
CITY OF YREKA
YREKA CREEK TRAIL DEVELOPMENT PROJECT
PUBLIC REVIEW DRAFT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF YREKA
701 FOURTH STREET
YREKA, CA 96097

Prepared by:



140 INDEPENDENCE CIRCLE, SUITE C
CHICO, CA 95973

DECEