in the City of Gridley is provided by the City. The City also operates and maintains water and sewer lines, streets, parks and electricity. Fire protection within the City is provided by the California Department of Forestry and Fire Protection and volunteer service. Schools in the area are operated by the Gridley Unified School District.

DISCUSSION OF CHECKLIST ANSWERS:

a) The proposed project will have **no impact** on fire protection services within the City of Gridley or surrounding area.

b) The project would not affect the provision of police protection services. **No impact.**

c) The project would not affect school enrollments nor generate a need for new facilities. **No impact.**

d) The project would have **no impact** on demand for parks. Also, please refer to **Section 14.4, Recreation**.

e) The project would have **no impact** on other governmental services. For impacts on service systems in the City of Gridley, please refer to **Section 4.16, Utilities and Service Systems**.

CONCLUSIONS RELATED TO PUBLIC SERVICES:

The project would have **no impacts** on public services.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☒	☐	☐

OVERVIEW:

The project consists of improvements to the existing day-use boat launch facility located on the Feather River. The proposed project will result in improved access to and improved day-use amenities at the boat launch facility.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project may lead to the increased use of the boat launch facility, though the project is intended to encourage and accommodate this use. This impact is considered to be **less than significant**.

b) The project consists of improvements to the existing boat launch facility that is utilized for day-use recreational purposes. This initial study analyzes the impacts associated with the proposed improvements. Mitigation included in this document results in project impacts **less than significant with mitigation incorporated**.

CONCLUSIONS RELATED TO RECREATION:

The project would have a **less than significant impact** on parks and recreational facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard 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) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

OVERVIEW:

The City of Gridley is intersected by State Route 99 and the Union Pacific Railroad. The project site is located adjacent to the Feather River, two miles east of the City of Gridley, and is accessed from East Gridley Road. The proposed project will not require the closure of streets or construction within streets and right-of-ways.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project consists of improvements to the existing boat launch facility in order to provide increases access and improved day-use facilities. Although the project may result in a minor increase in traffic to the facility, this increase is anticipated to be minimal and limited to recreational day-use. Although a minor increase in traffic may occur, and temporary construction traffic will result, the project would not generate additional traffic on roadways, as it does not involve the construction of residences, commercial centers, or other buildings for land use activities that generate traffic. Therefore, the project would have a **less than significant impact** on traffic volumes, nor would it change the capacity of any roadways in the vicinity of Gridley.

b) Since the project will have less than significant on traffic volume as described in a) above, the project would have **less than significant impact** on LOS or traffic volumes.

c) The project would have **no impact** on airstrip usage or on air traffic patterns.

d) The project will not result in the modification of the existing access intersection from East Gridley Road and therefore will not result in any increased hazards due to a design feature. The impact is considered **less than significant.**

e) The project will not interfere with emergency access within the City of Gridley or surrounding County lands. **No impact**.

f) The project will result in a total of 25 new parking spaces, including boat-trailer parking, handicapped parking and auto parking. This will result in an improvement of the existing facility parking. Therefore the project will have **no impact** on inadequate parking capacity.

g) The project would not conflict with adopted policies, plans or programs supporting alternative transportation. **No impact.**

CONCLUSIONS RELATED TO TRANSPORTATION AND CIRCULATION:

The project would not have a significant impact on traffic or transportation facilities. Impacts to traffic will be **less than significant**.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. UTILITIES AND SERVICE SYSTEMS. Would the project:				
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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☐	☒

OVERVIEW:

The City of Gridley provides a number of utilities and services including water, wastewater, and electricity to most areas of the City. The proposed boat launch improvement project is located on City-owned land to the east of the City center. The project includes the extension of sewer and water to the project area and includes the extension of on-site power to the proposed day use area.

DISCUSSION OF CHECKLIST ANSWERS:

a) The project would involve the installation of a restroom to be connected to the City's existing sewer service. This connection will not result in the City exceeding the wastewater treatment requirements of the Regional Water Quality Control Board. Therefore this impact is considered to be **less than significant**.

b) The project will not result in the construction of new water or wastewater treatment facilities. **No impact**.

c) The project includes the construction of a stormwater bioswale to accommodate stormwater drainage from the project site. The impacts associated with construction of the bioswale are evaluated in this Initial Study. Therefore the project will have a **less than significant** impact on stormwater.

d) The project includes connection to the City water system to service the fish cleaning station, restrooms and potable water spigots and/or drinking fountains. This impact is considered minimal and will have a **less than significant** impact on the City's water supplies.

e) The proposed project includes installation of restrooms with connection to the City's wastewater collection and treatment facilites to service the day-use area. The proposed restrooms consist of two stalls, with two sewer connections to the wastewater system. Additionally the fish cleaning station will be connected to the City wastewater system. The project will result in a total of three new connections to the City's wastewater system. This impact is considered to be **less than significant.**

f) All waste from the demolition of the existing boat launch facility will be disposed of at a permitted landfill. The Neal Road Landfill is operated by the Butte County Public Works Department, Solid Waste Division. The project will have a **less than significant impact** on solid waste services.

g) See f) above. **No impact.**

CONCLUSIONS RELATING TO UTILITIES AND SERVICE SYSTEMS:

The project would have **a less than significant impact** upon utilities and service systems.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wild-life population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION OF MANDATORY FINDINGS OF SIGNIFICANCE:

a) Refer to **Section 4, Biological Resources.** The project has potential to impact listed species through the modification of habitat and the removal of trees. Implementation of **MM 4.1** requires implementation of a Biological Resources Mitigation Program and would reduce anticipated impacts to a level considered **less than significant with mitigation incorporated**.

Refer to **Section 5, Cultural Resources**, in which the cultural resources are discussed. Potential impacts to cultural, archaeological and paleontological resources that are unknown at this

time are mitigated by implementation of **MM 5.1, MM 5.2 and MM 5.3**. **Less than significant with mitigation incorporated.**

b) The project proposes to improve the existing boat launch facilities along the Feather River, including construction of a new boat launch facility, improved parking, installation of restrooms, a new fish cleaning station and day-use amenities. The proposed project impacts are considered to be cumulatively **less than significant with mitigation incorporated.**

c) The Initial Study evaluated potential hazards to humans related to the project. Refer to **Section 7, Hazards and Hazardous Materials,** in which potential hazards are discussed. Potential impacts to hazards and hazardous materials are mitigated by the implementation of **MM 6.1. Less than significant with mitigation incorporated.**

5.0 Special Studies and References

5.1 DOCUMENTS REFERENCED IN INITIAL STUDY AND/OR INCORPORATED BY REFERENCE

The following documents were used to determine the potential for impact from the proposed project. Compliance with federal, state and local laws is assumed in all projects.

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PMC (PMC B). Memo RE: *Gridley WWTP Expansion Project – Migratory Bird and Raptor Nest Survey Results*. April 17, 2009.

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APPENDICES

Appendix A

Air Quality Analysis
URBEMIS Worksheets

PMC
June 15, 2009

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\smyers\Application Data\Urbemis\Version9a\Projects\Gridley Boat Ramp.urb924

Project Name: Gridely Boat Ramp

Project Location: Sacramento County AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2009 TOTALS (lbs/day unmitigated)	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
2009 TOTALS (lbs/day mitigated)	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
2010 TOTALS (lbs/day unmitigated)	6.15	39.06	34.34	0.03	25.10	2.53	27.25	5.26	2.32	7.23	5,490.76
2010 TOTALS (lbs/day mitigated)	6.15	39.06	34.34	0.03	5.77	2.53	7.92	1.22	2.32	3.19	5,490.76

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

6/15/2009 9:38:38 AM

Time Slice 11/30/2009-12/31/2009 Active Days: 24	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
Building 11/30/2009-06/15/2010	2.60	15.09	22.22	0.02	0.10	0.96	1.06	0.03	0.88	0.92	3,130.75
Building Off Road Diesel	1.66	6.57	4.91	0.00	0.00	0.61	0.61	0.00	0.56	0.56	596.40
Building Vendor Trips	0.63	8.05	6.57	0.01	0.05	0.33	0.38	0.02	0.30	0.32	1,513.86
Building Worker Trips	0.31	0.48	10.74	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,020.49
Demolition 11/30/2009-01/11/2010	1.26	8.21	5.96	0.00	0.00	0.64	0.65	0.00	0.59	0.59	811.86
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.17	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.56
Time Slice 1/1/2010-1/11/2010 Active Days: 7	3.59	21.75	26.56	0.03	0.10	1.48	1.58	0.04	1.36	1.39	3,943.75
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Demolition 11/30/2009-01/11/2010	1.17	7.73	5.76	0.00	0.00	0.59	0.59	0.00	0.54	0.54	811.95
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.14	7.68	4.68	0.00	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65

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Time Slice 1/12/2010-3/26/2010 Active Days: 54	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Time Slice 3/29/2010-5/11/2010 Active Days: 32	5.45	39.06	34.34	0.03	**25.10**	2.14	27.25	**5.26**	1.97	7.23	5,490.76
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Mass Grading 03/28/2010- 05/11/2010	3.03	25.04	13.54	0.00	25.00	1.25	26.26	5.22	1.15	6.37	2,358.97
Mass Grading Dust	0.00	0.00	0.00	0.00	25.00	0.00	25.00	5.22	0.00	5.22	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65
Time Slice 5/12/2010-5/14/2010 Active Days: 3	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

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Time Slice 5/17/2010-6/15/2010 Active Days: 22	6.15	33.79	34.07	0.03	0.12	2.53	2.65	0.04	2.32	2.36	5,059.15
Asphalt 05/15/2010-06/15/2010	3.73	19.77	13.27	0.00	0.02	1.64	1.66	0.01	1.51	1.51	1,927.35
Paving Off-Gas	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.11	1.65	0.57	0.00	0.01	0.07	0.08	0.00	0.06	0.06	257.69
Paving Worker Trips	0.07	0.11	2.42	0.00	0.01	0.01	0.02	0.00	0.00	0.01	251.22
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

Phase Assumptions

Phase: Demolition 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 3/28/2010 - 5/11/2010 - Default Paving Description

Total Acres Disturbed: 5

Maximum Daily Acreage Disturbed: 1.25

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

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Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 5/15/2010 - 6/15/2010 - Default Building Construction Description

Acres to be Paved: 5

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/30/2009 - 6/15/2010 - Type Your Description Here

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 0 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 0 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 0 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

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Time Slice 11/30/2009-12/31/2009 Active Days: 24	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
Building 11/30/2009-06/15/2010	2.60	15.09	22.22	0.02	0.10	0.96	1.06	0.03	0.88	0.92	3,130.75
Building Off Road Diesel	1.66	6.57	4.91	0.00	0.00	0.61	0.61	0.00	0.56	0.56	596.40
Building Vendor Trips	0.63	8.05	6.57	0.01	0.05	0.33	0.38	0.02	0.30	0.32	1,513.86
Building Worker Trips	0.31	0.48	10.74	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,020.49
Demolition 11/30/2009-01/11/2010	1.26	8.21	5.96	0.00	0.00	0.64	0.65	0.00	0.59	0.59	811.86
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.17	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.56
Time Slice 1/1/2010-1/11/2010 Active Days: 7	3.59	21.75	26.56	0.03	0.10	1.48	1.58	0.04	1.36	1.39	3,943.75
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Demolition 11/30/2009-01/11/2010	1.17	7.73	5.76	0.00	0.00	0.59	0.59	0.00	0.54	0.54	811.95
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.14	7.68	4.68	0.00	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65

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Time Slice 1/12/2010-3/26/2010 Active Days: 54	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Time Slice 3/29/2010-5/11/2010 Active Days: 32	5.45	39.06	34.34	0.03	5.77	2.14	7.92	1.22	1.97	3.19	5,490.76
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Mass Grading 03/28/2010- 05/11/2010	3.03	25.04	13.54	0.00	5.67	1.25	6.93	1.19	1.15	2.34	2,358.97
Mass Grading Dust	0.00	0.00	0.00	0.00	5.67	0.00	5.67	1.18	0.00	1.18	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65
Time Slice 5/12/2010-5/14/2010 Active Days: 3	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

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Time Slice 5/17/2010-6/15/2010 Active Days: 22	6.15	33.79	34.07	**0.03**	0.12	2.53	2.65	0.04	2.32	2.36	5,059.15
Asphalt 05/15/2010-06/15/2010	3.73	19.77	13.27	0.00	0.02	1.64	1.66	0.01	1.51	1.51	1,927.35
Paving Off-Gas	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.11	1.65	0.57	0.00	0.01	0.07	0.08	0.00	0.06	0.06	257.69
Paving Worker Trips	0.07	0.11	2.42	0.00	0.01	0.01	0.02	0.00	0.00	0.01	251.22
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 3/28/2010 - 5/11/2010 - Default Paving Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\smyers\Application Data\Urbemis\Version9a\Projects\Gridley Boat Ramp.urb924

Project Name: Gridely Boat Ramp

Project Location: Sacramento County AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2009 TOTALS (lbs/day unmitigated)	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
2009 TOTALS (lbs/day mitigated)	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
2010 TOTALS (lbs/day unmitigated)	6.15	39.06	34.34	0.03	25.10	2.53	27.25	5.26	2.32	7.23	5,490.76
2010 TOTALS (lbs/day mitigated)	6.15	39.06	34.34	0.03	5.77	2.53	7.92	1.22	2.32	3.19	5,490.76

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

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Time Slice 11/30/2009-12/31/2009 Active Days: 24	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
Building 11/30/2009-06/15/2010	2.60	15.09	22.22	0.02	0.10	0.96	1.06	0.03	0.88	0.92	3,130.75
Building Off Road Diesel	1.66	6.57	4.91	0.00	0.00	0.61	0.61	0.00	0.56	0.56	596.40
Building Vendor Trips	0.63	8.05	6.57	0.01	0.05	0.33	0.38	0.02	0.30	0.32	1,513.86
Building Worker Trips	0.31	0.48	10.74	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,020.49
Demolition 11/30/2009-01/11/2010	1.26	8.21	5.96	0.00	0.00	0.64	0.65	0.00	0.59	0.59	811.86
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.17	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.56
Time Slice 1/1/2010-1/11/2010 Active Days: 7	3.59	21.75	26.56	0.03	0.10	1.48	1.58	0.04	1.36	1.39	3,943.75
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Demolition 11/30/2009-01/11/2010	1.17	7.73	5.76	0.00	0.00	0.59	0.59	0.00	0.54	0.54	811.95
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.14	7.68	4.68	0.00	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65

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Time Slice 1/12/2010-3/26/2010 Active Days: 54	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Time Slice 3/29/2010-5/11/2010 Active Days: 32	5.45	39.06	34.34	0.03	**25.10**	2.14	27.25	**5.26**	1.97	7.23	5,490.76
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Mass Grading 03/28/2010- 05/11/2010	3.03	25.04	13.54	0.00	25.00	1.25	26.26	5.22	1.15	6.37	2,358.97
Mass Grading Dust	0.00	0.00	0.00	0.00	25.00	0.00	25.00	5.22	0.00	5.22	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65
Time Slice 5/12/2010-5/14/2010 Active Days: 3	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

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Time Slice 5/17/2010-6/15/2010 Active Days: 22	6.15	33.79	34.07	**0.03**	0.12	2.53	2.65	0.04	2.32	2.36	5,059.15
Asphalt 05/15/2010-06/15/2010	3.73	19.77	13.27	0.00	0.02	1.64	1.66	0.01	1.51	1.51	1,927.35
Paving Off-Gas	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.11	1.65	0.57	0.00	0.01	0.07	0.08	0.00	0.06	0.06	257.69
Paving Worker Trips	0.07	0.11	2.42	0.00	0.01	0.01	0.02	0.00	0.00	0.01	251.22
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

Phase Assumptions

Phase: Demolition 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 3/28/2010 - 5/11/2010 - Default Paving Description

Total Acres Disturbed: 5

Maximum Daily Acreage Disturbed: 1.25

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

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Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 5/15/2010 - 6/15/2010 - Default Building Construction Description

Acres to be Paved: 5

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/30/2009 - 6/15/2010 - Type Your Description Here

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 0 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 0 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 0 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

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Time Slice 11/30/2009-12/31/2009 Active Days: 24	3.86	23.30	28.18	0.03	0.10	1.60	1.71	0.04	1.47	1.51	3,942.61
Building 11/30/2009-06/15/2010	2.60	15.09	22.22	0.02	0.10	0.96	1.06	0.03	0.88	0.92	3,130.75
Building Off Road Diesel	1.66	6.57	4.91	0.00	0.00	0.61	0.61	0.00	0.56	0.56	596.40
Building Vendor Trips	0.63	8.05	6.57	0.01	0.05	0.33	0.38	0.02	0.30	0.32	1,513.86
Building Worker Trips	0.31	0.48	10.74	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,020.49
Demolition 11/30/2009-01/11/2010	1.26	8.21	5.96	0.00	0.00	0.64	0.65	0.00	0.59	0.59	811.86
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.17	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.56
Time Slice 1/1/2010-1/11/2010 Active Days: 7	3.59	21.75	26.56	0.03	0.10	1.48	1.58	0.04	1.36	1.39	3,943.75
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Demolition 11/30/2009-01/11/2010	1.17	7.73	5.76	0.00	0.00	0.59	0.59	0.00	0.54	0.54	811.95
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	1.14	7.68	4.68	0.00	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65

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Time Slice 1/12/2010-3/26/2010 Active Days: 54	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Time Slice 3/29/2010-5/11/2010 Active Days: 32	5.45	39.06	34.34	0.03	5.77	2.14	7.92	1.22	1.97	3.19	5,490.76
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34
Mass Grading 03/28/2010-05/11/2010	3.03	25.04	13.54	0.00	5.67	1.25	6.93	1.19	1.15	2.34	2,358.97
Mass Grading Dust	0.00	0.00	0.00	0.00	5.67	0.00	5.67	1.18	0.00	1.18	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.03	0.05	1.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	111.65
Time Slice 5/12/2010-5/14/2010 Active Days: 3	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

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Time Slice 5/17/2010-6/15/2010 Active Days: 22	6.15	33.79	34.07	0.03	0.12	2.53	2.65	0.04	2.32	2.36	5,059.15
Asphalt 05/15/2010-06/15/2010	3.73	19.77	13.27	0.00	0.02	1.64	1.66	0.01	1.51	1.51	1,927.35
Paving Off-Gas	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.98	18.01	10.28	0.00	0.00	1.57	1.57	0.00	1.44	1.44	1,418.44
Paving On Road Diesel	0.11	1.65	0.57	0.00	0.01	0.07	0.08	0.00	0.06	0.06	257.69
Paving Worker Trips	0.07	0.11	2.42	0.00	0.01	0.01	0.02	0.00	0.00	0.01	251.22
Building 11/30/2009-06/15/2010	2.42	14.02	20.80	0.02	0.10	0.89	0.99	0.03	0.82	0.85	3,131.80
Building Off Road Diesel	1.55	6.28	4.83	0.00	0.00	0.57	0.57	0.00	0.53	0.53	596.40
Building Vendor Trips	0.59	7.31	6.13	0.01	0.05	0.30	0.35	0.02	0.27	0.29	1,514.05
Building Worker Trips	0.28	0.43	9.85	0.01	0.05	0.02	0.07	0.02	0.02	0.03	1,021.34

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 3/28/2010 - 5/11/2010 - Default Paving Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\smyers\Application Data\Urbemis\Version9a\Projects\Gridley Boat Ramp.urb924

Project Name: Gridely Boat Ramp

Project Location: Sacramento County AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2009 TOTALS (tons/year unmitigated)	0.05	0.28	0.34	0.00	0.00	0.02	0.02	0.00	0.02	0.02	47.31
2009 TOTALS (tons/year mitigated)	0.05	0.28	0.34	0.00	0.00	0.02	0.02	0.00	0.02	0.02	47.31
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010 TOTALS (tons/year unmitigated)	0.24	1.47	1.61	0.00	0.41	0.09	0.50	0.09	0.09	0.17	246.56
2010 TOTALS (tons/year mitigated)	0.24	1.47	1.61	0.00	0.10	0.09	0.19	0.02	0.09	0.11	246.56
Percent Reduction	0.00	0.00	0.00	0.00	76.15	0.00	62.00	75.38	0.00	37.83	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

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2009	0.05	0.28	0.34	0.00	0.00	0.02	0.02	0.00	0.02	0.02	47.31
Building 11/30/2009-06/15/2010	0.03	0.18	0.27	0.00	0.00	0.01	0.01	0.00	0.01	0.01	37.57
Building Off Road Diesel	0.02	0.08	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	7.16
Building Vendor Trips	0.01	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.17
Building Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25
Demolition 11/30/2009-01/11/2010	0.02	0.10	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	9.74
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.01	0.10	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.40
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34

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2010	0.24	1.47	1.61	0.00	0.41	0.09	0.50	0.09	0.09	0.17	246.56
Building 11/30/2009-06/15/2010	0.14	0.83	1.23	0.00	0.01	0.05	0.06	0.00	0.05	0.05	184.78
Building Off Road Diesel	0.09	0.37	0.28	0.00	0.00	0.03	0.03	0.00	0.03	0.03	35.19
Building Vendor Trips	0.03	0.43	0.36	0.00	0.00	0.02	0.02	0.00	0.02	0.02	89.33
Building Worker Trips	0.02	0.03	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.26
Demolition 11/30/2009-01/11/2010	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.84
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Mass Grading 03/28/2010-05/11/2010	0.05	0.40	0.22	0.00	0.40	0.02	0.42	0.08	0.02	0.10	37.74
Mass Grading Dust	0.00	0.00	0.00	0.00	0.40	0.00	0.40	0.08	0.00	0.08	0.00
Mass Grading Off Road Diesel	0.05	0.40	0.20	0.00	0.00	0.02	0.02	0.00	0.02	0.02	35.96
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79
Asphalt 05/15/2010-06/15/2010	0.04	0.22	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	21.20
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.03	0.20	0.11	0.00	0.00	0.02	0.02	0.00	0.02	0.02	15.60
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.83
Paving Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76

Phase Assumptions

Phase: Demolition 11/30/2009 - 1/11/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

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Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 3/28/2010 - 5/11/2010 - Default Paving Description

Total Acres Disturbed: 5

Maximum Daily Acreage Disturbed: 1.25

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 5/15/2010 - 6/15/2010 - Default Building Construction Description

Acres to be Paved: 5

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/30/2009 - 6/15/2010 - Type Your Description Here

Off-Road Equipment:

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1 Cranes (399 hp) operating at a 0.43 load factor for 0 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 0 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 0 hours per day

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2009	0.05	0.28	0.34	0.00	0.00	0.02	0.02	0.00	0.02	0.02	47.31
Building 11/30/2009-06/15/2010	0.03	0.18	0.27	0.00	0.00	0.01	0.01	0.00	0.01	0.01	37.57
Building Off Road Diesel	0.02	0.08	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	7.16
Building Vendor Trips	0.01	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.17
Building Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25
Demolition 11/30/2009-01/11/2010	0.02	0.10	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	9.74
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.01	0.10	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.40
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
2010	0.24	1.47	1.61	0.00	0.10	0.09	0.19	0.02	0.09	0.11	246.56

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Building 11/30/2009-06/15/2010	0.14	0.83	1.23	0.00	0.01	0.05	0.06	0.00	0.05	0.05	184.78
Building Off Road Diesel	0.09	0.37	0.28	0.00	0.00	0.03	0.03	0.00	0.03	0.03	35.19
Building Vendor Trips	0.03	0.43	0.36	0.00	0.00	0.02	0.02	0.00	0.02	0.02	89.33
Building Worker Trips	0.02	0.03	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.26
Demolition 11/30/2009-01/11/2010	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.84
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Mass Grading 03/28/2010-05/11/2010	0.05	0.40	0.22	0.00	0.09	0.02	0.11	0.02	0.02	0.04	37.74
Mass Grading Dust	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.02	0.00	0.02	0.00
Mass Grading Off Road Diesel	0.05	0.40	0.20	0.00	0.00	0.02	0.02	0.00	0.02	0.02	35.96
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79
Asphalt 05/15/2010-06/15/2010	0.04	0.22	0.15	0.00	0.00	0.02	0.02	0.00	0.02	0.02	21.20
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.03	0.20	0.11	0.00	0.00	0.02	0.02	0.00	0.02	0.02	15.60
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.83
Paving Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 3/28/2010 - 5/11/2010 - Default Paving Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

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For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

APPENDIX B

SECTION 7 BIOLOGICAL ANALYSIS
GRIDLEY BOAT RAMP IMPROVEMENT SITE, BUTTE COUNTY, CA

FOOTHILL ASSOCIATES
FEBRUARY 20, 2009

Section 7 Biological Assessment

Gridley Boat Ramp Improvement Site
Butte County, California

Prepared for: Rolls Anderson & Rolls
Civil Engineers

February 20, 2009

Submitted by:
FOOTHILL ASSOCIATES

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1.0 INTRODUCTION

1.1 Purpose

This Biological Assessment (BA) is being written to analyze the impacts to federally listed species that may occur within the ±4.72-acre Gridley Boat Ramp Improvement project area (Proposed Project). The Proposed Project is located east of the City of Gridley, California (**Figure 1**). The City of Gridley (Applicant) intends to make improvements to the boat launching facility for public use, replace the existing boat ramp, and modify existing bank slope protection to prevent structural damage caused by winter high flows. The boat ramp improvement site is an existing public use and river access area and most improvements will occur within an approximately one-acre area. Land uses surrounding the site include recreational, agricultural, and the City's wastewater treatment plant.

The purpose of this BA is to review the proposed issuance of a federal permit by the U.S. Army Corps of Engineers (Corps) to determine if and how this action may affect federally listed species pursuant to the federal Endangered Species Act (ESA). The Applicant has submitted to the Corps a permit application pursuant to Section 404 of the Clean Water Act for fill of waters/wetlands of the United States associated with the Proposed Project area.

The Proposed Project consists of improvements to an existing boat ramp site that is comprised of paved road, a reinforced concrete boat ramp, fish cleaning station, and street lights. Improvements will include a paved parking area, plumbed restroom with electricity, and a lift station to pump sewage to a neighboring sewage treatment plant. The existing concrete ramp will be replaced with a pre-cast concrete ramp. Storm runoff from the new parking area will drain to a biofiltration swale which will drain to the river. The new fish cleaning station will be constructed south of the existing fish cleaning station. Wastewater from the fish cleaning station will be directed to the sewer lift station.

In accordance with Section 7 of the ESA, the Corps is required to consult with the U.S. Fish and Wildlife Service (Service) to ensure that issuance of a 404 permit for the proposed project would not jeopardize the continued existence of any federally listed species or result in adverse modification of designated critical habitat for federally listed species. Formal consultation between the Corps and the Service is necessary for the issuance of any permit associated with a project that is likely to adversely affect a federally listed species. This BA has been prepared to facilitate the federal consultation process by providing the Service with the best available information regarding project related effects to federally listed species.

1.2 Species Covered in this Document

The Proposed Project is located along the Feather River east of Gridley, California, (**Figure 1**) and may affect the following four species which are federally listed as

threatened: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB), Central Valley (CV) spring-run Chinook salmon (*Oncorhynchus tshawytscha*), CV steelhead (*Oncorhynchus mykiss*), and Southern Distinct Population Segment (DPS) of North American green sturgeon (*Acipsenser medirostris*).

This BA describes potential effects to VELB, CV spring-run Chinook salmon, CV steelhead, and green sturgeon resulting from the Proposed Project. This analysis takes into consideration both the project-related impacts and conservation measures to be implemented to avoid, minimize, and offset these impacts.

1.2.1 Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) (VELB)

The VELB is a federally listed threatened species. The beetle occurs solely in association with its host plant the elderberry (*Sambucus* sp.), a common component of the remaining riparian forests and adjacent uplands of the Central Valley. Suitable habitat for the beetle, consisting of elderberry shrubs, occurs within 100 feet of the Proposed Project site. Although no evidence of the beetle was detected, Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999) will be required for federal Endangered Species Act (FESA) compliance.

1.2.2 Central Valley (CV) Spring-Run Chinook Salmon (Oncorhynchus tshawytscha)

Central Valley spring-run Chinook salmon is a federally listed threatened species. The species occurs in Central Valley drainages while migrating, spawning, and rearing. The species occurs seasonally in the Feather River.

1.2.3 Central Valley Steelhead (Oncorhynchus mykiss)

Central Valley steelhead is a federally listed threatened species. The salmonid occurs in Central Valley drainages while migrating, spawning and rearing. The species occurs year-round in the Feather River at various life stages. Portions of the population never emigrate to salt water for various reasons and are considered rainbow trout.

1.2.4 Green Sturgeon (Acipsenser medirostris)

The Southern Distinct Population Segment (DPS) of North American green sturgeon is federally listed threatened. The fish occurs in Central Valley drainages, including the Feather River, while migrating, spawning, and rearing

1.3 Other Species Considered but not Addressed Further

1.3.1 Vernal Pool Fairy Shrimp (Branchinecta lynchi)

No suitable habitat occurs within the Action Area for this species.

1.3.2 Vernal Pool Tadpole Shrimp (Lepidurus packardi)

No suitable habitat occurs within the Action Area for this species.

1.3.3 Delta Smelt (Hypomesus transpicificus)

No suitable habitat occurs within the Action Area for this species.

1.3.4 Sacramento River Winter-Run Chinook Salmon (O. tshawytscha)

Sacramento River winter-run Chinook salmon occur only in the mainstem Sacramento River and must oversummer in high reaches of the watershed.

1.3.5 California Red-legged Frog (Rana aurora drtaytonii)

No suitable habitat for red-legged frog occurs within or adjacent to the Action Area; furthermore, the species is believed extirpated from the Central Valley.

1.3.6 Giant Garter Snake (Thamnophis gigas)

The giant garter snake is a federally listed threatened species. The snake is found primarily in marshes, sloughs, drainage canals, and irrigation ditches, especially around rice fields, and occasionally in slow-moving creeks. The species prefers locations with vegetation close to the water for basking, from sea level to 400 ft. (122 m).

Though the Feather River does provide perennial aquatic habitat and backwater areas within the vicinity of the Proposed Project area, the waterway is a very large, relatively fast moving waterway that is not considered suitable habitat for this species.

Additionally, there are no CNDDB records of this species from the Feather River or surrounding detention ponds and orchards, or within five miles of the Proposed Project site (**Figure 2**).

1.3.7 Western Yellow-billed Cuckoo (Coccyzus americanus occidentalis)

Suitable nesting habitat for the species does not occur within the Action Area. The species nests typically in sites with at least some willow, dense low-level or understory foliage, high humidity, and wooded foraging spaces in excess of 93m (300ft) in width and 10 ha (25 acres) in area (Gaines 1974b, 1977a). The riparian area associated with the boat ramp is not dense, is fragmented, and is surrounded by agricultural fields and a wastewater treatment plant, and there is no recorded occurrence of the bird within five miles of the Proposed Project Area (Figure 2).

1.4 Critical Habitat and Essential Fish Habitat

Under Section 7(a) of the ESA, federal agencies must ensure that any action they authorize, fund, or carry out, is not likely to result in destruction or adverse modification of formally designated critical habitat for federally listed species. Critical habitat is formally designated by the Service in the Code of Federal Regulations if prudent and

determinable. The Proposed Project will affect 0.19 acre of critical habitat for spring-run Chinook salmon, CV steelhead, and green sturgeon. In addition, the Proposed Project will affect 0.19 acre of essential fish habitat (EFH) for CV spring-run Chinook salmon.

1.4.1 Valley Elderberry Longhorn Beetle

Critical habitat for the VELB was formally designated on August 8, 1980 (FR 45:52803). However, the Proposed Project is located outside of the designated critical habitat for this species (FR 45:52805). The final rule for designation of critical habitat for VELB does not include any areas in Butte County.

1.4.2 CV Spring-Run Chinook and CV Steelhead

Critical Habitat

A final designation of critical habitat for these species was published on September 2, 2005, with an effective date of January 2, 2006. The boat ramp is situated within waters designated as critical habitat to CV spring-run Chinook salmon and CV steelhead. National Marine Fisheries Service (NMFS) designated critical habitat for spring-run Chinook salmon and CV steelhead, which is defined to include all river reaches accessible to listed salmonids in the Sacramento River and its tributaries in California (National Marine Fisheries Service, National Oceanic and Atmospheric Administration Fisheries 2006). By definition, the Feather River is considered critical habitat for these species.

Essential Fish Habitat

On September 19, 2005, Secretary of Commerce Carlos Gutierrez transmitted to Congress the Bush Administration's proposal to reauthorize the Magnuson-Stevenson Act (MSA). The MSA mandates federal protection for fisheries species covered under a management program and the habitat they require to complete their lifecycle (i.e., EFH). Essential Fish Habitat means those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act, 16 U.S.C. 1801 et seq).

For the purpose of interpreting the definition of EFH, waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrates includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity covers a species' full life cycle (EFH Interim Final Rule, 62 FR 66531).

The Feather River and its adjacent shores and substrate within the Action Area consist of EFH as defined by the MSA. The Pacific Fishery Management Council manages the fisheries for coho, chinook, and Puget Sound Pink Salmon and has defined EFH for these three species, which includes approximately 0.19 acre of the Action Area.

1.4.3 Green Sturgeon

Critical Habitat

Critical habitat has not been designated for the species. A proposed rule defining critical habitat was published in the Federal Register by NMFS in September 2008. Currently public comments are being addressed and a final ruling will be published by June 30, 2009 (Pers. comm. Wang 2008 and 2009). The current proposed rule defines the Lower Feather River as critical habitat for green sturgeon. This would include riverine habitat associated with the Proposed Project.

2.0 HISTORY OF CONSULTATION

July 11, 2008. A telephone conversation between Jana Milliken, Service and Ryan Brown, Foothill Associates, discussing the Services general requirements for the project. It was mutually agreed that a Biological Assessment would be written to aid consultation for the Proposed Project. Jana specifically requested a detailed project description spelling out time of year, construction details, and minimization measures to protect the beetle from potential negative affects.

July 15 and 16, 2008. E-mail correspondence between Jason Kindopp, Department of Water Resources (DWR), and Ryan Brown, Foothill Associates regarding flows in the Feather River near the Action Area and requesting any occurrence information for green sturgeon in the Feather River.

July 21, 2008. E-mail and phone correspondence between Alicia Seesholtz, DWR and Ryan Brown, Foothill Associates regarding any known occurrence data for green sturgeon in the Action Area and vicinity.

July 22, 2008 and February 13, 2009. Telephone conversation between Susan Wang, NMFS, and Ryan Brown, Foothill Associates regarding critical habitat designation for the green sturgeon.

3.0 EXISTING SETTING

3.1 Project Location and Setting

The site consists primarily of ±4.72 acres of land with an existing boat ramp and public river access area. The site is graded and partially paved, and includes a small day use area (picnic tables and grills). It is situated east of the City of Gridley and borders the Feather River downstream of Lake Oroville. The site is located within Township 17 North, Range 3 East, Section 4 of the U.S. Geological Survey (USGS) 7.5-minute *Gridley, California* quadrangle (**Figure 1**).

Day use of the site allows recreational fishermen and boaters to access the Feather River in a location allowing both upstream and downstream travel for relatively long distances.

3.2 Land Use

The site is currently utilized as a public boat launching facility. A concrete boat ramp is presently installed in the Feather River for access and bank areas surrounding the ramp have been rip-rapped to prevent erosion. Several amenities are located within the site to better serve the public; these include parking areas, a fish cleaning station, and port-a-potties.

The site is bound by wastewater treatment ponds on the east, riparian habitat, and a public access road on the north and south, and the Feather River along the west. The access road is bordered by a riparian area and an active orchard near the entrance. The day use area is comprised of roughly one acre.

3.3 Soils

The Natural Resources Conservation Service (NRCS) has mapped one soil unit on the Project Site (**Figure 3**). The soil unit that occurs onsite is **Gianella Fine Sandy Loam, 0 to 1 percent slopes, Occasionally Flooded**. This soil unit is described below.

- **Gianella Fine Sandy Loam, 0 to 1 percent slopes, Occasionally Flooded**: This moderately well-drained soil type occurs in western and southern Butte County, on bars of floodplains between 65 and 170 feet above mean sea level (MSL). This soil formed in stratified, coarse-loamy alluvium derived from igneous, metamorphic, and sedimentary rock. Surface runoff is negligible and available water capacity is high around eight inches. This soil is typically used for orchard and row crops, wildlife habitat, and watershed management. Vegetation mainly consists of walnut, prune, and almond orchards; in riparian forest areas, box elders, valley oaks, cottonwoods, and willows co-occur. The NRCS includes the soil type on their list of hydric soil types in Butte County.

3.4 Topography, Drainage and Hydrology

The Proposed Project site is situated primarily on a terraced area, upslope from the Feather River. The access road and parking areas are relatively flat areas. Closer to the river, the site quickly drops off and is steep sided. Elevations on the site range from 60-90 feet above MSL.

Precipitation onsite appears to percolate into the ground as most soil within the Proposed Project footprint is moderately well drained. Sheet flow would be expected to flow downslope to the river; although, no defined drainage patterns representing ephemeral or intermittent waterways occur within the site. One fresh emergent wetland was delineated within the survey area, but it abuts the Feather River, is influenced by the Feather River water table, and does not appear to depend on precipitation.

A portion of the Proposed Project does occur within the Feather River itself, which is a large perennial drainage that confluences with the Sacramento River downstream at Verona, CA. The Feather River is a managed waterway and aside from winter storm influence, flows consistently between 1000-3000 cubic feet per second in the vicinity of the boat ramp (Pers. Comm. Kindopp, 2008).

Once the Feather River confluences with the Sacramento River, water is conveyed to the San Francisco Bay Delta and eventually enters the Pacific Ocean.

3.5 Vegetation Communities

The Project Site supports four vegetation communities, including developed/ ornamental, valley foothill riparian, orchard, and jurisdictional waters of the United States.

3.5.1 Developed/Ornamental

Most of the site is developed and consists of a public water access area with an existing boat ramp. The site is primarily paved concrete and graded gravel areas. Ornamental plantings occur along the eastern side. Portions of the site occur along the immediate margins of the Feather River which supports riparian habitat. The ornamental trees and shrubs in association with the nearby riparian vegetation provide moderate habitat value, primarily for nesting and foraging bird species. Ornamental species that occur within the site include eucalyptus (*Eucalyptus* sp.), sweetgum (*Liquidambar styraciflua*), and honeysuckle (*Lonicera* sp.). A few naturally occurring Fremont cottonwood (*Populus fremontii*) also occur in this area. Bird species identified within this area during the biological assessment include ash-throated flycatcher (*Myiarchus cinerascens*), California quail (*Callipepla californica*), western wood-peewee (*Contopus sordidulus*), northern flicker (*Colaptes auratus*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), western kingbird (*Tyrannus verticalis*), European starling (*Sturnus vulgaris*), bushtit (*Psaltriparus minimus*), Cordilleran flycatcher (*Empidonax occidentalis*), western tanager (*Piranga ludoviciana*), and tree swallow (*Tachycineta bicolor).*

3.5.2 Valley Foothill Riparian

This biotic community is described as such by the California Department of Fish and Game (Mayer and Laudenslayer 1998). Valley foothill riparian habitats occur in the Central Valley and the lower foothills of the Cascade, Sierra Nevada, and Coast Ranges from sea level to 3,000 feet above MSL.

Within the site, valley foothill riparian habitat occurs along the Feather River which is adjacent to the western side of the project site. Much of the riparian habitat along the site slopes steeply down to the Feather River. Riparian habitat within the vicinity of the project site is relatively narrow, as riparian vegetation occurs only on the river side of the access road leading to the boat ramp facility. Much of the bank around the site has had large pieces of concrete deposited on it to prevent erosion. Though stabilizing the bank, these large pieces of concrete affect the ability for plants, namely native tree species, to densely colonize the bank near the boat ramp, and have reduced the habitat value of the site and immediate vicinity; although without the structure to prevent erosion, this bank area might not persist.

Upslope where the bank does level out, riparian vegetation ceases and a roadway occurs leading to the boat ramp. Vegetation occurring within the riparian area includes Himalayan blackberry (*Rubus discolor*), Fremont cottonwood, willow (*Salix* spp.), arundo (*Arundo donax*), California grape (*Vitus californica*), tree-of-heaven (*Ailanthus altissima*), and blue elderberry (*Sambucus mexicana*).

Several bird species utilize riparian habitat, especially riparian areas occurring in association with other riparian areas. Migratory birds use riparian areas for breeding, foraging, and as migratory stop-over sites between winter and summer breeding grounds. Wildlife species observed utilizing riparian habitat during field surveys include western kingbird, and California quail.

3.5.3 Jurisdictional Waters of the United States

Perennial Drainage

A 0.19-acre portion of perennial drainage (Feather River) occurs within the Proposed Project site. The Feather River is a Traditional Navigable Water (TNW). Perennial drainages support water year-round from a combination of sources such as ground water, storm water runoff, snowmelt, and reservoir discharge. Perennial drainages exhibit an ordinary high-water mark and consist of a channel, bed, and bank, and are typically devoid of vegetation due to the scouring effect of flowing water. Perennial drainages are often bordered by wetland vegetation communities of various composition and cover depending on flow rates, duration of flows and soil types. Since the Feather River is classified as a TNW, the Corps would consider it a jurisdictional water of the United States.

Vegetation found in association with the margins of the Feather River include box elder (*Acer negundo*), California mugwort (*Artemisia douglasiana*), willow, canary grass (*Phalaris* sp.), California tule (*Scirpus californicus*), common horsetail (*Equisetum*

arvense), and rabbits foot grass (*Polypogon monspeliensis*). The riverbank that occurs within the site support very little riparian vegetation due to rip-rap presently covering much of the bank in the vicinity of the site.

Perennial drainages provide important water and food resources to a variety of wildlife species. The Feather River provides suitable habitat for nesting birds, aquatic insects, resident amphibians such as frogs, newts and salamanders, and resident and anadromous fish species. Resident and migratory mammals and birds, as well as migrating salmonids utilize the Feather River for foraging, water, shelter, and as a migration corridor.

Fresh Emergent Wetland

A 0.01-acre fresh emergent wetland occurs on the river bank adjacent to the existing boat ramp, and is considered an abutting wetland feature. Fresh emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation is generally perennial monocots to 2 m (6.6 ft) tall (Cheatham and Haller 1975, Cowardin *et al*. 1979). All emergent wetlands are flooded frequently, enough so that the roots of the vegetation prosper in an anaerobic environment (Gosselink and Turner 1978). The vegetation may vary in size from small clumps to vast areas covering several kilometers.

The acreage of fresh emergent wetlands in California has decreased dramatically since the turn of the century due to drainage and conversion to other uses, primarily agriculture (Gilmer *et al*. 1982). On the upper margins of fresh emergent wetlands, saturated or periodically flooded soils support several moist soil plant species including big leafsedge (*Carex amplifolia*), baltic rush (*Juncus balticus*), redroot nutgrass (*Cyperus erythrorhizos*) and on more alkali sites, saltgrass (*Distichlis spicata*). On wetter sites, common cattail (*Typha latifolia*), tule bulrush (*Scirpus acutus*), river bulrush (*Scirpus fluviatilis*), and arrowhead (*Sagittaria* sp.) are potential dominant species (Cheatham and Haller 1975, U.S. Army Corps of Engineers 1978). Plant species dominating the feature onsite include tule bulrush and water primrose (*Ludwigia* sp.).

4.0 PROJECT DESCRIPTION

4.1 Proposed Development

The project consists of improvements to the existing Gridley boat ramp site. The facility currently consists of paved road, a reinforced concrete boat ramp, a fish cleaning station, and street lights. Improvements include a paved parking area, plumbed restroom with electricity, and a lift station to pump sewage to a neighboring treatment plant. The existing concrete ramp will be replaced with a pre-cast concrete ramp. A storm drain system will collect and route precipitation runoff to a bio-swale. The existing fish cleaning station will be relocated south of the boat ramp.

The proposed project entails:

(1) Demolition of the existing boat launching ramp and construction of a new, one lane boat launching ramp. (a) Demolition of the existing ramp will consist of breaking apart a large concrete slab into pieces that can be removed safely and hauled away from the site. An excavator will be utilized to demolish the slab and dump trucks will haul the material from the site. (b) Construction of the new boat ramp will consist of pouring a concrete slab on land and setting it into position in the water. Prior to installation of the concrete slab, smaller crushed rock will be placed in the footprint of the slab to provide a level surface.

(2) Installation of new boarding floats. These floats will serve as seasonal docks to tie up and board launched boats. No vegetation will be removed.

(3) Construction of a new parking area. Currently, the parking area is unimproved and consists of a dirt lot with a number of large eucalyptus trees. Removal of the eucalyptus trees will occur and the area will be paved with asphalt.

(4) Construction of a new restroom and sewer lift station. Part of this task will include trenching for a 3-inch diameter water pipeline. The water pipeline will be installed along the westerly levee of the existing percolation ponds within the City of Gridley Wastewater Treatment Plant. Electrical power for the restrooms will be provided by overhead powerlines. New power poles and overhead wires will be installed on the west side of the existing access road. All efforts will be made to maintain at least a 20-foot setback from the existing elderberry shrubs.

(5) Installation of a new fish-cleaning station.

(6) Installation of slope protection. To increase bank protection at the site, rock will be added over the existing broken concrete. This rock will be sized appropriately (estimated 4-9 inches in diameter) to avoid the creation of

interstitial spaces allowing predatory fish cover. Once rock is placed over the existing concrete rip-rap, soil may be added to facilitate the planting of willow stakes and other suitable riparian vegetation.

(7) Provision for drainage. Since the Proposed Project will create an increase in impervious surface, storm runoff from the new asphalt and concrete parking area will be sloped toward the river. Surface runoff will be diverted to a biofiltration swale on the west side of the parking area and access road and eventually be discharged into the Feather River.

(8) Installation of electrical facilities and lighting. Street lights will be installed within the project footprint to improve public safety during dark periods.

(9) Security access for the site

(10) Installation of signage

4.2 Conservation Measures

4.2.1 Construction Stormwater Pollution Prevention Plan

The Proposed Project is designed to minimize off-site stormwater runoff that might otherwise impact surrounding habitat and water quality. Measures will be implemented during the project construction to avoid adverse impacts to adjacent properties. Standard construction Best Management Practices (BMPs) will be incorporated into construction designs, plans and specifications, and will be required of contractors during construction. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Proposed Project, with the following objectives: (a) to identify pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges from the construction of the project; (b) to identify BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction; (c) to outline and provide guidance for BMPs and stormwater monitoring; (d) to identify project discharge points and receiving waters; (e) to address post-construction BMP implementation and monitoring; and (f) to address sediment / siltation / turbidity and non-visually detectable pollutant monitoring, and outline a sampling and analysis strategy.

4.2.2 Valley Elderberry Longhorn Beetle

The Service's *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* provides minimization ratios based on habitat type where the shrub is located, stem diameter of affected elderberry plants at ground level, and presence or absence of exit holes. Additionally, the Guidelines provide information regarding complete avoidance and measures that can be taken to avoid negatively affecting the beetle.

Within the Proposed Project area, there are no elderberry shrubs; however, complete avoidance of elderberry shrubs is defined as providing a 100-foot no disturbance buffer from shrubs. During biological surveys, 13 shrubs were identified within 100 feet of the

Proposed Project area. These shrubs are located approximately 9 to 38 feet (depending on the shrub) from the proposed overhead utility line leading to the Gridley Boat Ramp facilities (**Figure 4**). Overhead powerline installation along the access road will require standard utility poles placement within 100 feet of the shrubs, but outside the minimum 20 foot from dripline buffer.

An inventory of elderberry shrubs occurring in the vicinity of the Gridley Boat Ramp Improvement Project area was made on June 10, 2008 and is reported in **Table 1** in **Section 6.1**.

No shrub will be directly impacted and there is no reason for transplanting shrubs from their present location to an alternative location for their long-term benefit. To minimize potential negative effects of the project on the VELB, the project proponent will enact Protective Measures as outlined in the *Conservation Guidelines* (1999):

1) Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the Service, the proponent will tailor utility pole placement to provide a minimum setback of at least 20 feet from the dripline of each elderberry plant.

2) Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.

3) Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a federally threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.

4) Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

In addition, to these Protective Measures, the Project Proponent will also:

5) Perform construction in the vicinity of the elderberry shrubs onsite outside the emergence window of the beetle (May-June).

6) Prior to ground disturbing activities in the vicinity of elderberry shrubs adjacent to the project area, these areas will be watered to help prevent dust, which can negatively affect the beetle, if present.

4.2.3 CV Spring-Run Chinook Salmon and CV Steelhead

The Proposed Project will add fill to 0.19 acre within and immediately adjacent to the "in-water" boat ramp area (**Figure 5**). This area is comprised of the Feather River and is designated as critical habitat for CV spring-run Chinook salmon and CV steelhead. This

area is also EFH for Pacific salmon, including CV spring and fall-run Chinook salmon. Measures taken during construction should provide long-term benefits for juvenile salmonids by eliminating large interstitial spaces associated with the existing rip-rap and planting areas associated with the Proposed Project bank protection.

When placing small rock to establish a level foundation for the new pre-cast boat ramp, small rock shall be placed in the water utilizing an excavator or similar machinery, not end dumped from a dump truck or dropped into the water. This will allow any potential fish in the Action Area to disperse and not be impacted by the placement of base rock.

Existing large pieces of concrete, primarily sidewalks, will be layered over with smaller rock in the 4-9 inch size class. Larger debris, like discarded sidewalk, is known to provide cover for in-water predators of juvenile salmon. Smaller sized rock slope protection will fill in large spaces utilized by predatory fish species such as bass (*Micropterus* sp.), which feed on juvenile salmon.

Additionally, soil and plantings will accompany the installation of smaller size rock for slope protection. Plantings will increase the amount of shaded riverine aquatic (SRA) habitat in the immediate vicinity of the boat ramp, which is presently barren of vegetation. These planting, over time, will also contribute to instream woody material (IWM), as trees and shrubs grow into the water or portions of the plants break and fall into the river and create flow refuge and foraging surfaces.

The in-water work window of the project will occur during June 15 to September 15 when juvenile CV spring-run Chinook salmon will be absent or at very low levels in the Feather River. CV spring-run Chinook salmon and CV steelhead occurring within the river at this time will be at developmental stages that are easily capable of avoiding construction activities that might result in take of individuals. CV spring-run adults holding in the river at this time will primarily be located at the fish barrier dam, several miles upstream, or in deep pools holding for the summer.

Minimization Measures

The following Minimization Measures are taken from "National Marine Fisheries Service preliminary design recommendations for small erosion repair projects" dated February 8, 2006, and prepared by Howard Brown of the National Marine Fisheries Service (NMFS). Although, the Proposed Project consists of more than just erosion control, a portion of the project is such, and many of the recommendations are applicable and can be followed.

"National Marine Fisheries Service preliminary design recommendations for small erosion repair projects (NMFS, 2006)"

Maximum individual project size: 500 linear feet
Location: Sacramento River Flood Control Project
In-water work window: June 15-September 15

1. Repair/Maintain Existing Bank Protection

a. Above ordinary high water mark:
    i. Footprint of repair is the same as old protection.
    ii. If rock is used, apply the smallest size required to achieve desired bank protection.
    iii. Mix soil into stabilization rock.
    iv. Removal of vegetation is minimized to the maximum extent possible.
    v. If site conditions permit, plant grass, woody, or emergent vegetation, and encourage growth of vegetation types that do not have an adverse effect on levee stability and levee inspections.

b. Below ordinary high water mark:
    i. Footprint of repair is the same as old protection.
    ii. Where feasible, and where site-specific engineering and hydraulic conditions allow, incorporate biotechnical methods to create and support a periodically inundated, vegetated floodplain with a mosaic of SRA cover, and instream woody material.
    iii. Rock used is the smallest size required to achieve desired bank protection.
    iv. Mix soil into stabilization rock.
    v. Removal of vegetation is minimized to the maximum extent possible. If removal is required for access, replace onsite to achieve 1:1 successful revegetation. To achieve successful 1:1 revegetation, trees removed can be planted at 3:1 replacement to removal ratio, or site can be monitored for 2 years and replanted until 1:1 is reached.
    vi. Removal of instream woody material is avoided or minimized. If removal is required to safely access or construct erosion repair project, then a similar woody material will be replaced onsite and in-kind.
    vii. For large trees that fall into the active channel, a rock/soil mix may be placed into root hole or erosion hole if tree is left in place. No revegetation required.
    viii. Plant, on average, 1 willow or other native tree or plant that is appropriate for the local site conditions, per square meter of bank protection.

2. New Bank Protection
    a. On levee profile above ordinary high water mark:
        i. If rock is used, apply the smallest size required to achieve desired bank protection.
        ii. Mix soil into stabilization rock.
        iii. Removal of vegetation is minimized to the maximum extent possible.

iv. If site conditions permit, plant grass or woody vegetation and encourage growth of vegetation types that do not have an adverse effect on levee stability and levee inspections.

b. On natural bank and unprotected levee profile below ordinary high water mark:
   i. Project should be designed to meet the dual objectives of protecting and maintaining the flood control system, and protecting and creating instream and nearshore habitat conditions that are beneficial to anadromous salmonids.
   ii. Site design will be limited to engineering and hydraulic constraints, but will incorporate biotechnical practices to create and support a periodically inundated, vegetated floodplain with a mosaic of SRA cover, and instream woody material.
   iii. Use of rock should be minimized. Rock size should be minimized to achieve bank protection goals while minimizing predator habitat. Rock placement should be designed to create near-shore, shallow-water habitat through the construction of berms or other simulated floodplain habitats that are seasonally inundated and capable of supporting riparian vegetation.
   iv. Rock berms and stabilized banks should be planted with, on average, 1 willow or other native tree or plant that is appropriate for the local site conditions, per square meter of bank protection.
   v. Removal of instream woody material is avoided or minimized. If removal is required to safely access or construct erosion repair project, then a similar woody material will be replaced onsite and in-kind.
   vi. Removal of vegetation is minimized to the maximum extent possible. If removal is required for access, replace onsite to achieve 1:1 successful revegetation. To achieve successful 1:1 revegetation, trees removed can be planted at 3:1, or site can be monitored for 2 years and replanted until 1:1 is reached.

3. Additional Provisions
   a. Check heavy equipment daily for leaks. Do not use equipment until leaks are fixed.
   b. Refuel outside of active stream channel or above ordinary high water at designated sites.
   c. Follow a spill prevention and control plan developed specifically for the program.
   d. Petroleum products, chemicals, cement, or water contaminated with the aforementioned materials shall not be allowed to enter flowing waters.
   e. No work during wet weather or when saturated grounds exist.
   f. Locate staging areas outside of active stream channel or above ordinary high water at designated sites.

g. Develop a tracking system for erosion control projects conducted pursuant to this program.
h. Develop an implementation, and effectiveness monitoring plan.
i. Consult with resource agencies (quarterly, annually?) to review proposed projects for consistency with the project description and applicable regulatory requirements.

More recently these measures were reiterated in a December 21, 2007 letter from the NMFS to the Corps, *Programmatic consultation from NOAA's National Marine Fisheries Service (NMFS) pursuant to the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Management and Conservation Act (MSA) for eight categories of actions regulated by the U.S. Army Corps of Engineers (USACE)* (NMFS, 2007). These measures will be implemented into the Proposed Project to minimize affects to critical habitat for salmonids and green sturgeon in the Feather River and EFH.

4.2.4 Green Sturgeon

The southern DPS of Green sturgeon are known to occur in the Feather River. Though extremely rare, the species is believed to spawn opportunistically in the Feather River and could potentially be affected by the Proposed Project (Pers. comm., Seesholtz 2008).

Minimization measures conducted for the benefit of CV spring-run Chinook salmon and Central Valley steelhead listed above are considered effective to reduce impacts to green sturgeon to a less than significant level.

5.0 ACTION AREA

The Action Area includes all areas in which listed species would be directly and indirectly affected by the Proposed Project (**Figure 6**). For the purpose of this analysis, the Action Area can be defined as all land on the Proposed Project Site and general vicinity. Based on the project description (**Section 4** of this BA) and as described in the Effects section (**Section 7.0**). The Proposed Project is expected to result in effects to CV spring-run Chinook salmon (including Critical Habitat), Central Valley steelhead (including Critical Habitat), EFH, and green sturgeon within the Project Site. Minimization measures for the VELB are expected to mitigate any negative effects to the species.

Land adjacent to the site was also considered as part of this analysis; these areas were evaluated due to the obvious presence of elderberry shrubs, which are the host plant to the federally listed threatened VELB.

6.0 SPECIES ACCOUNTS AND STATUS OF SPECIES IN THE ACTION AREA

This section describes any listed species or critical habitat that may be affected by the Proposed Project.

6.1 Valley Elderberry Longhorn Beetle

Listing Status: The valley longhorn elderberry beetle (VELB) was federally listed as threatened on August 8, 1980. The final rule was published which included critical habitat proposed for formal designation on September 15, 2002 (FR 45:52803).

Habitat: VELB is a wood boring species that is dependent on elderberry shrubs for its life cycle. For this reason, elderberry shrubs are considered habitat for this species. During their life cycle, adults lay hundreds of eggs on the stems and leaves, hatching larvae that emerge and burrow into the soft woody stems where it feeds on the pith and develop within the branches. After approximately 1-2 years the larva chews a hole through to the exterior surface of the branch, and then returns to a chamber within the stem to pupate. Following the pupa stage, about the time when the shrub begins to flower, the adult beetle emerges from the hole it created as a larva. Frequently, the only evidence of the beetle's presence is exit holes on the shrub. The adult VELB feed on the flowers and possibly the leaves. The adults are generally seen on shrubs from mid-March until June (Barr 1991).

Rangewide Distribution: VELB is endemic to California and commonly found near riparian habitats in the Central Valley; however, its range spans the Sierra foothills, and may reach elevations of 3,000 feet above MSL. However, during the last 150 years the species distribution has been greatly reduced due to loss of riparian habitat in the Central Valley.

Local Distribution: There are reported occurrences of VELB in the City of Chico. According to the California Natural Diversity Database, there are two recorded occurrences of this species; one located approximately 1.5 miles east of the Project Site boundary, and the other located approximately 1.9 miles southeast of the site boundary (CNDDB 2008).

Population Dynamics/Dispersal: The beetle appears to be only locally common to the Central Valley, found in population clusters that are not evenly distributed across available elderberry shrubs (Barr 1991). The patchy distribution of VELB indicates that this species is a poor disperser, and may be unable to recolonize riparian drainages where it has been locally extirpated (Collinge *et al*. 2001).

Detectability: VELB can be difficult to detect and often the only evidence of the presence of the beetle are the exit holes found on the elderberry shrubs. Also, the larvae develop within the woody stems for approximately 1 to 2 years prior to creating the exit holes and could go undetected during that period.

Status in the Action Area: Suitable VELB habitat is occurs adjacent to the Proposed Project site (**Figure 4**). This suitable habitat is comprised of 13 elderberry shrubs. The following table reflects data collected from a field survey conducted on June 10, 2008, by Foothill Associates' biologist, Ryan Brown.

Table 1 — Elderberry Shrub Data Sheet From Gridley Boat Ramp Improvement Project Vicinity, Butte County, CA.

Project Site: Gridley Boat Ramp				Biologist: R. Brown		Date: June 10, 2007
Shrub	Location (Riparian v. Non-Riparian)	Exit Holes	Stem Count Size * > 1" & ≤ 3"	Stem Count Size * > 3" & < 5"	Stem Count Size * ≥ 5"	Total # of Elderberry Stems
1	R	N	1		2	3
2	R	N	2			2
3	R	N	1		1	2
4	R	N	2			2
5	R	N	1		1	2
6	R	N	2	3		5
7	R	N	1			1
8	R	N	4	1	1	6
9	R	N	3	2	1	6
10	R	N	1			1
11	R	N	2			2
12	R	N	3			3
13	R	N	6		1	7

6.2 CV Spring-Run Chinook Salmon and CV Steelhead

Listing Status: Both species were listed as a federally threatened species on September 16, 1999; threatened status was reaffirmed on June 28, 2005. This includes all naturally spawned populations of CV spring-run Chinook salmon and CV steelhead in the Sacramento River and its tributaries in California, including the Feather River, as well as the Feather River Hatchery spring-run Chinook program.

Habitat Characteristics: Spring-run Chinook salmon and CV steelhead both require similar habitats for survival. As juveniles, the species are opportunistic, although generally hold in the cold, flowing water of creek and river margins. Instream cover for predator avoidance and flow refuge, or undercut banks to conceal themselves under are very beneficial for developing fry. Fry will also congregate in backwater areas where temperatures are higher and environmental productivity is greater, but often at the risk of higher predation rates. It is not uncommon for most fish to emigrate downstream immediately after emerging from gravel.

As these salmonids grow larger, they move out into the open water column where they feed on invertebrates drifting downstream in the water column. Cold water is still crucial

for their survival and instream cover and flow refugia are important habitat characteristics.

Smoltification occurs as the species travel downstream to the ocean and adjust to salt water. Both species live in estuarine areas and open ocean for several years, feeding on crustaceans, squid, and schools of smaller fish. As they grow larger, they typically become increasingly pisciverous (Moyle 2002).

After 2 to 6 years, CV spring-run Chinook return to the same area they emerged from to spawn. CV spring-run Chinook require cool water while they mature/ripen in freshwater over the summer in deep pools. Summer water temperatures in the CV are suitable for Chinook salmon only above the 150 to 500 meter elevation. Most such habitat in the CV is now upstream of impassable dams.

Proper substrate is required to allow digging of a functioning redd. Steelhead also return and utilize smaller gravel to dig their redds in. Cold, flowing water is a crucial habitat characteristic at this life stage as well. These salmonid species require the presence of accessible high quality spawning habitat, which are those areas containing gravel substrate in combination with frequent riffles and pools and adequate flows. In addition, adequate cover and food sources are necessary for juvenile salmonid survival to once again complete the cycle.

Critical Habitat: Spring-run Chinook salmon and steelhead are listed as threatened species under the federal Endangered Species Act. Critical habitat for these species was designated on February 16, 2000, which includes, "all waterways, substrates, and adjacent riparian zones below longstanding, natural impassible barriers" (National Oceanic and Atmospheric Administration 2000). The designation of critical habitat includes all accessible reaches within the Sacramento River Basin, which includes the Feather River.

By definition, the Feather River is considered critical habitat for these species.

Rangewide Distribution: Spring-run Chinook salmon currently exist in a small portion of its previous range (approximately 70-90 percent of spawning and rearing habitats have been lost) (NMFS, Southwest Regional Office 1999). The Feather, Yuba, and American rivers are major tributaries to the lower Sacramento River and supported large populations of steelhead historically. Today, the spawning and rearing habitats that historically supported suitable spawning and rearing habitat has become inaccessible due to the installation of large dams (California Department of Fish and Game 1996).

The Central Valley (CV) spring-run Chinook salmon ESU has been reduced from an estimated 17 historical populations to only three extant natural populations with consistent spawning runs (on Mill, Deer, and Butte Creeks, which are tributaries to the Sacramento River). These remaining natural populations reached low abundance levels during the late 1980s (67 to 243 spawners compared to a historic peak of about 700,000 spawners), and are within close geographic proximity, making them vulnerable to disease and catastrophic events. The upper Sacramento River supports a small spring-run

population, but its status is poorly documented and the degree of hybridization with fall-run Chinook salmon is unknown. Of numerous Sierra Nevada stream populations only two remain – the Feather River and the Yuba River populations. The Feather River population is dependent on Feather River Hatchery (FRH) production (which is considered part of the ESU) but may have hybridized with fall-run Chinook. Production is offsite, which contributes to straying. The status of the Yuba River population is largely unknown, other than appearing to be small. An overall loss of diversity has resulted from the extirpation of spring-run populations in most of the CV, including all the San Joaquin tributaries. The Biological Review Team (BRT) views the FRH as a major threat to the genetic integrity of the remaining wild spring-run comprising this ESU.

Local Distribution: Known populations of spring-run Chinook salmon and CV steelhead occur in the Feather River and are known to utilize the Action Area as rearing habitat. Adult fish do not spawn near the existing structure.

Population Dynamics/Dispersal: Both species spawn annually in upper reaches of streams where suitable habitat occurs. After spawning, juvenile fish emigrate downstream to estuarine and ocean waters. Although, steelhead progeny can remain in freshwater their entire life and be considered rainbow trout.

Populations of CV spring-run Chinook salmon varies greatly from year-to-year. Each cohort of emigrants does not return for 2 to 6 years to spawn and many factors affect their survival. Recent returns over the past five years have steadily declined in the Feather River.

Wild steelhead populations have declined to very low numbers. Supplemental fish from the Feather River Hatchery currently help to maintain a sustainable population, but natural spawning is minimal in the Feather River.

Detectability: The species are relatively easy to detect when spawning. Juveniles are monitored by the Department of Water Resources (DWR). Efforts for monitoring include rotary screw trapping, snorkel surveys, redd surveys, and carcass surveys; among other techniques.

Status in the Action Area: The Feather River has known populations of spring-run Chinook salmon and CV steelhead. The Action Area presently serves as a backwater area and flow refuge for juvenile salmonids, among other fish species. Adult salmonids would not be expected to utilize the boat ramp area.

6.3 Green Sturgeon

Listing Status: After completion of a study of its status (Adams *et al*. 2002) in 2002, NMFS determined that the green sturgeon is comprised of two DPSs that qualify as species under the ESA, but that neither warranted listing as threatened or endangered [PDF] (68 FR 4433). Uncertainties in the structure and status of both DPSs led NMFS to add them to the Species of Concern List [PDF] (69 FR 19975). The "not warranted"

determination was challenged on April 7, 2003. NMFS produced an updated status review on February 22, 2005 and reaffirmed that the northern green sturgeon DPS only warranted listing on the Species of Concern List, however proposed that the Southern DPS should be listed as threatened under the ESA. NMFS published a final rule on April 7, 2006 listing the Southern DPS as threatened [PDF] (71 FR 17757), which took effect June 6, 2006.

Habitat: Green sturgeon utilize both freshwater and saltwater habitat. Green sturgeon spawn in deep pools or "holes" in large, turbulent, freshwater river mainstems (Moyle et al., 1992). Specific spawning habitat preferences are unclear, but eggs likely are broadcast over large cobble substrates, but range from clean sand to bedrock substrates as well (Moyle *et al*. 1995). It is likely that cold, clean water is important for proper embryonic development. Adults live in oceanic waters, bays, and estuaries when not spawning. Green sturgeons are known to forage in estuaries and bays ranging from San Francisco Bay to British Columbia.

Critical Habitat: Critical habitat has not been designated for the species. A proposed rule defining critical habitat was published in the Federal Register by NMFS in September 2008. Currently public comments are being addressed and a final ruling will be published by June 30, 2009 (Pers. comm. Wang 2008 and 2009). The current proposed rule defines the Lower Feather River as critical habitat for green sturgeon. This would include riverine habitat associated with the Proposed Project.

Rangewide Distribution: Sturgeons are found in North America and Eurasia. Green sturgeons are the most broadly distributed, wide-ranging, and most marine-oriented species of the sturgeon family. The green sturgeon ranges from Mexico to at least Alaska in marine waters, and is observed in bays and estuaries up and down the west coast of North America (Moyle *et al*. 1995).

The actual historical and current distribution of where this species spawns is unclear as green sturgeon make non-spawning movements into coastal lagoons and bays in the late summer to fall, and because their original spawning distribution may have been reduced due to harvest and other anthropogenic effects (Adams *et al.*, in press). Today green sturgeons are believed to spawn in the Rogue River, Klamath River Basin, and the Sacramento River. Spawning appears to rarely occur in the Umpqua River. Green sturgeon in the South Fork of the Trinity River were thought extirpated (Moyle 2002), but juveniles are captured at Willow Creek on the Trinity River (Scheiff *et al*. 2001), and it is suspected that the fish could be coming from either the South Fork or the Trinity River (Adams *et al*. in press). Green sturgeons appear to occasionally occupy the Eel River.

Local Distribution: Annual reports of sturgeon occurring at the Lake Oroville Afterbay Outlet are known. Very little information is available for the species locally.

Population Dynamics/Dispersal: No good data on current population sizes exists and data on population trends is lacking.

Detectability: Very hard to detect and their limited numbers in the Feather River make it very hard to collect data.

Status in the Action Area: Minimal habitat occurs in the Action Area. Any disturbance would presumably drive the species away from the site.

6.4 Critical Habitat for CV Spring-Run Chinook Salmon, CV Steelhead, and Proposed Critical Habitat for Green Sturgeon

Within the Action Area, 0.19 acre of habitat for rearing and foraging juvenile salmonids and green sturgeon occurs. The sites sheltered "cove-like" set-up creates a backwater area and provides a flow refuge. A very minimal amount of SRA cover occurs along the bank in the form of a single willow shrub, and a small fresh emergent wetland adjacent to the existing ramp also provides some cover and foraging opportunity.

6.5 Essential Fish Habitat for CV Spring and Fall-Run Chinook Salmon

Essential Fish Habitat is presumed to be comprised of the same 0.19 acre of habitat as critical habitat listed above; although EFH is only a consideration for Pacific Salmon and includes habitat specifically for all runs of Chinook salmon potentially occurring in the Action Area. This includes both CV spring and fall-run Chinook salmon.

7.0 EFFECTS

7.1 Direct Effects

7.1.1 Valley Elderberry Longhorn Beetle

The Proposed Project will avoid direct effects to VELB by placing utility poles greater than 20 feet from the dripline of any elderberry shrub. Final placement of poles will be closely coordinated with Pacific Gas and Electric to achieve this minimization measure.

7.1.2 CV Spring-Run Chinook Salmon and CV Steelhead

Timing of the project will avoid direct effects to salmonids occurring in the Feather River. Installation of boat ramp and rock slope protection will occur between July 1 and September 15 to avoid the presence of juvenile salmonids. By this date, if young-of-the-year salmonids are present within the Action Area, they will be able to avoid construction activities. Methodologies utilized to install in-water materials, such as placing rock rather than dropping or dumping, will allow any potentially present fish to escape the area. Adult salmonids are not expected to occur in the Action Area during construction activities and would escape the area upon any disturbance.

7.1.3 Critical Habitat and Essential Fish Habitat

Construction activities will add fill to 0.19 acre of the Feather River, which is both Critical Habitat for CV spring-run Chinook salmon, CV steelhead, and is proposed critical habitat for green sturgeon; as well as EFH for all populations of Chinook salmon in the Feather River.

Fill will consist of small sized rock to create a proper foundation for placement of the new pre-cast boat ramp. Also, a veneer of smaller sized rock, 4-9 inches in diameter, will replace or be placed over existing large broken pieces of concrete sidewalk currently serving as rock slope protection adjacent to the existing boatramp. Though some streamside vegetation currently providing cover in the immediate vicinity of the existing boat ramp may be lost, smaller rock slope protection will eliminate existing ambush cover for predatory fish. Additionally, by mixing soil into new rock and planting native riparian vegetation at estimated one plant per square meter in modified areas, the site will provide an increase in habitat value for fish.

The Proposed project will utilize the existing boat ramp footprint and will utilize minimization measures defined by the, *"National Marine Fisheries Service preliminary design recommendations for small erosion repair projects,"* noted previously in this document and also follows the more recently released, *Programmatic consultation from NOAA's National Marine Fisheries Service (NMFS) pursuant to the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Management and Conservation Act (MSA) for eight categories of actions regulated by the U.S. Army Corps of Engineers (USACE)* (NMFS, 2007).

Over time, minimization measures included in the Proposed Project will increase and improve salmonid habitat associated with the site.

7.1.4 Green Sturgeon

No direct effects to green sturgeon are foreseen from improvement of the boat ramp.

7.2 Indirect Effects

7.2.1 CV Spring-Run Chinook Salmon and CV Steelhead

By improving the boat ramp facility, presumably a greater number of boaters will utilize the ramp and enter the Feather River. This could indirectly affect salmonid species occurring in the river. Presumably, if more fishermen enter the river, more salmonids will be caught and taken from the river. Fishing and "take" of these listed salmonids is regulated by the CA Department of Fish and Game and is allowed under Section 4(d) of the Federal Endangered Species Act.

7.2.2 Valley Elderberry Longhorn Beetle

Although, no evidence of VELB was observed on shrubs evaluated for this report, by increasing the capacity of the boat ramp, increase in traffic may increase potential for take of the VELB by cars driving to and from the boat ramp. This potential indirect effect would presumably be negligible to the population of VELB as a whole.

7.3 Interrelated and Interdependent

No interrelated and/or interdependent actions are foreseen.

8.0 CUMMULATIVE EFFECTS

Cumulative effects as defined under the ESA include the effects of future State, local or private actions that are reasonably certain to occur in the Action Area. Future Federal actions that are not related to the Proposed Project are not addressed as cumulative effects under Section 7 of the ESA, because they require separate Section 7 consultation.

8.1 Valley Elderberry Longhorn Beetle

The Proposed Project is not located within critical habitat for the VELB. Though elderberry shrubs occur within the site, there was no evidence of the beetle's presence (i.e., no exit holes were present on the shrubs). Elderberry shrubs adjacent to the site are located in a steeply sloped riparian area between an access road and the Feather River.

Connection to the riparian areas associated with the Feather River will allow any VELB within the site to mature, disperse, and proliferate. Once improvements of the boat ramp are complete, there are no other proposed actions within the vicinity of the site. Therefore, cumulative effects to VELB in the Action Area are not expected.

8.2 Spring-Run Chinook Salmon, CV steelhead, Green Sturgeon

Any action involving effects to these aquatic species, their critical habitat, and/or EFH will require a federal permit. Any potential cumulative effects would be analyzed. There are no "reasonably certain to occur" actions planned that may affect these species.

9.0 CONCLUSIONS AND DETERMINATIONS

The Proposed Project *"may affect, but is not likely to adversely affect"* the VELB. Proposed conservation measures will avoid direct effects and minimize any potential adverse effects. Avoidance and minimization measures will contribute to the long-term survival of the VELB. Additionally, the project *"may affect, but is not likely to adversely affect"* CV spring-run Chinook salmon, critical habitat for CV spring-run Chinook salmon, CV steelhead, critical habitat for CV steelhead, green sturgeon, proposed critical habitat for green sturgeon, and EFH. Minimization measures outlined in the document will reduce impacts to a negligible level and the Proposed Project will improve localized habitat for these federally listed fish species.

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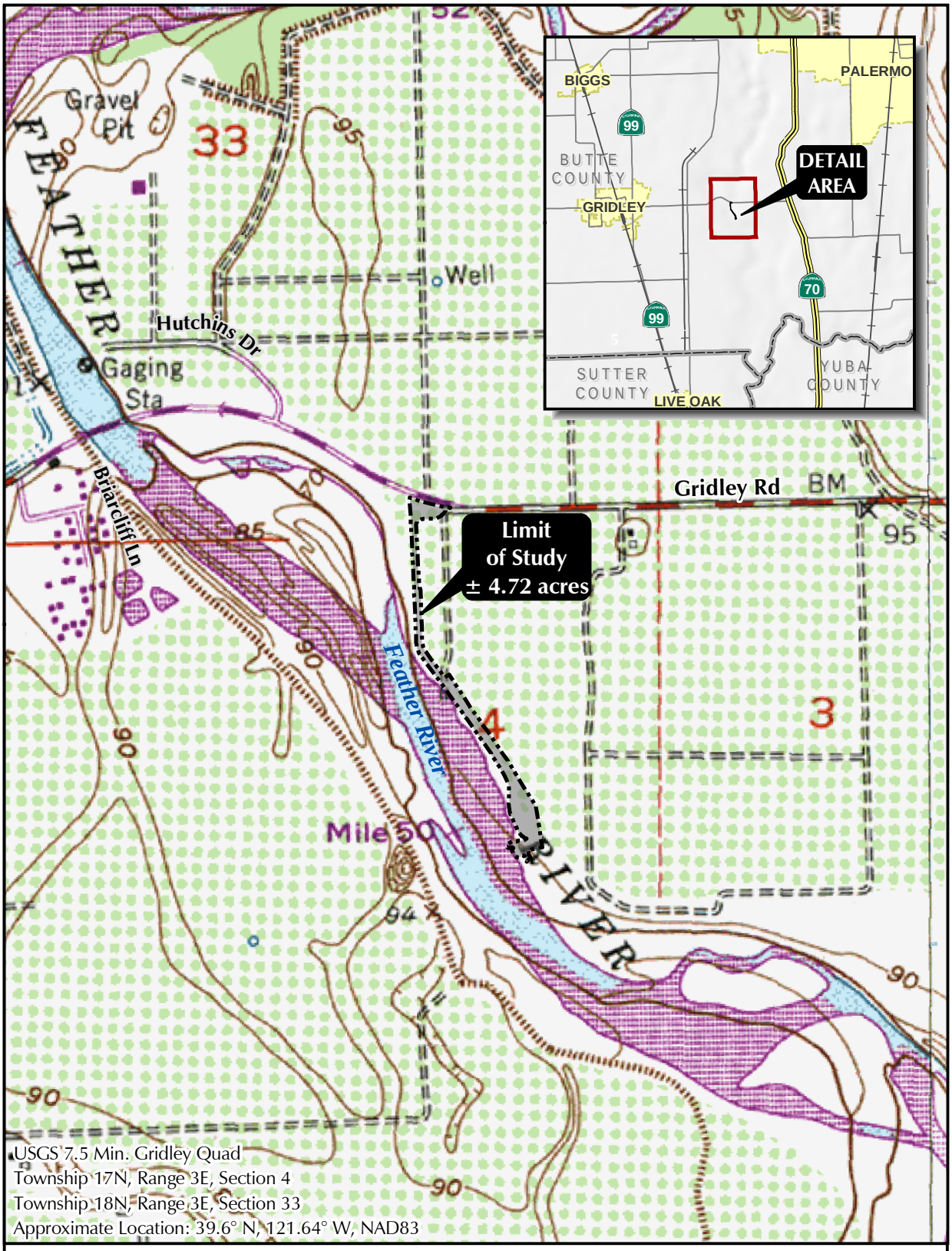


SITE AND VICINITY

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 500 1000
SCALE IN FEET

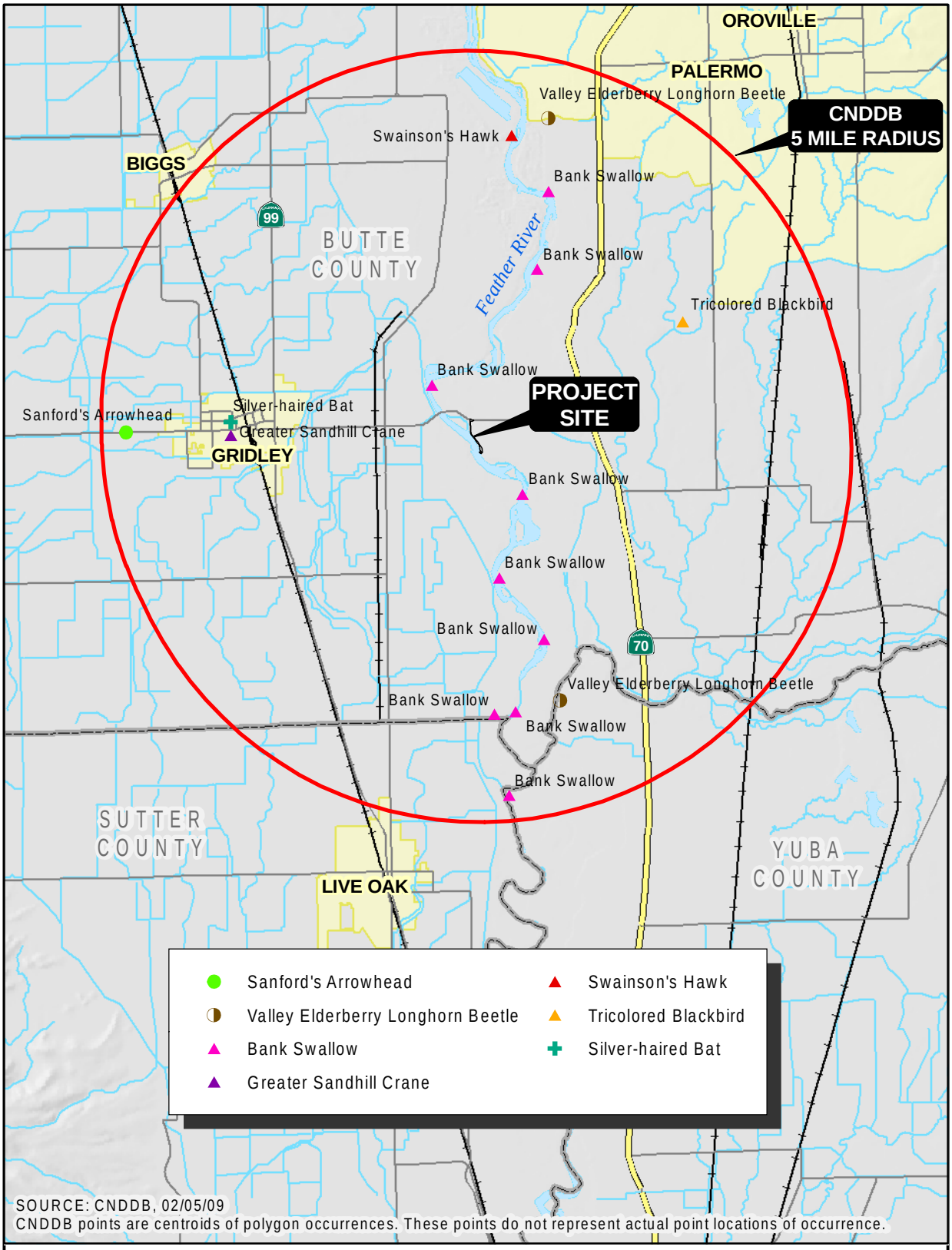
Drawn By: PDL
Date: 02/17/09

FIGURE 1

GRIDLEY BOAT RAMP IMPROVEMENT

site_and_vicinity.mxd

© 2009



CNDDB

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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SCALE IN MILES

Drawn By: PDL
Date: 02/17/09

FIGURE 2

GRIDLEY BOAT RAMP IMPROVEMENT

cnddb.mxd

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SOILS

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N

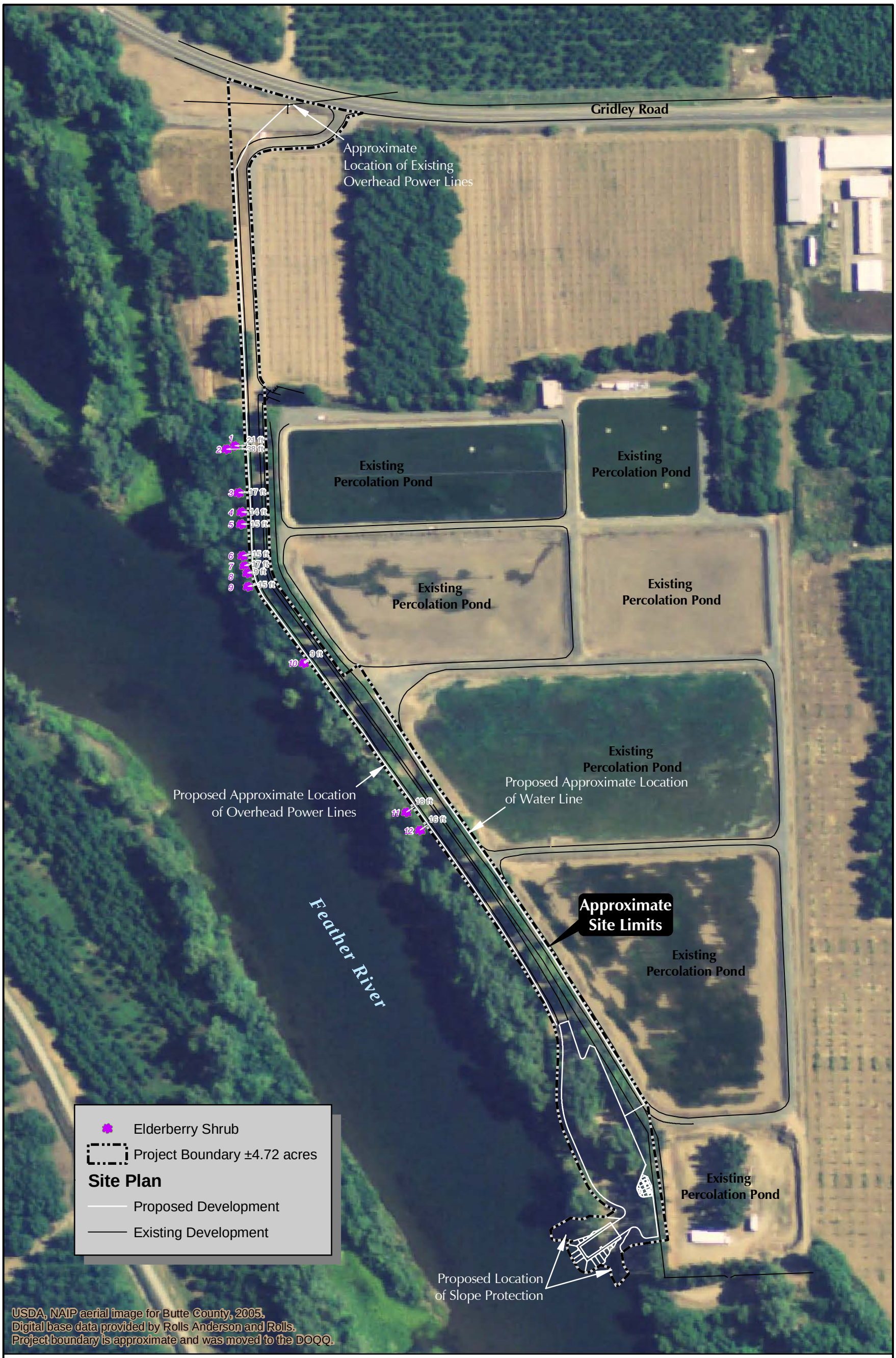
0 100 200 400
SCALE IN FEET

Drawn By: CR/PL
Date: 02/17/09

FIGURE 3

GRIDLEY BOAT RAMP IMPROVEMENT

soils.mxd
© 2009



ELDERBERRY SHRUB LOCATION MAP

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N

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SCALE IN FEET

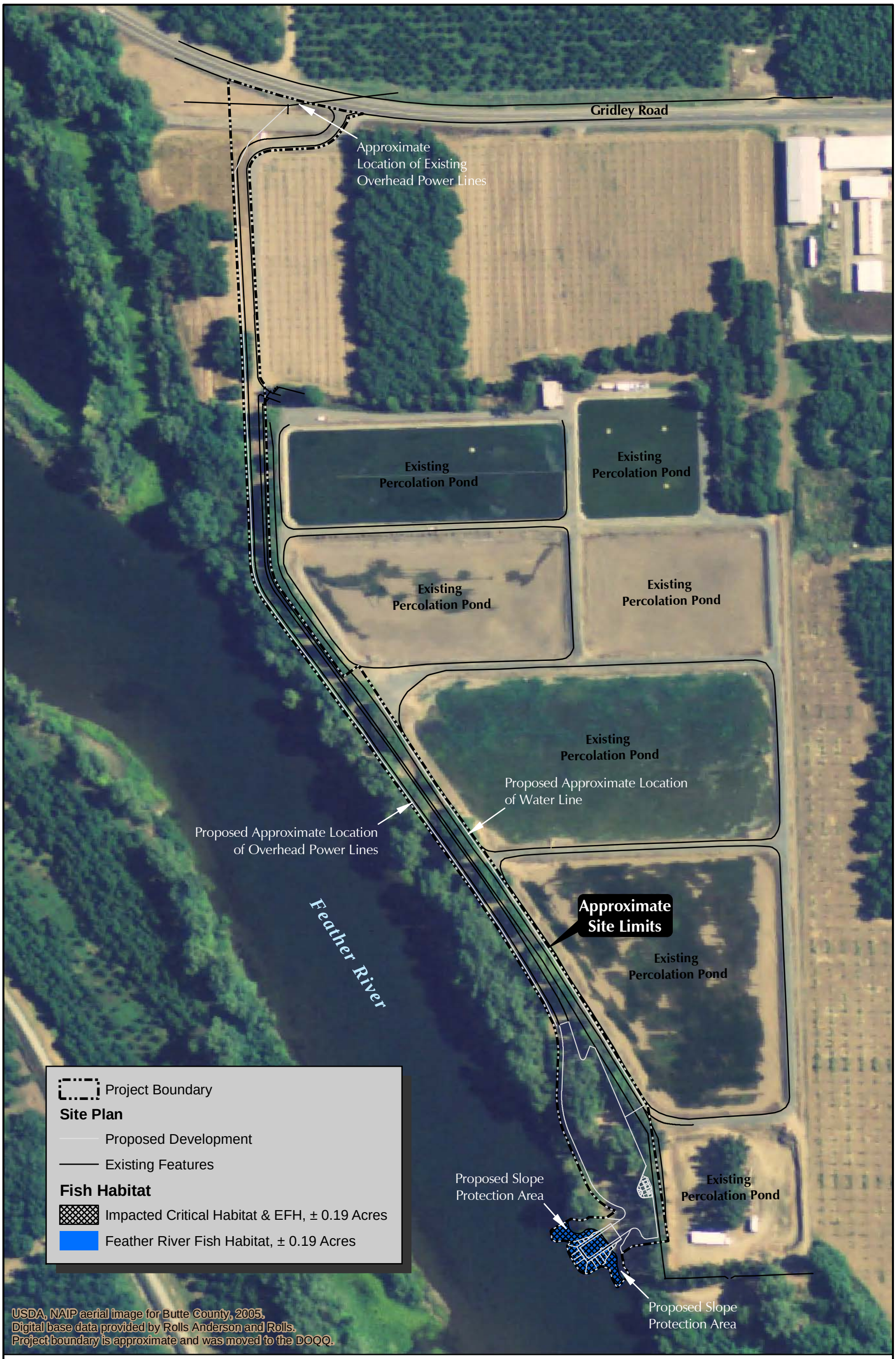
Drawn By: MJ/PL
Date: 02/17/09

FIGURE 4

GRIDLEY BOAT RAMP IMPROVEMENT

Elderberry.mxd

© 2009



FISHERIES HABITAT IMPACTS MAP

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ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 100 200 400
SCALE IN FEET

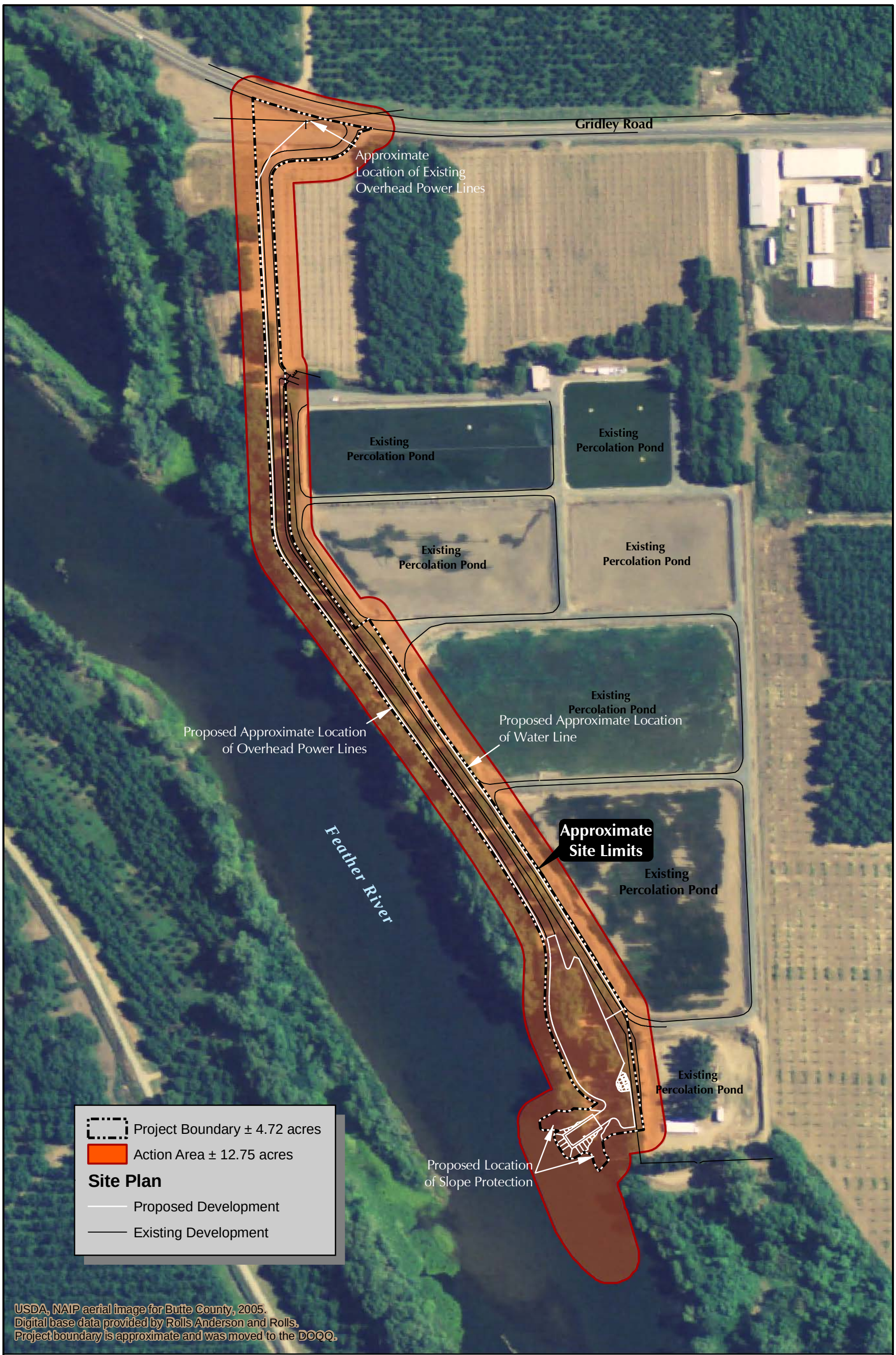
Drawn By: MJ/PL
Date: 02/17/09

FIGURE 5

GRIDLEY BOAT RAMP IMPROVEMENT

Fisheries.mxd

© 2009



ACTION AREA

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 225 450
SCALE IN FEET

Drawn By: PL
Date: 02/18/09

FIGURE 6

GRIDLEY BOAT RAMP IMPROVEMENT

ActionArea.mxd

© 2009

Attachment A — Site Photos

Site Photo #1 — Access road to the ramp.

Site Photo #2 — A closer view shows adequate buffer from riparian and elderberry shrubs to place poles for the Project's power line alongside the roadway.

GROUND-LEVEL PHOTOGRAPHS

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Site Photo #3 — The existing ramp and surrounding bank areas.

Site Photo #4 — Much of the Action Area bank is covered with rip-rap comprised of old sidewalks. This will be replaced with 4-9 inch stone, soil, and riparian plantings.

GROUND-LEVEL PHOTOGRAPHS

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APPENDIX C

REQUEST FOR THE PRELIMINARY JURISDICTIONAL DETERMINATION FOR WATERS FO THE U.S. OCCURING WITHITN THE GRIDLEY BOAT RAMP IMPROVEMENT PROJECT AREA, BUTTE COUNTY, CA.

FOOTHILL ASSOCIATES
FEBRUARY 20, 2009

FOOTHILL ASSOCIATES

ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

February 20, 2009

RECEIVED
FEB 20 2009
ROLLS, ANDERSON & ROLLS

Brian Vierria, Regulatory Project Manager
United States Army Corps of Engineers
1325 J Street, 14th Floor
Sacramento, CA 95814

Subject: **Request for the Preliminary Jurisdictional Determination for Waters of the U.S. occuring within the Gridley Boat Ramp Improvement Project Area, Butte County, California.**

Mr. Vierria,

On behalf of the City of Gridley, Foothill Associates formally requests verification of the Preliminary Jurisdictional Determination for waters of the U.S. occurring within the ±4.72-acre Gridley Boat Ramp Improvement Project Area. This letter summarizes the methods and results for delineating waters of the U.S. within the site to determine the regulatory jurisdiction of these waters. Per our telephone conversation on May 22, 2008, we are submitting this Delineation of waters of the U.S. in letter format, as the site is small, and there is relatively little to analyze.

Below are the items you requested: project description; distance to Section 10 Waters in Marysville, CA (still part of the Feather River); a delineation of the Feather River ordinary high water mark; and, additional information to assist in your jurisdictional determination regarding the site.

Site Description

The site consists of ±4.72 acres of land with an existing river access area and boat ramp on the Feather River within unincorporated Butte County (**Figure 1**). The site is paved and has a small day use area (picnic tables and fish cleaning station). Construction activities are proposed to improve the existing boat ramp, associated infrastructure, and facilities. Land uses surrounding the site include recreational, agricultural, and a wastewater treatment plant. The site is bounded by wastewater treatment ponds on the east, riparian habitat and a public access road on the north and south, and the Feather River along the west. The elevation of the site is 88 feet above mean sea level (MSL). Surface water runoff most likely sheets off paved areas and percolates into the ground or is conveyed towards the river. A map depicting the soils on the site is included as **Figure 2**, and an aerial photograph of the site is included as **Figure 3**. The site is located within Township 17 North, Range 3 East, Section 4 on the USGS 7.5-minute *Gridley, California* quadrangle.

Project Description

The project consists of improvements to an existing boat ramp site that currently consists of paved road, reinforced concrete boat ramp, fish cleaning station, and street lights. Improvements shall include a paved parking area, plumbed restroom with electricity, and a lift station to pump sewage to the neighboring sewage treatment plant. The existing concrete ramp will be replaced with a pre-cast concrete ramp. Storm runoff from the new parking area will drain to a biofiltration swale which will drain to the river. The new fish cleaning station will be constructed south of the existing fish cleaning station. Wastewater from the new fish cleaning station will be directed to the sewer lift station.

The proposed project entails: (1) demolition of the existing boat launching ramp and construction of a new, one-lane boat launching ramp, (2) installation of two new boarding floats, (3) construction of a new parking area, (4) construction of a new restroom and sewer lift station, (5) installation of a new fish-cleaning station, (6) modification of existing slope protection, (7) provision for drainage, (8) installation of electrical and lighting, (9) security access for the site, and (10) signs.

Methods

Field Methods

The site was surveyed on foot to ensure total search coverage by Foothill Associates biologists on May 7 and June 10, 2008. Special attention was given to those areas with the potential to support features associated with wetlands/waters of the U.S. (e.g. hydrophytic vegetation, hydrologic indicators). A review of aerial photographs, topographic maps and soils survey data was conducted before assessing the site on May 7, 2008.

The following available information pertaining to the natural resources of the region was reviewed for the survey and preparation of this report:

- Natural Resource Conservation Service (NRCS). 2006. Soil Survey of Butte Area, California, Parts of Butte and Plumas counties. U.S. Department of Agriculture;
- Rolls Anderson and Rolls. March 2008. Preliminary Boat Ramp Improvement Layout. Prepared for the City of Gridley;
- U.S. Army Corps of Engineers (Corps). 1987. Corps of Engineers Wetlands Delineation Manual. U.S. Army Corps of Engineers Waterways Experiment Station. Vicksburg, MS;
- U.S. Army Corps of Engineers, U.S. Environmental Protection Agency. 2007. Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States and Carabell v. United States*;
- U.S. Army Corps of Engineers. 2007. Jurisdictional Determination Form Instructional Guidebook;
- U.S. Army Corps of Engineers. 2008. Traditional Navigable Waters of the U.S. in California. Available at: http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/ca_waterways.html; and

- U.S. Geological Survey (USGS). 1952 (Photorevised 1973). *Gridley, California* 7.5-minute series topographic quadrangle. United States Department of the Interior.

Wetland mapping utilized the U.S. Army Corps of Engineers' (Corps) 1987 three-parameter methodology to delineate jurisdictional waters of the U.S. This methodology requires the collection of data on hydric soils, hydrophytic vegetation, and hydrology at several locations to establish the jurisdictional boundary of waters of the U.S., including wetlands.

Additional methods to identify and delineate other waters of the U.S. (e.g. streams, drainages, and lakes) were used as applicable. The method used for the delineation of non-wetland waters of the U.S., which included the Feather River, was the delineation of the ordinary high water mark.

Boundaries of delineated waters within the site were surveyed and recorded with a Trimble GeoXT GPS (Global Positioning System) hand-held unit. This is a mapping-grade GPS unit capable of real-time differential correction and sub-meter accuracy. The GPS data were downloaded from the unit and differentially corrected utilizing Trimble Pathfinder Office software and appropriate base station data, and then converted to ESRI ® shape file format. Data are typically exported to the Geographic Information System (GIS) software in the State Plane coordinate system (NAD 83) with units as "survey feet." Within the GIS, data are edited and linear features are built into polygons using recorded width information. All wetland shape files are merged to create a single wetland file with calculated acreages. These results are presented in **Figure 4**.

Classification of Delineated Waters

The delineated waters were further classified on the basis of the agency guidance developed in response to the *Rapanos* decision. Under the *Rapanos* Guidance, these classes of features are either automatically jurisdictional (i.e., TNWs, non-navigable tributaries that are relatively permanent), generally not jurisdictional (i.e., ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water), or features of unknown jurisdictional status. The agencies will decide the jurisdictional status of the latter class based on a fact-specific analysis regarding whether they have a significant nexus with the nearest downstream Traditional Navigable Water.

Results and Discussion

A total of 0.20 acre of waters of the U.S. occurs within the survey area. These waters are comprised of 0.01 acre of fresh emergent wetland and 0.19 acre of perennial drainage (Feather River)(**Figure 4**).

Fresh Emergent Wetland

A 0.01-acre fresh emergent wetland occurs on the river bank adjacent to the existing boat ramp, and is considered an abutting wetland feature (**Photo 1**). Fresh emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation is generally perennial monocots to 2 m (6.6 ft) tall (Cheatham and Haller 1975, Cowardin et al. 1979). All

emergent wetlands are flooded frequently, enough so that the roots of the vegetation prosper in an anaerobic environment (Gosselink and Turner 1978). The vegetation may vary in size from small clumps to vast areas covering several kilometers.

The acreage of fresh emergent wetlands in California has decreased dramatically since the turn of the century due to drainage and conversion to other uses, primarily agriculture (Gilmer et al. 1982). On the upper margins of fresh emergent wetlands, saturated or periodically flooded soils support several moist soil plant species including big leaf sedge, baltic rush, redroot nutgrass and on more alkali sites, saltgrass. On wetter sites, common cattail, tule bulrush, river bulrush, and arrowhead are potential dominant species (Cheatham and Haller 1975, U.S. Army Corps of Engineers 1978, Wentz 1981). Plant species dominating the feature onsite include, hard-stem bulrush (*Scirpus acutus*) and water primrose (*Ludwigia* sp.). A Corps' wetland determination data form (**Attachment A**) was completed for this feature, and is referenced as DP 1 on the Wetland Delineation map (**Figure 4**)

Perennial Drainage

The 0.19-acre perennial drainage within the site is comprised of the Feather River (**Photo2**). Perennial drainages are features that do not meet the three-parameter criteria for vegetation, hydrology, and soils but do convey water and exhibit an "ordinary high water mark." Perennial drainages generally convey unidirectional water flows throughout the entire year. Perennial drainages typically consist of a channel, bed, and bank, and are devoid of vegetation due to the scouring effect of flowing water. Perennial drainages are often bordered by wetland vegetation communities of various composition and cover depending on flow rates, duration of flows, and soil types.

Conclusions

As discussed above, ±0.20 acre of waters of the U.S. occurs within the site. These waters are comprised of a 0.01 acre fresh emergent wetland and 0.19 acre of perennial drainage (Feather River)(**Figure 4**).

The Feather River is defined as Section 10 waters of the Rivers and Harbors Act from the mouth of the river at Verona., CA (where it confluences with the Sacramento River) to the railroad bridge in Marysville, which is located approximately 15 aerial miles and 20 river miles south of the site (U.S. Army Corps of Engineers 2008). Though located above Section 10 waters, the portion of the Feather River that occurs on the site is "navigable-in-fact," as evidenced by the presence of the boat ramp, and use of this portion of the river for recreational boating. For these reasons, the ±0.19-acre portion of the Feather River that occurs on the Gridley Boat Ramp Improvement site is expected to be considered jurisdictional as a "navigable-in-fact water"/ traditional navigable water, and the 0.01-acre fresh emergent wetland as a wetland abutting a traditional navigable water.

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Please contact me if you have any questions or require additional information in order to make a jurisdictional determination for the site.

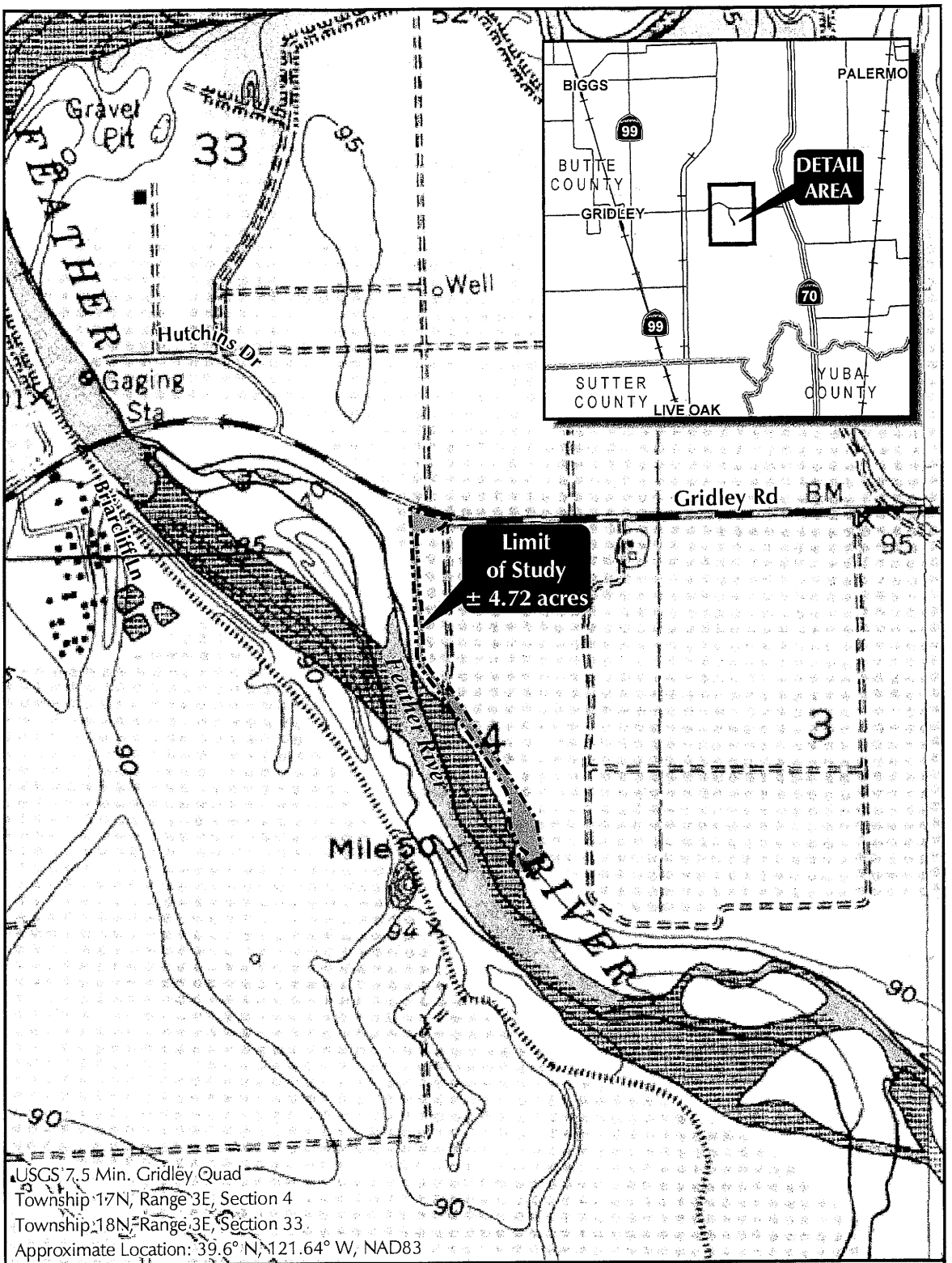
Sincerely,

Ryan Brown

Ryan Brown,
Regulatory Biologist

Enclosures:

Figure 1 — Site and Vicinity
Figure 2 — Soils
Figure 3 — Aerial Photograph
Figure 4 — Delineated Waters of the U.S.
Attachment A-Site Photos
Corps Wetland Data Form - DP 1



SITE AND VICINITY

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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Drawn By: PDL
Date: 02/17/09

FIGURE 1

GRIDLEY BOAT RAMP IMPROVEMENT

site_and_vicinity.mxd
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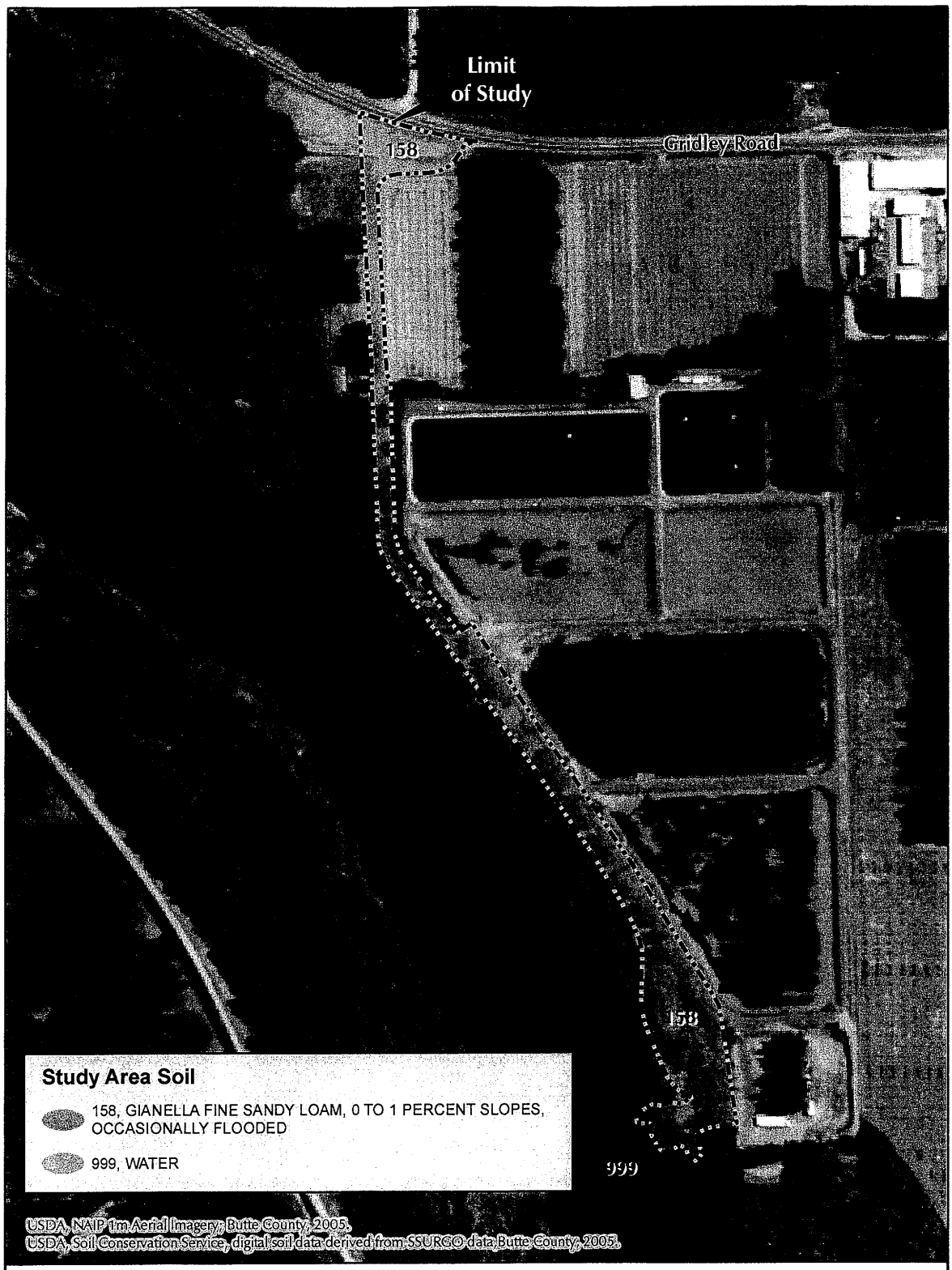

SOILS

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SCALE IN FEET

Drawn By: CR/PL
Date: 02/17/09

FIGURE 2

GRIDLEY BOAT RAMP IMPROVEMENT

soils.mxd
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LANDSCAPE ARCHITECTURE
(916) 435-1202

2005 AERIAL PHOTOGRAPH

FIGURE 3

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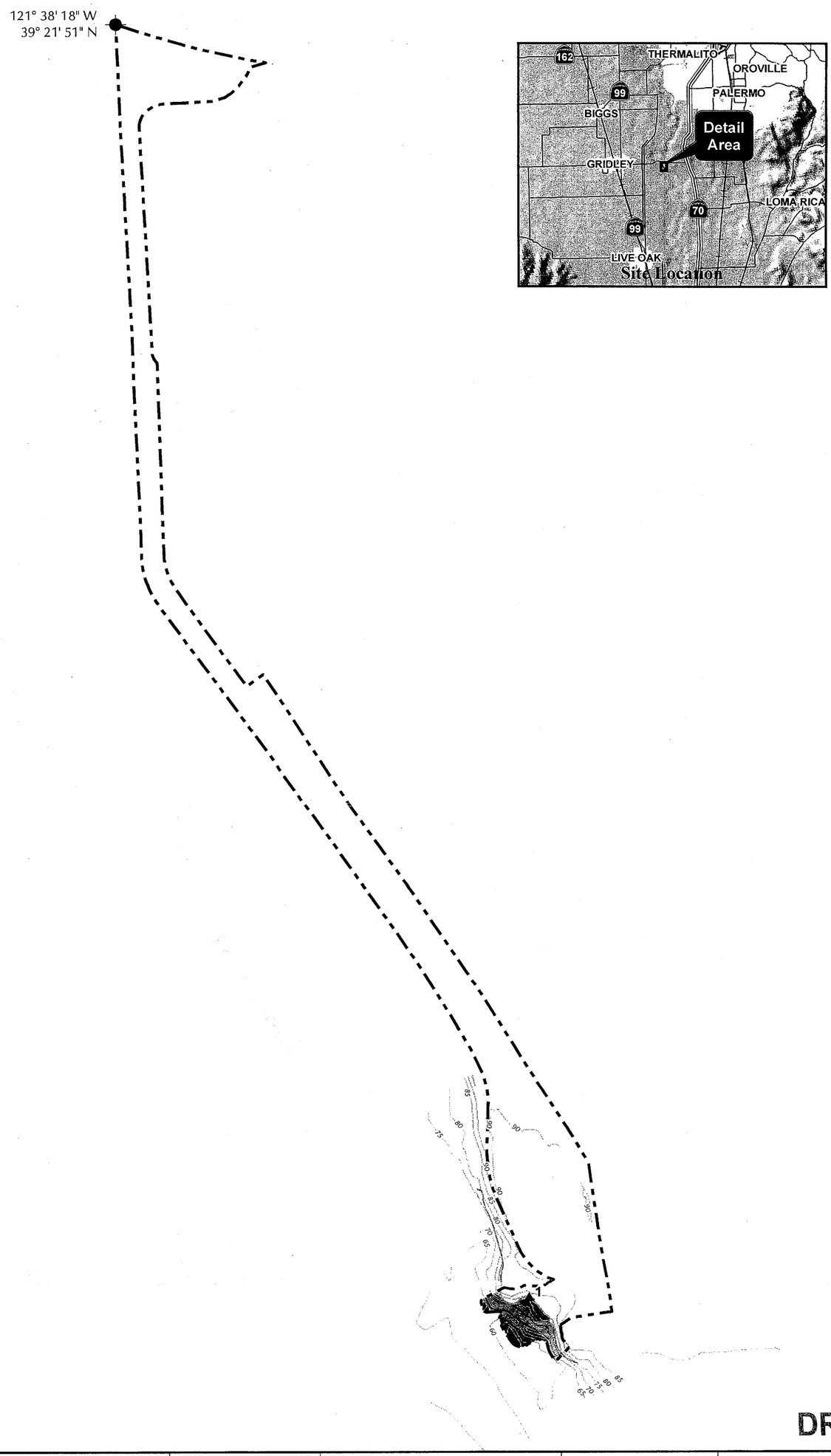
SCALE IN FEET
1 INCH = 200 FEET
PRINTED @ 11" X 17"

GRIDLEY BOAT RAMP IMPROVEMENT

Existing Site Conditions.mxd ©2008



DRAFT

WATERS OF THE U.S.	
CLASSIFICATION	ACREAGE
Abutting Wetlands	
Fresh Water Emergent	0.01
Traditionally Navigable Waters	
Perennial Drainage (Feather River)	0.19
TOTAL	0.20

OTHER FEATURES

- Data Point
- Project Boundary
- Ordinary High Water Mark (OHWM)

NOTES

- Waters of the U.S. are subject to U.S. Army Corps of Engineers verification.
- Digital base data provided by Rolls Anderson Rolls. Contour interval is 1 foot.
- The Hydrologic Unit Code for this site is 18010206.
- This delineation utilizes the Corps' 1987 three-parameter methodology to delineate jurisdictional waters of the U.S.
- Waters of the U.S. were mapped using a Trimble Global Positioning System (GPS).

N

0 50 100 150 200
Scale in Feet

FIGURE 4

DELINEATED WATERS OF THE U.S.

GRIDELY BOAT RAMP IMPROVEMENTS

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© 2009

FILE NAME: wetland_delineation.mxd
DELINEATED BY: AEG/RMB
DRAWN BY: PDL
DATE: 06/11/2008, Rvsd:02/17/09

Photo 1 - Data Point #DP 1 — Fresh Emergent Wetland.

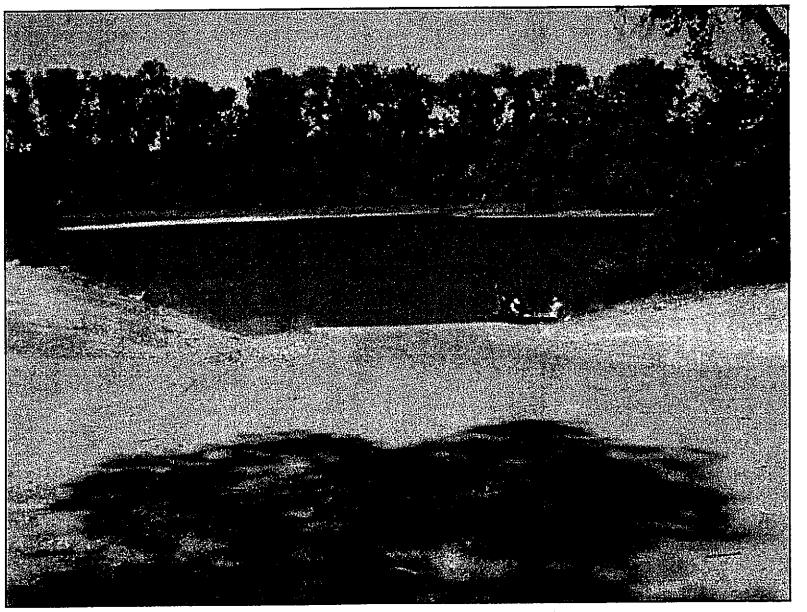

Photo 2 - Feather River (perennial drainage) adjacent to the Gridley Boat Ramp.

GROUND-LEVEL PHOTOGRAPHS

FOOTHILL ASSOCIATES ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE	1 OF 1	Attachment A

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Gridley Boat Ramp City/County: Butte Sampling Date: 6/10/08

Applicant/Owner: City of Gridley State: CA Sampling Point: DP 1

Investigator(s): R. Brown Section, Township, Range: Section 4 Township 17 North, Range 3 East

Landform (hillslope, terrace, etc.): riverbank Local relief (concave, convex, none): none Slope (%): 0-5

Subregion (LRR): Mediterranean California Lat: 39* 21' 32.3"N Long: 121* 38' 9.7"W Datum: NAD 83

Soil Map Unit Name: 158- Gianella Fine Sandy Loam, 0 to 1 percent slopes, Occasionally Flooded NWI classification: emergent wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes x No ___

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** **Yes X** **No _____**
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:
The feature is abutting the Feather River.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Scirpus acutus	85	yes	obl
2. Ludwigia sp.	15	yes	obl
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	100	x 1 = 100
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	100 (A)	100 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X** **No _____**

Remarks:
Vegetation is well established.

SOIL

Sampling Point: DP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
ASSUMED								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes __X__ No ____

Remarks:

Soil assumed. The soil is listed on the CA hydric soils list and saturated at field visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- X Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- X Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No __X__ Depth (inches): _____

Water Table Present? Yes __X__ No ____ Depth (inches): __0__

Saturation Present? (includes capillary fringe) Yes __X__ No ____ Depth (inches): __0__

Wetland Hydrology Present? Yes __X__ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Area was saturated at visit and is adjacent to perennial waters.

APPENDIX D

CITY OF GRIDLEY WASTE WATER TREATMENT PLANT EXPANSION PROJECT
VALLEY ELDERBERRY LONGHORN BEETLE SURVEY REPORT

PMC

APRIL, 2009

CITY OF GRIDLEY
WASTE WATER TREATMENT PLANT EXPANSION PROJECT
VALLEY ELDERBERRY LONGHORN BEETLE SURVEY REPORT

Prepared for:

HYDROSCIENCE ENGINEERS
10569 OLD PLACERVILLE RD.
SACRAMENTO, CA 95827

Prepared by:

PMC™

2729 PROSPECT PARK DRIVE, SUITE 220
RANCHO CORDOVA, CA 95670

APRIL 2008

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CHAPTER 1. INTRODUCTION

The proposed project is located in the City of Gridley, Butte County, California (Figure 1). The City of Gridley (City) is located along Highway 99 approximately 30 miles south of the City of Chico and approximately 60 miles northeast of the City of Sacramento. The City of Gridley operates a wastewater treatment plant (WWTP) (project site) located on East Gridley Road, 3.3 miles east of the City of Gridley on the east bank of the Feather River. The project site is located in Sections 3 and 4 of Township 17 North, Range 3 West on the U.S. Geological Survey (USGS) Gridley, California 7.5-minute quadrangle map (USGS 1952) (Figure 2). The western end of the project site is located within the riparian corridor of the Feather River. The project site footprint encompasses 26.1 acres and 100-foot buffer from the project site boundary encompasses another 11.6 acres for a total of 37.7 acres.

The existing WWTP provides primary and secondary treatment in two aerated ponds, and discharges the secondary treated effluent to four percolation ponds located adjacent to the aeration ponds. There is no disinfection at the facility. The existing WWTP consists of headworks, an aeration pond, an aerated polishing pond, and four percolation ponds. Emergency storage ponds are located 0.75 mile south of the existing WWTP on the west side of the Feather River, and provide approximately 100 acre-feet of capacity. The WWTP is currently permitted to treat and discharge a maximum average dry weather flow of 1.05 million gallons per day (mgd).

The project proposes to install upgraded equipment to the City's existing WWTP in an effort to process additional wastewater. The proposed project will result an increase in the design capacity from a maximum dry weather flow of 1.05 mgd to 1.7 mgd. The increase in primary and secondary treatment capacity will be achieved by significantly increasing aeration in the aeration and polishing ponds, improving mixing in the aeration pond, and replacing the existing headworks with a new facility. Hydraulic upgrades consisting of yard piping and inlet/outlet modifications will be performed to maintain the required minimum two feet of freeboard in all ponds at peak flows. No changes in design or operation are proposed with respect to the emergency storage ponds. **Design changes have been made to the project so that all project construction including pipelines and driving routes will not come within 100 feet of any elderberry shrub. This design change will ensure no direct or indirect impacts to elberberry shrubs or the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; VELB).**

The purpose of this report is to discuss the findings of a survey conducted for the valley elderberry longhorn beetle, the potential impacts to this species due to project implementation, and the proposed mitigation measures to offset potential impacts.

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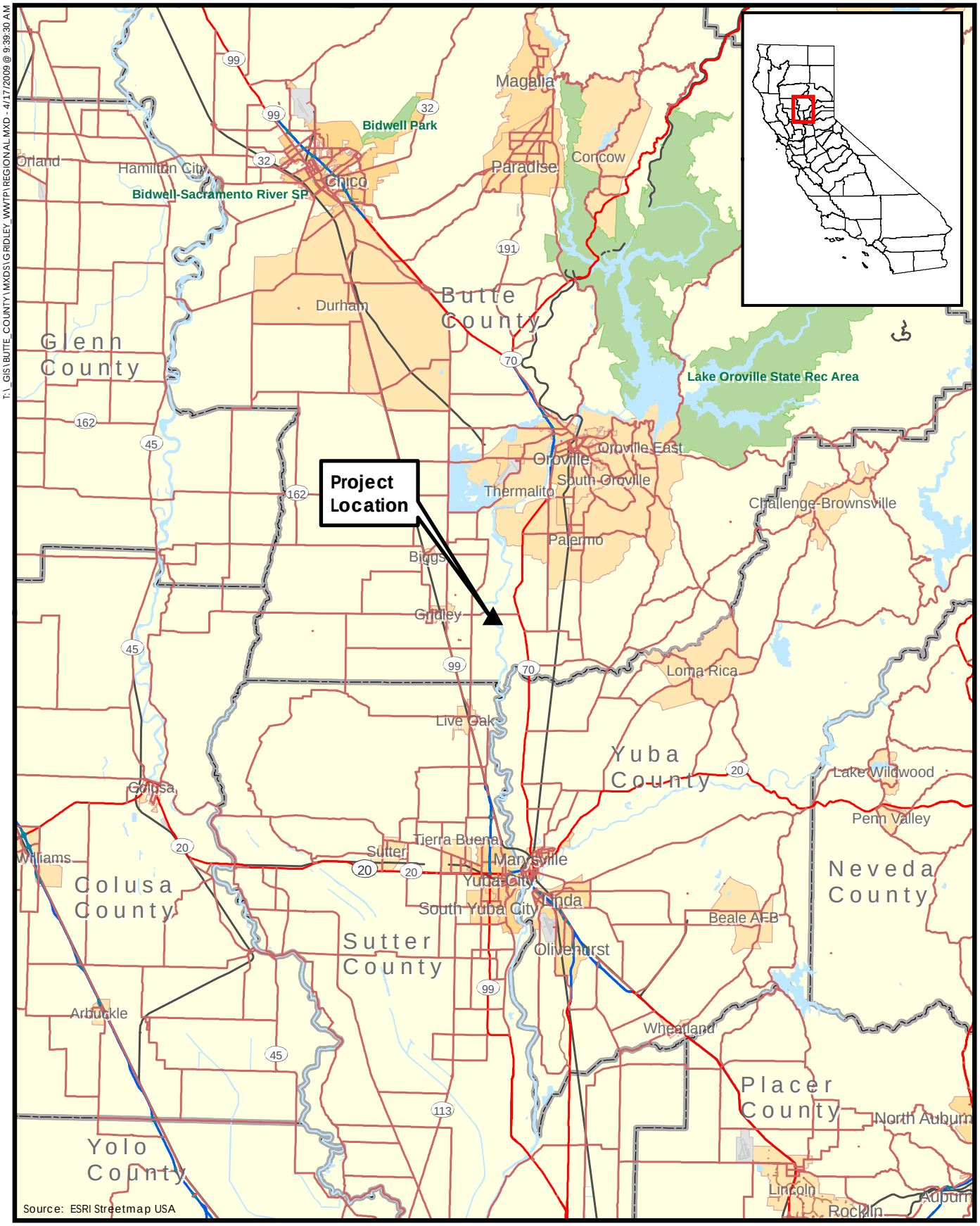

Figure 1
Regional Location Map

PMC

T:_GIS\BUTTE_COUNTY\MXDS\GRIDLEY_WWTP\PROJECT LOCATION.MXD - 4/17/2009 @ 10:16:20 AM

1,000 0 1,000
FEET
N

Figure 2
Project Location Map

PMC

CHAPTER 2. STUDY METHODS

Protocol-level surveys for the VELB were completed in accordance with U.S. Fish and Wildlife Service (USFWS) Conservation Guidelines for the Valley Elderberry Longhorn Beetle (Conservation Guidelines) (USFWS 1999). The purpose of the survey was to determine the presence and location of elderberry (*Sambucus* sp.) shrubs within the project site and 100-foot buffer that may be affected by implementation of the proposed project. The survey was conducted by qualified biologist, Elaine Flock, on April 14, 2009. According to the USFWS Conservation Guidelines (1999), protocol-level survey results are valid for a period of two years.

USFWS considers all shrubs with stems greater than one inch in diameter as habitat for VELB. According to the USFWS Conservation Guidelines (1999), complete avoidance (i.e., no adverse effects) may be assumed when a 100-foot or wider buffer is established and maintained around elderberry shrubs containing stems measuring 1.0 inch or greater in diameter at ground level. In addition, the USFWS requires that a minimum setback of at least 20 feet is maintained from the dripline of each elderberry plant. USFWS also requires that the area within a 100-foot buffer is restored and protected during and after construction (USFWS 1999). As such, all elderberry shrubs or clumps within the project footprint, within a 20-foot radius setback from the project footprint, and within a 100-foot radius of the project footprint, were surveyed. The locations of elderberry shrubs were mapped using a handheld Trimble GEO-XT global positioning system (GPS) unit capable of sub-meter accuracy.

CHAPTER 3. SPECIES ACCOUNT

3.1 VALLEY ELDERBERRY LONGHORN BEETLE

3.1.1 Regulatory Status

The VELB was federally listed as threatened on August 8, 1980 (USFWS 1980). Critical habitat for the VELB was also designated in the final rule listing the species as threatened (USFWS 1980). The two designated critical habitat units include an area along the south bank of the American River and an area south of State Route 160 and bounded by the Western Pacific Railroad tracks and Commerce Circle (all in Sacramento County). As such, the project site is not located within designated critical habitat for the VELB.

3.1.2 Ecology and Life History

The VELB is completely dependent on its host plant, the blue elderberry (*Sambucus mexicana*), which is a common component of the remaining riparian forests and adjacent upland habitats of California's Central Valley. Suitable habitat for the valley elderberry longhorn beetle consists predominantly of riparian forest with dominant plant species that include Fremont cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), valley oak (*Quercus lobata*), and willow (*Salix* spp.), with an understory of elderberry shrubs.

The VELB is a medium-sized wood-boring beetle that is approximately 2 centimeters in length. The taxon is sexually dimorphic. Males are primarily red in color with dark green spots, while females are primarily a dark metallic green with red margins (U.C. Berkeley 2004). Due to the obligate relationship with elderberry all life history phases of the VELB are closely associated with elderberry. The life cycle takes one or two years to complete. The VELB spends most of its life in the larval stage, living within the stems of an elderberry plant. Just after mating, females deposit their eggs in crevices within the bark of living elderberry plants (either *S. mexicana* or *S.*

racemosa var. *microbotrys*). Upon hatching, the larvae bore into the pith of the elderberry stem where they remain for up to two years. Mature larvae create an exit hole prior to pupation. Following pupation, the adult beetle emerges from the elderberry stem through the hole that it previously created. Emergence typically occurs during late March through June (generally at the time that elderberries begin to flower) (USFWS 1999). Exit holes are circular or slightly oval and are typically 7 to 10 millimeters in diameter (Barr 1991). Exit holes are generally found in elderberry stems that are one inch or greater in diameter at ground level. The presence of exit holes in elderberry stems is therefore an accepted indicator of valley elderberry longhorn beetle presence and habitat use. The adult beetles then feed on elderberry flowers and foliage until approximately June when mating occurs.

3.1.3 Distribution

The range of the VELB extends throughout California's Central Valley and associated foothills, from about the 3,000-foot-elevation contour on the east and the watershed of the Central Valley on the west (USFWS 1999). The range of the VELB extends throughout California's Central Valley and associated foothills from approximately the 3,000-foot elevation contour along the eastern boundary and the watershed of the Central Valley along the western boundary (USFWS 1999). The VELB occurs at very low densities, but occurrences are scattered over a wide geographic area from Tehama County south to Kern County (Arnold 1984; Barr 1991).

Collinge et al. (2001) found that colonization of previously unoccupied elderberry sites within drainages occupied by VELB is rare and that dispersal between drainages probably does not occur at all. This pattern implies that even when an individual VELB disperses from its host plant to colonize new habitat, it will only travel along the riparian corridor within its home drainage. Most remaining elderberry habitat and riparian vegetation exist in small isolated patches. Consequently, the distances between VELB populations and unoccupied VELB habitat are believed to limit the species' ability to successfully colonize new sites.

A query of the California Natural Diversity Data Base (CNDDB) (CDFG 2009) was conducted to identify previously recorded occurrences of VELB within the vicinity of the project site (**Appendix A**). VELB has not been previously documented within the project site, or within one mile of the project site. Two occurrences of VELB have been recorded within five miles, and another six occurrences have been documented within ten miles of the project site. The nearest occurrence is approximately 3.5 miles south of the project site east of Honcut Creek. There is no contiguous or semi-contiguous riparian habitat or elderberry savannah between this occurrence and the project site.

CHAPTER 4. RESULTS

4.1 SURVEY RESULTS

4.1.1 Vegetation Communities

The project site consists of the WWTP facilities and ornamental trees and vegetation that surround the ponds. Trees within the project site included pines (*Pinus* spp.), incense cedar (*Calocedrus decurrens*), birch (*Betula* sp.), and western sycamore (*Plantanus racemosa*). Other vegetation within the project site include, but are not limited to, Himalayan blackberry (*Rubus discolor*), Bermuda grass (*Cynodon dactylon*), and periwinkle (*Vinca major*). Biological communities within the 100-foot buffer surrounding the project site include orchards to the north and east of the site, and valley foothill riparian to the west. Immediately south of the project site boundary, there is a shooting range area containing a small stand of blue gum (*Eucalyptus*

globulus) trees. The orchards consist primarily of almond (*Prunus dulcis*) and English walnut (*Juglans regia*) trees. Understory vegetation consists of annual grassland species such as ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), bluegrass (*Poa annua*), wild oats (*Avena barbata*), cutleaf geranium (*Geranium dissectum*), long-beaked filaree (*Erodium botrys*), black medic (*Medicago lupalina*), prickly lettuce (*Lactuca serriola*), barley (*Hordeum murinum* ssp. *leporinum*), fiddleneck *(Amsinkia* sp.), scarlet pimpernel (*Anagallis arvensis*), mustards (*Brassica* spp.), wild radish (*Raphanus sativa*), mallows (*Malva* spp.), and field mint (*Mentha arvensis)*. Vegetation within the riparian corridor consists of, but is not limited to, box elder (*Acer negundo* var. *californicum*), tree-of-heaven (*Ailanthus altissima*), black walnut (*Juglans californica*), western sycamore, Himalayan blackberry, California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), wild grape (*Vitis californica*), fireweed (*Epilobium brachycarpum*), bedstraw (*Galium aparine*), and field hedge parsley (*Torilis arvensis*).

4.1.2 Elderberry Shrubs

No elderberry shrubs/clumps are located within the project footprint or the 20-foot radius setback (Figure 3). A total of 42 elderberry shrubs were identified outside the 20-foot radius setback, but within the 100-foot radius buffer. Table 1 below summarizes the elderberry stems greater than one inch that were identified and mapped during the survey.

4.2 POTENTIAL DIRECT AND INDIRECT EFFECTS

4.2.1 Direct Effects

The proposed project would not result in the direct impact (e.g., removal) of any elderberry shrubs. In addition, there are no elderberry shrubs located within the 20-foot radius setback from the project footprint which would be considered directly impacted by the proposed project, according to USFWS Conservation Guidelines (1999).

4.2.2 Indirect Effects

Although 42 elderberry shrubs with stems of various sizes are located between 20 feet and 100 feet of the project footprint the **project construction would take place on the opposite side of an existing 8-foot fence from where the elderberry shrubs are located. In addition to the existing fence, there is also and existing ornamental tree barrier (oleanders) that line the fence that buffer the elderberry shrubs from construction activities and everyday plant operations.**

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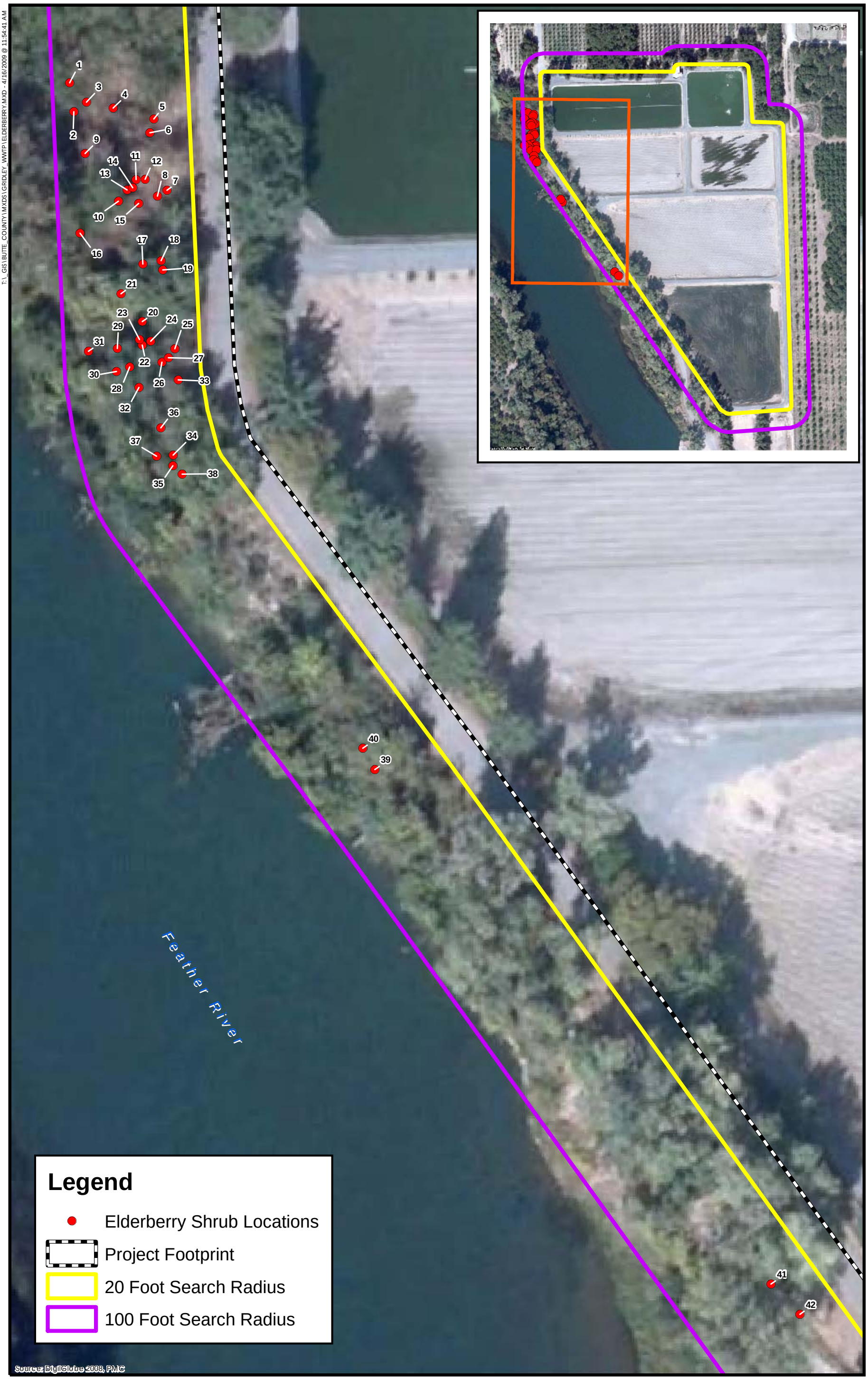

Figure 3
Elderberry Shrub Locations

PMC

CHAPTER 5. AVOIDANCE AND MINIMIZATION MEASURES

Design changes have been made to the project so that all project construction including pipelines and driving routes will not come within 100 feet of any elderberry shrub. This design change will ensure no direct or indirect impacts to elderberry shrubs or the valley elderberry longhorn beetle. These design changes and construction limitations shall be included in the construction design plans. The roadways within the project site that have elderberry shrubs along their boarders will be block off to construction traffic (but no to normal facility maintenance traffic) to ensure 100% avoidance of the VELB.

5.1 DETERMINATION

The project has been redesigned so that construction activities do not come within the 100-foot buffer in which the USFWS considers direct and indirect impacts to VELB to occur; **therefore the project will not affect the valley elderberry longhorn beetle**.

CHAPTER 6. REFERENCES

Arnold, R.A. 1984. Distributional and Ecological Studies of Five Endangered Insects. Interim report for Contract C-616 with the California Department of Fish and Game. 14 pp.

Barr, C.B. 1991. The Distribution, Habitat, and Status of the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus). U.S. Fish and Wildlife Service. Sacramento, California. 133 pp.

California Department of Fish and Game (CDFG). 2009. California Natural Diversity Database (CNDDB). Wildlife and Habitat Data Analysis Branch, California Dept. Fish and Game, Sacramento, CA.

Collinge, S.K., M. Holyoak, J.T. Marty, and C. Barr. 2001. Riparian Habitat Fragmentation and Population Persistence of the Valley Elderberry Longhorn Beetle (Coleoptera: Cerambycidae) in northern California. Biological Conservation 100(1):103-113.

U.C. Berkeley, Essig Museum of Entomology. 2004. California's Endangered Insects – Valley Elderberry Longhorn Borer. Available online at: http://essig.berkeley.edu/endins/desmocer.htm

U.S. Fish and Wildlife Service (USFWS). 1980. Listing the Valley Elderberry Longhorn Beetle as a Threatened Species with Critical Habitat, Federal Register, Volume 45, No. 155, pp. 52803-52807.

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United States Fish and Wildlife Service (USFWS). 1999. Conservation Guidelines for the Valley Elderberry Longhorn Beetle. July 9. Sacramento, CA.

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Appendix A. Recorded CNDDB Occurrences within One, Five, and Ten Miles of the Project Site

APPENDIX A. RECORDED CNDDB OCCURRENCES WITHIN ONE, FIVE, AND TEN MILES OF THE PROJECT SITE

PREVIOUSLY RECORDED VELB OCCURRENCES WITHIN ONE, FIVE, AND TEN MILES OF THE PROJECT SITE*

Scientific Name	Common Name	Quad Name	Search Radius Distance
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Loma Rica	10 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Loma Rica	10 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Loma Rica	10 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Gridley	10 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Biggs	10 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Honcut	10 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Palermo	5 Mile
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Honcut	5 Mile

** From the CNDDB (CDFG 2009); there are no recorded occurrences within 1 mile of the project site.*

APPENDIX E

GRIDLEY WWTP EXPANSION PROJECT-MIGRATORY BIRD AND RAPTOR NEST SURVEY RESULTS

PMC
APRIL 17, 2009

MEMO

To: Bill Slenter
HydroScience Engineers, Inc.

From: Elaine Flock
PMC

Date: April 17, 2009

Re: Gridley WWTP Expansion Project - Migratory Bird and Raptor Nest Survey Results

INTRODUCTION

The City of Gridley (City) proposes to install upgraded equipment to the City's existing wastewater treatment plant (WWTP) in an effort to process additional wastewater. The proposed project will result an increase in the design capacity from a maximum dry weather flow of 1.05 million gallons per day (mgd) to 1.7 mgd. The increase in primary and secondary treatment capacity will be achieved by significantly increasing aeration in the aeration and polishing ponds, improving mixing in the aeration pond, and replacing the existing headworks with a new facility. Hydraulic upgrades consisting of yard piping and inlet/outlet modifications will be performed to maintain the required minimum two feet of freeboard in all ponds at peak flows.

The purpose of this memorandum is to discuss the findings of a survey conducted for nesting migratory birds and raptors (birds of prey), within the project site and within 300 feet of the project site boundaries. This survey will satisfy the biological resources preconstruction survey requirements as outlined in the Initial Study/Mitigated Negative Declaration, Mitigation Monitoring Reporting Program (mitigation measures 4.1 and 4.2) for the for the Gridley Wastewater Treatment Plant Expansion Project.

PROJECT LOCATION

The proposed project is located in the City of Gridley, Butte County, California (**Figure 1**). The City is located along Highway 99 approximately 30 miles south of the City of Chico and approximately 60 miles northeast of the City of Sacramento. The City operates a wastewater treatment plant (WWTP) (project site) located on East Gridley Road, 3.3 miles east of the City of Gridley on the east bank of the Feather River. The project site is located in Sections 3 and 4 of Township 17 North, Range 3 West on the U.S. Geological Survey (USGS) *Gridley, California* 7.5-minute quadrangle map (USGS 1952) (**Figure 2**).

METHODOLOGY

On April 14, 2009, PMC biologist Elaine Flock performed a survey of the project site and within 300 feet of the site boundaries (study area). The purpose of the survey was to conduct an inspection of the existing structures, trees, and shrubs to determine if active bird nests are present. Field investigations included a pedestrian reconnaissance-level survey to directly observe bird-nesting behavior and/or identify actual and potential nests.

RESULTS

No active nesting was observed within the project site; however, three nests were found within 300 feet of the project site boundary (**Figure 3**). Two of the nests were small and were likely built by smaller migratory birds. Breeding status was confirmed at one of the small nests located at the northeast end of the study area. American goldfinches (*Carduelis tristis*) were displaying territorial behaviors at this nest location. No breeding behavior was observed at the second small nest located within the riparian corridor along the Feather River at the northwest end of the study area; however, the nest appeared to have been newly constructed. A red-tailed hawk (*Buteo jamaicensis*) was observed taking flight from a tree that contained the third and much larger nest; this nest is located within the riparian corridor within the southwestern portion of the study area. Other birds observed or heard within or nearby the study area included scrub jay (*Aphelocoma californica*), killdeer (*Charadrius vociferous*), American crow (*Corvus brachyrynchos*), turkey vulture (*Cathartes aura*), acorn woodpecker (*Melanerpes formicivorus*), tree swallow (*Tachycineta bicolor*), red-shafted flicker (*Colaptes auratus*), and mallard (*Anas platyrhynchos*).

RECOMMENDATIONS

If proposed site disturbance and construction activities are planned to occur within the study area during the nesting season for local avian species (typically February 15 through August 31), it is recommended that trees/shrubs with nesting birds not be disturbed until abandoned by the birds or a qualified biologist deems disturbance potential to be minimal (in consultation with USFWS and/or CDFG, where appropriate).

For active nests located within 100 feet (300 feet for raptors) of construction activities, other restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet or 300 feet, as appropriate, around the nest) or alteration of the construction schedule. It is also recommended that the nests be monitored by a qualified biologist on a regular basis (three times a week) until construction activities are completed or until nesting has concluded (fledglings have left nest).

If construction activities are proposed to occur during the non-breeding season (September 1 – February 14), no avoidance or minimization measures are required.

Should construction activities be delayed beyond May 31, 2009, it is recommended that the applicant retain a qualified biologist to conduct another survey for active nests of migratory birds and raptors within and in the vicinity of (up to 300 feet and no less than 100-feet outside project boundaries, where possible) the disturbance and construction area no more than 30 days prior to ground disturbance. The purpose of this second survey is determine the breeding status at the three nest locations and to determine if any additional nesting has commenced within 100 feet (300 feet for raptors) of construction activities.

If you have any questions or concerns, please do not hesitate to contact me at (530) 894-3469, extension 13213.

Regards,

Elaine Flock

Elaine Flock
Senior Biologist

Attached: Figure 1 – Regional Location Map
Figure 2 – Project Location
Figure 3 – Nest Location Map

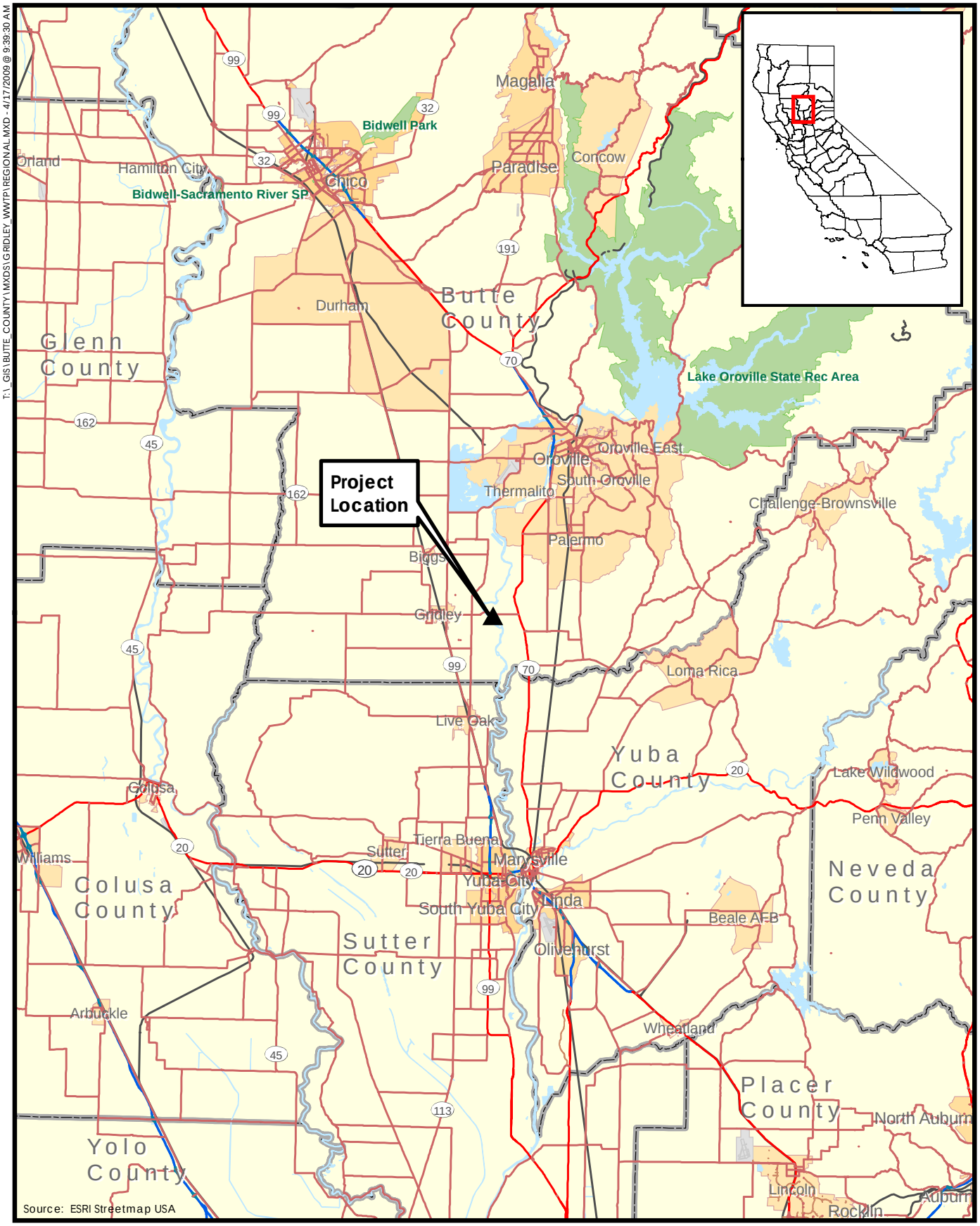

Figure 1
Regional Location Map

PMC

T:_GIS\BUTTE_COUNTY\MXDS\GRIDLEY_WWTP\PROJECT LOCATION.MXD - 4/17/2009 @ 10:16:20 AM

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Figure 2
Project Location Map

PMC

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150 0 150
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Figure 3
Nest Location Map

PMC

APPENDIX F

ARCHAEOLOGICAL INVENTORY SURVEY, PROPOSED GRIDLEY BOAT RAMP PROJECT, 1.1 ACRES BUTTE COUNTY, CA.

SEAN MICHAEL JENSEN, M.A.

APRIL, 2008

ARCHAEOLOGICAL INVENTORY SURVEY

Proposed Gridley Boat Ramp Project,
c. 1.1-Acres, Butte County, California.

Prepared for

Rolls, Anderson & Rolls
115 Yellowstone Drive
Chico, California 95973

Author

Sean Michael Jensen, M.A.

Keywords *for Information Center Use:*

Archaeological Inventory Survey, c. 1.1-acres, Butte County, CEQA/NEPA, USGS Gridley, Ca. 7.5' Quad., No Historic Properties/Historical Resources/Archaeological Resources.

April 29, 2008

GENESIS SOCIETY - PARADISE, CALIFORNIA

ARCHAEOLOGICAL - HISTORICAL - CULTURAL RESOURCE MANAGEMENT SERVICES

1. INTRODUCTION

Project Background

This report details the results of an archaeological inventory survey involving approximately 1.1-acre of land at the Gridley Boat Ramp facility, located adjacent to the east side of the Feather River, approximately ¼-mile south of East Gridley Road, in Butte County, California. The proposed project will involve replacement of the existing boat ramp, construction of a floating dock, parking lot, restrooms, and fish cleaning facilities, as well limited land re-contouring and vegetation removal, all to occur within the 1.1-acre impact area.

The proposed project will involve physical disturbance to ground surface and sub-surface components in conjunction with dredging and re-contouring lands within the vicinity of the existing boat ramp and other proposed actions, and will therefore have the potential to impact cultural resources located within the Area of Potential Effect (APE), which consists of the c. 1.1-acre project area itself (see attached ***Project Location Map***). Evaluation of the project's effects to cultural resources must be undertaken in conformity with Butte County rules and regulations, and in compliance with requirements of the California Environmental Quality Act of 1970, Public Resources Code, Section 21000, et seq. (CEQA), and The California CEQA Environmental Quality Act Guidelines, California Administrative Code, Section 15000 et seq. (Guidelines as amended).

As well, the project will require permitting through the US Army Corps of Engineers because of impacts or potential impacts to waters of the United States. Cultural studies must therefore also comply with federal guidelines, including in particular Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800), and other rules and regulations.

Scope of Work

Compliance with CEQA requires completion of projects in conformity with the amended (October 1998) Guidelines, including in particular Section 15064.5. Compliance with Section 106 of the NHPA requires completion of projects in conformity with the standards, guidelines, and principles in the Advisory Council's Treatment of Archaeological Properties: A Handbook (1980), and Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (1983). Based on these rules, regulations and laws, the following tasks were considered an adequate and appropriate Scope of Work for the present archaeological inventory:

- Conduct a records search at the Northeast Information Center of the California Historical Resources Information System at CSU-Chico and consult with affected Native American representatives and the Native American Heritage Commission. The goals of the records search and consultation are to determine (a) the extent and distribution of previous archaeological surveys, (b) the locations of known archaeological sites and any previously recorded archaeological districts, and (c) the relationship between known sites and environmental variables. This step is also designed to ensure that, during subsequent

field survey work, all significant/eligible cultural resources are discovered, correctly identified, and properly interpreted.

- Conduct a complete-coverage, intensive pedestrian survey of the APE. The purpose of the pedestrian survey is to ensure that previously recorded sites identified during the records search and consultation are re-located and eligibility evaluations updated on the basis of existing conditions vis-à-vis site integrity and condition. For previously undocumented sites discovered, the field survey would involve formally recording these on State DPR-523 Primary Records. For both previously identified and newly identified resources, the level of field work would be sufficient to recommend measures to avoid, minimize or mitigate adverse effects of the undertaking to any sites recommended eligible or potentially eligible for listing on the National Register of Historic Places.

- Upon completion of the records search, consultation and pedestrian survey, prepare an archaeological inventory survey report that identifies project effects and that includes an ***Historic Properties Treatment Plan*** for any eligible or potentially eligible properties affected by the undertaking.

The present document constitutes the final report for this project, detailing the results of the records search, consultation and pedestrian field survey and providing recommendations for treatment of historic properties affected. All field survey procedures followed guidelines provided by the State Historic Preservation Office (Sacramento) and conform to accepted professional standards.

Location

The Gridley Boat Ramp Project consists of an existing boat ramp located adjacent to the east side of the Feather River, approximately ¼-mile south of East Gridley Road, in Butte County, California. The proposed project will involve replacement of the existing boat ramp, construction of a floating dock, parking lot, restrooms, and fish cleaning facilities, as well limited land re-contouring and vegetation removal. Lands affected total approximately 1.1-acres located within a portion of Section 4, Township 17 North, Range 3 East, as shown on the USGS Gridley, California, 7.5' series quadrangle (see attached ***Project Location Map***).

Until relatively recently, lands within this general area remained largely undeveloped for residential or commercial uses, being utilized since about 1865 for ranching and orchard farming. During the past several decades, however, the pace of development within the Gridley area generally and in the vicinity of the Highway 70 corridor (Highway 70 is located c. one mile east of the project area) has increased, with residential, commercial, and recreational development ongoing in some areas.

Based on available topographic and other maps, but notwithstanding the effects of past and on-going land uses (particularly historic farming, ranching, contemporary recreational activities, prior construction of existing boat ramp and related features), the project area appeared to contain lands of generally low sensitivity for both prehistoric and historic-period sites and features.

2. EXISTING CONDITIONS

Several information sources were considered relevant to evaluating the types of sites and site distribution that might be encountered within the project area. The information evaluated includes data maintained by the Northeast Information Center of the California Historical Resources Information System (CSU-Chico), consultation with Native American representatives and the Native American Heritage Commission, and published and unpublished documents relevant to regional environment, prehistory, ethnography, and early historic developments.

Northeast Information Center Records

The records of the Northeast Information Center (CSU-Chico) were examined for existing recorded prehistoric and historic sites and previous archaeological survey within or near the project area (Records Search dated April 21, 2008, I.C. File # W08-31, copy attached), with the following results.

Previous Archaeological Survey:

None of the Area of Potential Effect (APE) has been subjected to survey by a professional archaeologist. Likewise, no archaeological surveys have been conducted within a quarter mile of the project area.

Recorded Cultural Resources:

No prehistoric or historical cultural resources have been formally recorded or otherwise identified within, adjacent or close to the project area.

Native American Consultation

In conjunction with the records search for the present project, the Native American Heritage Commission (NAHC) was contacted regarding Sacred Land Listings. The NAHC indicated that there are no Sacred Land listings for the project area or adjacent lands (response dated April 25, 2008, attached). The contact list from the Native American Heritage Commission included the following individuals and groups, all of whom were contacted and requested to supply any information they might have concerning prehistoric sites or traditional use areas within the project area:

1. Berry Creek Rancheria.
2. Butte Tribal Council.
3. Enterprise Rancheria.
4. Greenville Rancheria.
5. Konkow Valley Band of Maidu
6. Maidu Cultural and Development Group.
7. Maidu Nation.
8. Mechoopda Indian Tribe of Chico Rancheria.
9. Mooretown Rancheria of Maidu Indians.

To date, no responses have been received from these contacted groups.

Other Sources

In addition to examining records at the Northeast Information Center at CSU-Chico and Native American consultation, the following sources were also reviewed by the Information Center, or separately:

- The National Register of Historic Places (1988, Supplements 1966 through 7-00).
- The California Register of Historical Resources (2007)
- The California Inventory of Historic Resources (State of California 1976).
- The California Historical Landmarks (State of California 1996).
- The California Points of Historical Interest (May 1992 and updates).
- The Historic Property Directory (OHP 2007).
- USGS Quadrangle: 1951 Gridley 15'.
- Published and unpublished documents relevant to environment, ethnography, prehistory and early historic developments in the vicinity (reviewed below), providing context for assessing site types and distribution patterns for the project area.

Environmental Context: The project area consists of northern Sacramento Valley lands located adjacent to the east side of the Feather River, within lands that receive winter storm runoff from a significant watershed. The area contains deep sediments of the Sacramento Valley, which in turn has been uplifted along its eastern margin where it interfaces with the lower foothills of the Sierra Nevada.

In view of the substantial surface water sources throughout this area, including in particular the Feather River, prehistoric use and occupation was generally intensive, but the population was not randomly distributed. Clearly, the most intensively occupied land areas were at elevated locations along the river systems and along the Valley/Foothill interface located east of Gridley and east of the present project area.

Prehistory: The earliest residents in the Great Central Valley are represented by the Fluted Point and Western Pluvial Lakes Traditions, which date from about 11,500 to 7,500 years ago (Moratto 2004). Within portions of the Central Valley of California, fluted projectile points have been found at Tracy Lake (Heizer 1938) and around the margins of Buena Vista Lake in Kern County. Similar materials have been found to the north, at Samwel Cave near Shasta Lake and near McCloud and Big Springs in Siskiyou County. These early peoples are thought to have subsisted using a combination of generalized hunting and lacustrine exploitation (Moratto 2004).

These early cultural assemblages were followed by an increase in Native population density after about 7,500 years ago. One of the most securely dated of these assemblages in north-central California is from the Squaw Creek Site located north of Redding. Here, a charcoal-based C-14 date suggests extensive Native American presence around 6,500 years ago, or 4,500 B.C. Most of the artifactual material dating to this time period has counterparts further south, around Borax (Clear) Lake to the west, and the Farmington Area in a Valley setting east of Stockton. Important artifact types from this time period include large wide-stemmed projectile points and manos and metates.

In the Northern Sacramento Valley in the general vicinity of the project area, aboriginal populations continued to expand between 6,500 and 4,500 years ago. Early Penutian-speaking arrivals in this area may be represented by the archaeological complex known in the literature as the "Windmiller" or "Early Horizon." These sites date to about 4,000-5,000 years ago, with the connection to Penutian-speaking peoples suggested on the basis of extended burials, large leaf-shaped and stemmed projectile points similar to points of the Stemmed Point Tradition in the Plateau and portions of the Great Basin, large villages established along major waterways, and elaborate material culture with a wide range of ornamental and other non-utilitarian artifact types being present (Ragir 1972). The continuation of this pattern through the "Middle Horizon", or from about 1,000 B.C. to A.D. 300, has also been documented at riverine sites within the Sacramento Valley, including several sites near Colusa on the west side of the Sacramento River, and along the Feather River between Oroville to the north, through the Gridley and Liveoak areas, to Marysville to the south.

Sometime around AD 200-300, the Valley may have experienced another wave of Penutian immigration. Arriving ultimately from southern Oregon and the Columbia and Modoc Plateau region and proceeding down the major drainage systems (including the Feather, Yuba and American Rivers and of course the Sacramento River), these Penutian-speaking arrivals may have displaced the earlier populations, including remnant Hokan-speaking peoples still resident within the Valley. Presumably introduced by these last Penutian-speaking peoples to arrive were more extensive use of bulbs and other plant foods, animal and fishing products more intensively processed with mortars and pestles, and perhaps the bow and arrow and associated small stemmed- and corner-notched projectile points.

Ethnography: The project area is located within northernmost territory claimed by the northernmost Nisenan at the time of initial contact with European/American culture (*circa* AD 1850) (Wilson and Towne 1978), but close to the border shared with the Maidu to the north. The Nisenan were also referred to as Southern Maidu.

The Nisenan, like the Maidu immediately north, were Penutian speakers, for whom the basic social unit was the family, although the village may also have functioned as a social, political and economic unit. Villages were usually located near water sources, with major villages inhabited mainly in the winter as it was necessary to relocated into the hills and higher elevation zones to establish temporary camps during food gathering seasons (i.e., spring, summer and fall). Villages typically consisted of a scattering of bark houses, numbering from four or five to several dozen in larger villages, each house containing a single family of from three to seven people.

As with all northern California Indian groups, economic life for these Penutian-speaking groups revolved around hunting, fishing and the collecting of plant foods. Deer were an important meat source and were hunted by individuals by stalking or snaring, or by groups in community drives. Salmon runs, and other food resources available along the Feather and Yuba Rivers, also contributed significantly to local economies. While much of the fish protein was consumed immediately, a significant percentage, particularly during the fall salmon run, was prepared for storage and consumed during winter months. Acorns represented one of the most important vegetal foods and were particularly abundant within

the Oak Park Woodland which dominated lands located a short distance east of Gridley and along the margins of the major rivers, including the Feather River located adjacent to the project area.

Relations between Euro-Americans and Native Americans in the northern Sacramento Valley followed the course of interaction documented in most other parts of North America, but with particularly devastating consequences for the Sacramento Valley Indians. John Work's fur trapping expedition through the region in 1832-33 resulted in the introduction of several communicable diseases, the results of which were devastating to Native culture and society (Maloney 1945; Cook 1955; 1976).

Resource Considerations, Native American Sites: The discussion of regional prehistory and ethnography provides insight into the types of Native American sites likely to be present within the general project vicinity, with the most likely types for this area including:

- Large village sites located along the margins of the Feather River and other major streams, particularly at confluences.
- Surface scatters of lithic artifacts and debitage without evidence of buried cultural deposits, resulting from short-term occupation and/or specialized economic activities.
- Mortuary sites, often but not exclusively associated with large village complexes.
- Isolated finds of aboriginal artifacts and flakes.

Historic Context: Historic evidence exists to document that some of the Spanish and Mexican expeditions may have come through and made brief stays within northern California. John Work's fur trapping expedition through central California in 1832-33, the best documented of the initial forays into Valley, introduced several communicable diseases to the Native inhabitants which turned out to be devastating to Nisenan culture and society (Malony 1945; Cook 1976).

The next major incursion by White men occurred during the Gold Rush period, which in this area began in 1849-1850 with mining operations along the Feather River at Oroville, the Honcut Creek system to the east, and the Bear and Yuba River systems to the southeast. Beginning in 1855 the placer operations shifted to hydraulicking, with adverse effects on downstream communities near major river systems, such as Gridley, Marysville and Sacramento.

Gridley itself was an important early farming and ranching community. By the late 1860's and early 1870's, large tracts of farmland were being cleared throughout lands flanking the Feather River, with the railroad reaching the area from Sacramento in 1870.

As elsewhere in California, many of the Valley communities were purposefully created and funded by the railroads, with one of the objectives being to provide necessary services for the system itself (water, fuel), and another being to benefit from housing construction spurred by the extension of the railroad. Several towns in the vicinity of Gridley represent such communities whose period of intensive growth was directly related to the railroad and to the benefits to local agriculture and ranching (both sheep and cattle) which accompanied expansion of available markets created by the extension of long-haul freight into the Valley.

Another important historic railroad in the area is the Sacramento Northern Railroad. The Sacramento Northern emerged by consolidating and re-incorporating several interurban electric lines, including the Chico Electric and Northern Electric. This historic alignment is located east of the present project area, paralleling the Highway 70 corridor to the east.

Resource Considerations, Historic Resources: Historic overviews for the region document a range of historic site and feature types within this portion of Butte County in particular and the Northern Sacramento Valley in general. These range from remnant structures within historic communities to isolated farms, homesteads and ranch complexes, and irrigation ditches and canals, and drainage and other reclamation features. Also present within the vicinity but outside the APE for this project are constructed levees associated with the Feather River. The present APE is removed from the existing levee, however, which at this location has not been purposefully elevated and contains only limited concrete demolition rip-rap placed primarily following the 1986 flooding event.

3. PEDESTRIAN SURVEY and INVENTORY

All of the project area was subjected to intensive pedestrian survey by walking back and forth across the c. 1.1-acre property with systematic transects maintained at c. 5-10 meter intervals. In searching for cultural resources, the surveyor considered the results of background research and was alert for unusual contours, soil changes, distinctive vegetation patterns, exotic materials, artifacts, feature or feature remnants and other possible markers of cultural sites. All of the existing built environment within and adjacent to the project area is fully contemporary – including the existing boat ramp, a fish-cleaning facility, and the nearby wastewater treatment features.

Prehistoric Sites

Neither the existing records at CSU-Chico, consultation with tribal representatives, consultation with the Native American Heritage Commission, nor the present pedestrian field survey have documented any prehistoric sites or artifacts, traditional use areas, or sacred land listings within, adjacent or close to the project area. The absence of prehistoric cultural material at this location is explained in part by the extensive disturbance to which virtually all of the project/study area has been subjected, including substantial grading and other construction activities associated with the existing Gridley boat ramp and associated picnic facilities and access roads, as well as intensive disturbance associated with construction of a waste water treatment plant adjacent to the east side of the project property.

Historic Sites

Neither the existing records at CSU-Chico nor the present pedestrian field survey have documented any historical sites or artifacts within, adjacent or close to the project area. The existing boat ramp and all associated facilities are contemporary, including the nearby wastewater treatment features, all having been constructed after 1970.

4. PROJECT EFFECTS

A project may have a significant impact or adverse effect on cultural resources/historic properties if the project will or could result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance or values of the resource would be materially impaired.

Based on the findings of the present inventory effort, no historic properties are present within the project area and no historic properties will be affected by the undertaking, as presently proposed.

5. PROJECT SUMMARY

This report details the results of an archaeological inventory survey involving approximately 1.1-acres of land at the Gridley Boat Ramp facility, located adjacent to the east side of the Feather River, approximately ¼-mile south of East Gridley Road, in Butte County, California. The proposed project will involve replacement of the existing boat ramp, construction of a floating dock, parking lot, restrooms, and fish cleaning facilities, and limited land re-contouring and vegetation removal.

A search of State data bases, including all records and documents available at the Northeast Information Center, consultation with the Native American Heritage Commission and Native American representatives identified by the NAHC, and intensive-level pedestrian survey have failed to identify any historical or prehistoric cultural resources, traditional use areas, areas of traditional collecting, or other cultural issues of concern within or adjacent to the project area/APE.

Based on the findings of the present archaeological inventory, no historic properties will be affected by the undertaking, as presently proposed. Despite these negative findings, the following general provisions are considered appropriate:

1. ***Consultation in the event of inadvertent discovery of human remains***: In the event that human remains are inadvertently encountered during any ground-disturbing activity or at any time subsequently, State law shall be followed, which includes but is not limited to immediately contacting the County Coroner's office upon any discovery of human remains.

2. ***Consultation in the event of inadvertent discovery of cultural material***: The present evaluation and recommendations are based on the findings of an inventory-level surface survey only. There is always the possibility that important unidentified cultural materials could be encountered on or below the surface during the course of future construction or other activities. This possibility is particularly relevant considering the constraints generally to archaeological field survey, and particularly where extensive past disturbance has occurred, as in the present case. In the event of an inadvertent discovery

of previously unidentified cultural material, archaeological consultation should be sought immediately.

6. REFERENCES CITED and/or UTILIZED

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ARCHAEOLOGICAL INVENTORY SURVEY

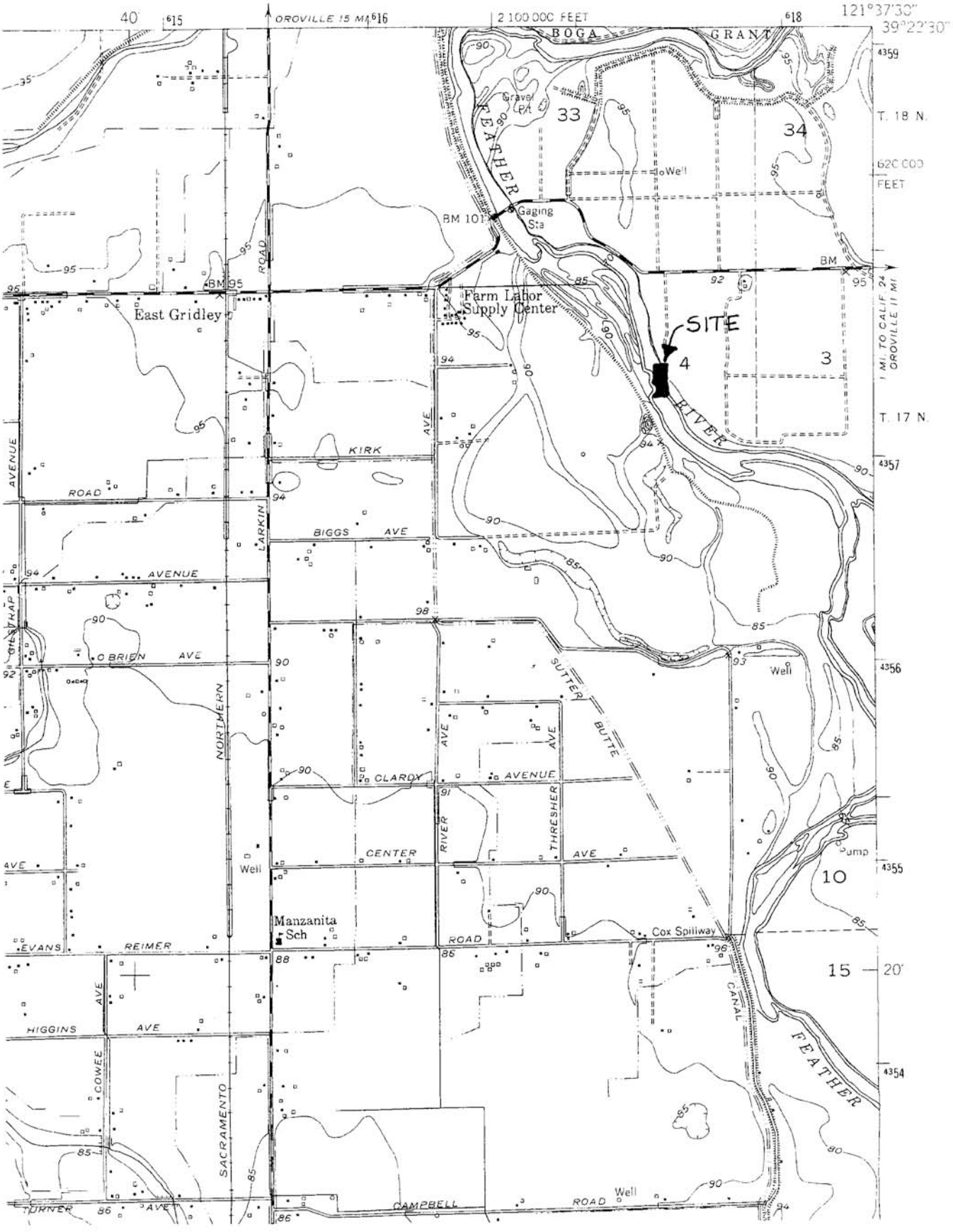
Proposed Gridley Boat Ramp Project,
c. 1.1-Acres, Butte County, California.

ATTACHMENTS

- Project Location Map.
- Copy of Records Search from Northeast Information Center, W08-31.
- Copy of letter to the Native American Heritage Commission (NAHC).
- Response letter from the Native American Heritage Commission (NAHC).
- Letter contacts with Native American Representatives:
  1. Berry Creek Rancheria.
  2. Butte Tribal Council.
  3. Enterprise Rancheria.
  4. Greenville Rancheria.
  5. Konkow Valley Band of Maidu
  6. Maidu Cultural and Development Group.
  7. Maidu Nation.
  8. Mechoopda Indian Tribe of Chico Rancheria.
  9. Mooretown Rancheria of Maidu Indians.

GRIDLEY QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

1662 I NE (PALERMO)



Northeast Center of the
California Historical Resources
Information System

BUTTE
GLENN
LASSEN
MODOC
PLUMAS
SHASTA
SIERRA
SISKIYOU
SUTTER
TEHAMA
TRINITY

California State University, Chico
Building 25, Suite 204
Chico, California 95929-0377
Phone (530) 898-6256
Fax (530) 898-4413

I.C. FILE # 1008-31

AGREEMENT OF CONFIDENTIALITY

I, the undersigned, have been granted access to archaeological data on file at the Northeast Center of the California Historical Resources Information System. I understand the confidential nature of this information and agree to respect that confidentiality by not disclosing specific site locations to unauthorized individuals or in publicly distributed documents without written consent of the State Historic Preservation Officer or the Information Center Coordinator.

I agree to submit completed site records and reports pertinent to this project to this Information Center no later than 60 days after completion of field investigation. Subsequent reports on the identified sites that are pertinent to archaeological resource management will be submitted as well.

I understand that failure to comply with the above agreement is grounds for denial of access to archaeological data at any California Historical Resources Information Center.

Sean Jensen — Name
x Sean Michael Jensen — Signature
4-21-08 — Date
GENESIS SOCIETY — Affiliation
680-6170 — Telephone
7053 MOLOKAI DRIVE PARADISE, CA 95969 — Address

Purpose of Research: Planning (✓) Scientific/Academic ( ) Other ( )

GRIDLEY BOAT RAMP — Project

T17N, R3E, S4 — Location

Gridley 7.5' — Maps

STAFF USE ONLY

Time:
IN: 3:25pm
OUT: 3:50pm

Adrienne Slattery
Information Center Staff

Backlog (✓) Am
none

Fees:	1 hour(s) @ $100.00/hr	$100.00
	____ staff hours @ $40.00/hr	$____
Photocopy Charges:	____ copies @ $.15/page	$____
Other:	_____	$____
TOTAL:		$100.00

*** THIS IS NOT AN INVOICE ***

GENESIS SOCIETY

a Corporation Sole

7053 MOLOKAI DRIVE
PARADISE, CALIFORNIA 95969
(530) 680-6170 VOX
(530) 876-8650 FAX
sean-jensen@sbcglobal.net

April 20, 2008

Native American Heritage Commission
Attn.: Ms. Debbie Treadway
915 Capitol Mall, Room 364
Sacramento, California 95814

Subject: ***Gridley Boat Launch Project, Butte, California.***

Dear Debbie:

Enclosed is a USGS based map showing the location of a 1.1-acre boat ramp replacement project, in Butte County, California.

We have been requested to conduct the archaeological survey, and are requesting any information you may have concerning archaeological sites or traditional use areas for this area. Any information you might supply will be used to supplement the archaeological and historical study being prepared for this project.

Project Name:	Gridley Boat Ramp Project, c. 1.1-acres
County:	Butte
Map	USGS Gridley, 7.5'
Location:	Section 4 of T17N, R3E

Thanks in advance for your assistance.

Regards,

Sean Michael Jensen

Sean Michael Jensen, Administrator

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390
Web Site www.nahc.ca.gov

April 25, 2008

Sean Michael Jensen, Administrator
GENESIS SOCIETY
7053 Molokai Drive
Paradise, CA 95969

Sent by Fax: 530-876-8650
Number of Pages: 4

Re: Proposed: Gridley Boat Launch project, Butte County. Roddan Ranch Development project, Yuba County.

Dear Mr. Jensen:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated', if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
Butte County
April 25, 2008

Berry Creek Rancheria of Maidu Indians
Cultural Resources Rep
#5 Tyme Way
Oroville , CA 95966
gmix@berrycreekrancheria.
(530) 534-3859
(530) 534-1151 FAX
Tyme Maidu

Berry Creek Rancheria of Maidu Indians
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(530) 534-1151 FAX
Tyme Maidu

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Maidu

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Maidu

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Chairperson
PO Box 279
Greenville , CA 95947
(530) 284-7990
(530) 284-6612 - Fax
Maidu

Greenville Rancheria of Maidu Indians
Mike DeSpain, EPA/Cultural Resources
PO Box 279
Greenville , CA 95947
mdespain.
(530) 284-7990
Fax: (530) 284-6612
Maidu

Greenville Rancheria of Maidu Indians
Gabriel Gorbet, Tribal Administrator
PO Box 279
Greenville , CA 95947
ggorbet@greenvillerancheria.com
(530) 284-7990
Fax: (530) 284-6612
Maidu

This list is current only as of the date of this document.

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Gridley Boat Launch project, Butte County.

Native American Contacts
Butte County
April 25, 2008

KonKow Valley Band of Maidu
Patsy Seek, Chairperson
1706 Sweem Street
Oroville , CA 95965
(530) 533-1504

KonKow / Concow
Maidu

Maidu Cultural and Development Group
Lorena Gorbet
PO Box 426
Greenville , CA 95947
(530) 284-1601

Maidu

Maidu Nation
Clara LeCompte
P.O Box 204
Susanville , CA 96130

Maidu

Mechoopda Indian Tribe of Chico Rancheria
Dennis Ramirez, Chairperson
125 Mission Ranch Blvd
Chico , CA 95926
award@mechoopda-nsn.gov
(530) 899-8922 ext 215
(530) 899-8517 - Fax

Mechoopda Maidu
Concow

Mechoopda Indian Tribe of Chico Rancheria
Paula Cuddeford, Tribal Administrator
125 Mission Ranch Blvd
Chico , CA 95926
pcuddeford@mechoopda-nsn.
(530) 899-8922 ext-209
Fax: (530) 899-8517

Mechoopda Maidu
Concow

Mooretown Rancheria of Maidu Indians
Gary Archuleta, Chairperson
#1 Alverda Drive
Oroville , CA 95966
frontdesk@mooretown.org
(530) 533-3625
(530) 533-3680 Fax

Maidu
KonKow / Concow

Mooretown Rancheria of Maidu Indians
James Sanders, Tribal Administrator
#1 Alverda Drive
Oroville , CA 95966
(530) 533-3625
(530) 533-3680 FAX

Maidu
KonKow/Concow

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Gridley Boat Launch project, Butte County.

GENESIS SOCIETY

a Corporation Sole

7053 MOLOKAI DRIVE
PARADISE, CALIFORNIA 95969
(530) 680-6170 VOX
(530) 876-8650 FAX
sean-jensen@sbcglobal.net

April 25, 2008

Native American Individuals, Groups and Tribes

Subject: ***Gridley Boat Ramp Project, Butte County, California.***

Dear Interested Native Americans:

Enclosed is a USGS topo-based map showing the location for a proposed boat ramp replacement project involving approximately 1.1-acres in Butte County, California.

We are requesting any specific information you might have concerning prehistoric sites or traditional use areas at this location, which is shown on the attached map and further described below:

Project Name:	Gridley Boat Ramp Project, c. 1.1-acres
County:	Butte
Map	USGS Gridley, 7.5'
Location:	Section 4 of T17N, R3E

If you have questions, please don't hesitate to call me at (530) 680-6170.

Regards,

Sean Michael Jensen

Sean Michael Jensen, Administrator

MITIGATION MONITORING REPORTING PROGRAM FOR THE GRIDLEY BOAT LAUNCH IMPROVEMENT PROJECT

DECEMBER 2009

Submitted to:

CITY OF GRIDLEY
685 Kentucky Street
Gridley, CA 95948

PMC

MITIGATION MONITORING PROGRAM CONTENTS

This document is the Mitigation Monitoring Reporting Program (MMRP) for the Gridley Boat Launch Improvement Project. The MMRP includes a brief discussion of the legal basis for and the purpose of the program, discussion and direction regarding complaints about noncompliance, a key to understanding the monitoring matrix, and the monitoring matrix itself.

LEGAL BASIS OF AND PURPOSE FOR THE MITIGATION MONITORING PROGRAM

California Public Resources Code Section 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report (EIR) or a mitigated negative declaration. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the Initial Study/Mitigated Negative Declaration for the Gridley Boat Launch Improvement Project. It is to be used by the City of Gridley staff, participating agencies, project contractors and mitigation monitoring personnel during implementation of the project.

The Initial Study/Mitigated Negative Declaration for the Gridley Boat Launch Improvement Project presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation measures, as defined by CEQA Guidelines Section 15370, are measures that do any of the following:

- Avoid impacts altogether by not taking a certain action or parts of an action.
- Minimize impacts by limiting the degree or magnitude of the action and its implementation.
- Rectify impacts by repairing, rehabilitating or restoring the impacted environment.
- Reduce or eliminate impacts over time by preservation and maintenance operations during the life of the project.
- Compensate for impacts by replacing or providing substitute resources or environments.

The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as necessary, on-site identification and resolution of environmental problems, and proper reporting to Agency staff.

The timing elements of mitigation measures and definition of the development process have been provided in detail throughout this MMRP to assist existing and future City staff by providing the most usable monitoring document possible.

RESPONSIBILITIES AND AUTHORITY

The City of Gridley will have primary responsibility for the operation and implementation of the MMRP. The City will be responsible for the following activities:

- Coordination of monitoring activities.
- Direction of the preparation and filing of compliance reports.
- Maintenance of records concerning the status of all mitigation measures.

The City will also have the responsibility of implementing the mitigation measures for which it has

been identified as the primary enforcement and monitoring agent. Other agencies or persons which have been identified as enforcement and monitoring agents for specific mitigation measures will be responsible for implementing these measures.

MONITORING PERSONNEL

The City of Gridley bears responsibility for ensuring that the mitigation measures in this document are implemented. The City reserves the right to hire technical experts and professionals to help in evaluating compliance. These may include but are not limited to biologists, archaeologists and planning professionals. Some of the measures will be assigned to the contractor as part of the scope of work.

MONITORING MATRIX

The tables on the back pages of the MMRP identify the mitigation measures proposed for the Gridley Boat Launch Improvement Project. These mitigation measures are reproduced from the Gridley Boat Launch Improvement Project Initial Study/Mitigated Negative Declaration for the project. The tables have the following columns:

- **Mitigation Measure:** Lists the mitigation measures identified within the Gridley Boat Launch Improvement Project Initial Study/Mitigated Negative Declaration for a specific impact, along with the number for each measure as enumerated in the Initial Study/Mitigated Negative Declaration.
- **Timing:** Identifies at what point in time, review process or phase the mitigation measure will be completed.
- **Agency/Department Consultation:** References the person or agency with which coordination is required to satisfy the identified mitigation measure.
- **Verification:** Spaces to be initialed and dated by the individual designated to verify adherence to a specific mitigation measure.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures associated with the project. The complaint shall be directed to the City in written form, providing specific information on the asserted violation. The City shall conduct an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the City shall take appropriate action to remedy any violation. The complainant shall receive a written response indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

MONITORING MATRIX FOR
GRIDLEY BOAT LAUNCH IMPROVEMENT PROJECT

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
AIR QUALITY			
MM 3.1 The following mitigation measures shall be implemented as appropriate during the construction phase of the project: • Water all active construction sites at least twice daily, or as needed. Frequency should be based upon the type of operation, soil, and wind exposure. • Land clearing, grading, earth moving, or excavation activities shall be suspended when winds exceed 15 miles per hour, as determined by an anemometer on-site or at the direction of BCAQMD. • Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area. • Plant vegetative cover in disturbed areas as soon as possible. • Cover inactive storage piles. • Paved roadways shall be swept or washed at the end of each day as necessary to remove excessive accumulations of silt and/or mud which may have accumulated as the result of construction activities. • Use alternatives to open burning of vegetative material on the project site, such as chipping, mulching, or conversion to biomass	Upon commencement of grading and construction activities.	City of Gridley Planning Department, Butte County Air Quality Management District.	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
fuel, unless otherwise deemed infeasible by the BCAQMD. • Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.			
MM 3.2 To mitigate impacts of diesel equipment emissions during construction, the following mitigation measures shall be implemented: • The primary contractor shall be responsible for ensuring that all construction equipment is properly tuned and maintained. • Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators when feasible. • Minimize idling time to 10 minutes.	Upon commencement of grading and construction activities	City of Gridley Planning Department, Butte County Air Quality Management District	
BIOLOGICAL RESOURCES			
MM 4.1: Prior to the initiation of any grading activities related to the project, the City shall obtain all required permits from the U.S. Army Corps of Engineers.	Prior to construction activities.	City of Gridley Planning Department, City of Gridley Public Works Department, U.S. ACOE	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
Migratory Birds, Raptors and other Special-Status Bird Species			
MM 4.2: The City of Gridley shall implement the following measure to reduce impacts to migratory birds: • If feasible, tree falling and ground-disturbing construction activities shall be limited to the period of September 1 through January 31, which is the non-breeding season for migratory birds. • If construction or tree falling activities will occur during the breeding season (February 15 through August 31), a qualified biologist shall conduct two preconstruction surveys to ensure that no nests of migratory birds or raptors will be disturbed during construction. The first survey can occur as early as February 1, and the second should occur no more than two weeks prior to commencement of construction activities. The survey area shall include the construction zone, including all staging areas, and a ½ mile (2,640 foot) radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm any nesting raptors (birds of prey) or migratory birds. • If an active nest is located within the proposed disturbance area, the wildlife biologist shall establish an appropriate buffer zone and consult with the California Department of Fish and Game (DFG) as necessary to prevent "take" of special status bird species. The buffer zone established by the qualified biologist shall be evaluated by a CDFG biologist if necessary. A qualified wildlife biologist shall monitor the nest weekly to determine when the young have fledged and submit bi-weekly reports throughout the nesting season to the lead agency. The biological monitor shall	Prior to construction activities	City of Gridley Planning Department, City of Gridley Public Works Department, DFG, USFWS.	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
have the authority to cease construction if there is any sign of distress to any raptor or migratory bird. Take of a raptor species is strictly prohibited by Section 3503.5 of the California Fish and Game Code Reference to this requirement and the MBTA shall be included in the construction specifications. • If the establishment of a suitable buffer zone is not feasible, the City shall apply to the CDFG for a California Endangered Species Act (CESA) Incidental Take Permit (ITP) pursuant to Fish and Game Code sections 2081 (b) and 2081(c) and California Code of Regulations, Title 14, Section 783 et Seq.			
Bats			
MM 4.3: The City of Gridley shall implement the following measure to reduce impacts to special status bats: •If feasible, tree falling and ground-disturbing construction activities shall be limited to the period of September 1 through April 30, which is the non-roost season for special status bats. •If construction or tree falling activities will occur during the maternal roost season (May 1 through August 31), a qualified wildlife biologist shall conduct a bat survey (including survey of trees with large cavities) to determine the presence or absence of roosting bats. If roosting special-status bats are found to occur within the project area, the qualified wildlife biologist shall consult with California DFG to determine a suitable buffer zone. If no special status bat species or roosts are found, no further mitigation would be required.	Prior to construction activities	City of Gridley Planning Department, City of Gridley Public Works Department, DFG, USFWS.	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
Stormwater Runoff			
MM 4.4: Prior to the initiation of any grading activities the City, or their contractor, shall obtain a Construction Stormwater Pollution Prevention Permit from the Central Valley Regional Water Quality Control Board. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Proposed Project (as required by the Permit), with the following objectives: (a) to identify pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges from the construction of the project; (b) to identify BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction; (c) to outline and provide guidance for BMPs and stormwater monitoring; (d) to identify project discharge points and receiving waters; (e) to address post-construction BMP implementation and monitoring; and (f) to address sediment / siltation / turbidity and non-visually detectable pollutant monitoring, and outline a sampling and analysis strategy. *Best Management Practices included in the SWPPP may include, but are not limited to the following:* (a) Check heavy equipment daily for leaks. Do not use equipment until leaks are fixed. (b) Refuel outside of active stream channel or above ordinary high water at designated sites.	Prior to construction activities.	City of Gridley Planning Department, City of Gridley Public Works Department, Central Valley Regional Water Quality Control Board	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
(c) Follow a spill prevention and control plan developed specifically for the program. (d) Petroleum products, chemicals, cement, or water contaminated with the aforementioned materials shall not be allowed to enter flowing waters. (e) No work during wet weather or when saturated grounds exist. (f) Locate staging areas outside of active stream channel or above ordinary high water at designated sites. (g) Develop a tracking system for erosion control projects conducted pursuant to this project. (h) Develop an implementation, and effectiveness monitoring plan. (i) Consult with resource agencies to review proposed projects for consistency with the project description and applicable regulatory requirements. (j) Existing natural vegetation shall be retained, protected and supplemented where necessary. Existing trees greater than 12-inches in diameter will be preserved whenever possible and practical. (k) Exposure of soil to erosion by removal of vegetation shall be limited to the smallest area practical and for the shortest time practical. (l) Seeding, mulching or other suitable stabilization measures shall be used to protect exposed erodible areas a minimum of two weeks in advance of the wet weather season. (m) Straw bales or sandbags stacked at the job site for emergency erosion control work during rainstorms. (n) Velocity check-dams in all unpaved roadways shall be provided at the necessary intervals to control and minimize erosion. (o) All erosion control devices shall be in place at the end of each working day during the wet weather season and directed by the City during the dry season when there is a forecasted probability of rain.			

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
Valley Elderberry Longhorn Beetle			
MM 4.5: To minimize potential negative effects of the project on the Valley Elderberry Longhorn Beetle, the City and their contractor will enact the following Protective Measures as outlined in the Valley Elderberry Longhorn Beetle Conservation Guidelines (1999): 1) Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the Service, the proponent will tailor utility pole placement to provide a minimum setback of at least 20 feet from the dripline of each elderberry plant. 2) Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements. 3) Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a federally threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction. 4) Instruct work crews about the status of the beetle and the need to protect its elderberry host plant. In addition, to these Protective Measures, the Project Proponent will also: 5) Perform construction in the vicinity of the elderberry shrubs onsite outside the emergence window of the beetle (May-June).	Prior to and during construction activities	City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
6) Prior to ground disturbing activities in the vicinity of elderberry shrubs adjacent to the project area, these areas will be watered to help prevent dust, which can negatively affect the beetle, if present.			
CV Spring-Run Chinook Salmon, CV Fall/Late Fall-Run Chinook Salmon, CV Steelhead, Green Sturgeon and Western Pond Turtle			
MM 4.6: The in-water work shall be limited to June 15 to September 15 when juvenile CV spring-run Chinook salmon will be absent or at very low levels in the Feather River. CV spring-run Chinook salmon and CV steelhead occurring within the river at this time will be at developmental stages that are easily capable of avoiding construction activities that might result in take of individuals. CV spring-run adults holding in the river at this time will primarily be located at the fish barrier dam, several miles upstream, or in deep pools holding for the summer.	During construction activities.	City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service	
MM 4.7: When placing small rock to establish a level foundation for the new pre-cast boat ramp, small rock shall be placed in the water utilizing an excavator or similar machinery, not end dumped from a dump truck or dropped into the water. This will allow any potential fish in the Action Area to disperse and not be impacted by the placement of base rock.	During construction activities	City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife Service	
MM 4.8: Existing large pieces of concrete utilized for bank stabilization, primarily sidewalks, shall be layered over with smaller rock in the 4-9 inch size class. Larger debris, like discarded sidewalk, is known to provide cover for in-water predators of juvenile salmon. Soil and plantings shall accompany the installation of smaller size	During and following construction activities	City of Gridley Planning Department, City of Gridley Public Works Department, U.S. Fish and Wildlife	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
rock for slope protection. Plantings will increase the amount of shaded riverine aquatic (SRA) habitat in the immediate vicinity of the boat ramp, which is presently barren of vegetation. These planting, over time, will also contribute to instream woody material (IWM), as trees and shrubs grow into the water or portions of the plants break and fall into the river and create flow refuge and foraging surfaces.		Service	
MM 4.9: The following measures (taken from *National Marine Fisheries Service Preliminary Design Recommendations for Small Erosion Repair Projects* dated February 8, 2006) shall be implemented during construction of bank stabilization structures to minimize affects to critical habitat for salmonids and green sturgeon in the Feather River and essential fish habitat. **Repair/Maintain Existing Bank Protection Above ordinary high water mark** • Footprint of repair shall be no larger than the old protection. • If rock is used, apply the smallest size required to achieve desired bank protection. • Mix soil into stabilization rock. • Removal of vegetation is minimized to the maximum extent possible. • If site conditions permit, plant grass, woody, or emergent vegetation, and encourage growth of vegetation types that do not	Prior to, during and after construction activities	City of Gridley Planning Department, City of Gridley Public Works Department, U.S. ACOE	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
have an adverse effect on levee stability and levee inspections. **Repair/Maintain Existing Bank Protection Below ordinary high water mark:** • Footprint of repair shall be no larger than the old protection. • Where feasible, and where site-specific engineering and hydraulic conditions allow, incorporate biotechnical methods to create and support a periodically inundated, vegetated floodplain with a mosaic of SRA cover, and instream woody material. • Rock used is the smallest size required to achieve desired bank protection. • Mix soil into stabilization rock. • Removal of vegetation is minimized to the maximum extent possible. If removal is required for access, replace onsite to achieve 1:1 successful revegetation. To achieve successful 1:1 revegetation, trees removed can be planted at 3:1 replacement to removal ratio, or site can be monitored for 2 years and replanted until 1:1 is reached. • Removal of instream woody material is avoided or minimized. If removal is required to safely access or construct erosion repair project, then a similar woody material will be replaced onsite and in-kind. • For large trees that fall into the active channel, a rock/soil mix may be placed into root hole or erosion hole if tree is left in place.			

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
No revegetation required. • Plant, on average, 1 willow or other native tree or plant that is appropriate for the local site conditions, per square meter of bank protection. **New Bank Protection on levee profile above ordinary high water mark:** • If rock is used, apply the smallest size required to achieve desired bank protection. • Mix soil into stabilization rock. • Removal of vegetation is minimized to the maximum extent possible. • If site conditions permit, plant grass or woody vegetation and encourage growth of vegetation types that do not have an adverse effect on levee stability and levee inspections. **New Bank Protection On natural bank and unprotected levee profile below ordinary high water mark:** • Project shall be designed to meet the dual objectives of protecting and maintaining the flood control system, and protecting and creating instream and near shore habitat conditions that are beneficial to anadromous salmonids. • Site design will be limited to engineering and hydraulic			

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
constraints, but will incorporate biotechnical practices to create and support a periodically inundated, vegetated floodplain with a mosaic of SRA cover, and instream woody material. • Use of rock should be minimized. Rock size should be minimized to achieve bank protection goals while minimizing predator habitat. Rock placement should be designed to create near-shore, shallow-water habitat through the construction of berms or other simulated floodplain habitats that are seasonally inundated and capable of supporting riparian vegetation. • Rock berms and stabilized banks should be planted with, on average, 1 willow or other native tree or plant that is appropriate for the local site conditions, per square meter of bank protection. • Removal of instream woody material is avoided or minimized. If removal is required to safely access or construct erosion repair project, then a similar woody material will be replaced onsite and in-kind. • Removal of vegetation is minimized to the maximum extent possible. If removal is required for access, replace onsite to achieve 1:1 successful revegetation. To achieve successful 1:1 revegetation, trees removed can be planted at 3:1, or site can be monitored for 2 years and replanted until 1:1 is reached.			
CULTURAL RESOURCES			
MM 5.1: If, during the course of project implementation, cultural resources (i.e., prehistoric sites, historic sites, and isolated	During all earth moving activities	City of Gridley Public Works	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)
artifacts and features) are discovered, work shall be halted immediately within 50 feet of the discovery. The City of Gridley Planning Department shall be immediately notified, and a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery. The City shall consider mitigation recommendations presented by a professional archaeologist and implement a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The Native American Heritage or other applicable Native American tribes shall also be notified and consulted on appropriate measures		Department	
MM 5.2: Prior to the commencement of project ground-disturbing activities, all construction personnel shall be informed of the type(s) of cultural resources that might be inadvertently uncovered in the area and protocols to be implemented to protect Native American human remains and any subsurface cultural resources.	Prior to construction activities	City of Gridley Public Works Department	
MM 5.3: If human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.	During all earth moving activities	City of Gridley Public Works Department	

Mitigation Measure	Timing	Agency/Department Consultation	Verification (Date and Initials)

RESOLUTION NO. 2010-R-003

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRIDLEY CERTIFYING THE MITIGATED NEGATIVE DECLARATION AND ADOPTING THE MITIGATION MONITORING PROGRAM FOR THE CITY'S BOAT LAUNCH IMPROVEMENT PROJECT, STATE CLEARINGHOUSE NO. 2009102029

WHEREAS, a Mitigated Negative Declaration ("MND") has been prepared, publicized, circulated and reviewed in accordance with the California Environmental Quality Act (Cal. Pub. Res. Code sections 21000 *et seq.*, "CEQA") and the State CEQA guidelines (Cal. Code Regs, Title 17, sections 15000 *et seq.*, "CEQA Guidelines"); and

WHEREAS, a Notice of Preparation was released for public and agency review and comment on the Gridley Boat Launch Improvement Project, with public review period starting October 5, 2009 and ending on November 7, 2009; and

WHEREAS, the City has reviewed and considered the verbal and written information provided by interested parties as well as the information provided in the Initial Study/Mitigated Negative Declaration ("MND") and

WHEREAS, the MND reflects the Council's independent judgment; and

WHEREAS, the mitigation measures listed in the MND shall be made conditions of project approval to ensure that the project will not have significant effect on the environment; and

WHEREAS, a Mitigation Monitoring and Reporting Program has also been prepared in accordance with CEQA and Implementing Guidelines.

NOW, THEREFORE, the City Council of the City of Gridley hereby certifies the Mitigated Negative Declaration as complete, adequate and in compliance with CEQA, and hereby adopts the associated Mitigation Monitoring and Reporting Program for the Gridley Boat Launch Improvement Project as follows:

FINDINGS:

Based upon information contained in this staff report and/or testimony received at the public hearing, the City Council of the City of Gridley makes the following findings:

1. In accordance with the California Environmental Quality Act Guidelines, an Initial Study was prepared to analyze the potential impacts of the proposed project.

2. The City received comments from affected agencies which resulted in minor modifications to be made Section 4.0. Biological Resources of the document. The changes are considered to be a minor modification to the project under CEQA and are consistent with Section 15164 of the CEQA Guidelines. The additions are determined consistent with Section 15164 of the CEQA Guidelines and consists of minor technical changes or additions to the project that do not result in significant effects not discussed in

the previous IS/MND. No Subsequent Negative Declaration as defined by Section 15164 will be required as the project does not consist of substantial changes to the project.

3. The Final Initial Study and Mitigated Negative Declaration determined the project could have a significant impact on the environment; however, with the mitigation measures identified in the Initial Study, all potential impacts would be reduced to a level of less than significant.

4. No additional written comments have been received which present evidence the project will have a significant impact on the environment. Therefore, the proposed Mitigated Negative Declaration and Monitoring Program attached to this staff report are adequate under CEQA.

5. The City Council approves the Final Initial Study and Mitigated Negative Declaration, for the Gridley Boat Launch Improvement Project, which is kept on file at the City Planning Department and approves the Mitigation Monitoring Program, attached as Exhibit "A" to this resolution.
6. The proposed project has been reviewed and is consistent with the General Plan, in that the land use being proposed is a replacement of an existing boat launch facility and consistent with the General Industrial land use designation.

7. All of the findings and conclusions made by the City Council pursuant to this Resolution and the exhibit incorporated herein are based on substantial evidence in the entire record before the City Council.

* *

I HEREBY CERTIFY that the foregoing resolution was introduced, passed and adopted by the City Council of the City of Gridley at a regular meeting held on the 16th day of February, 2010 by the following vote:

AYES: COUNCILMEMBERS ______________________________

NOES: COUNCILMEMBERS ______________________________

ABSTAIN: COUNCILMEMBERS ______________________________

ABSENT: COUNCILMEMBERS ______________________________

ATTEST: APPROVE:

______________________________ ______________________________

CITY CLERK, Rob Hickey MAYOR, Jerry Ann Fichter

Notice of Determination

Form C

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☒ County Clerk

County of: Butte

Address: 25 County Center Dr., Oroville, CA 95965

From:

Public Agency: City of Gridley

Address: 685 Kentucky Street, Gridley, CA 95948

Contact: Andrea Redamonti

Phone: 530 846 3633

Lead Agency (if different from above):

Address:

Contact:

Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009102029

Project Title: City of Gridley Boat Launch Improvement Project

Project Location (include county): east bank of the Feather River south of East Gridley Road

Project Description:

The proposed project consists of improvements to the City's existing boat ramp which includes the following: (1) new boat launch facility, (2) a new parking area, (3) restrooms and associated lift station, (4) fish cleaning station, (5) drainage and erosion control measures, and (6) extension of utilities to serve the project.

This is to advise that the City of Gridley ☒ Lead Agency or ☐ Responsible Agency has approved the above described project on February 16, 2010 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
4. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
5. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: Gridley Planning Department, 685 Kentucky Street, Gridley, CA 95948

Signature (Public Agency) _____ Title Community Development Director

Date 2/18/10 Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005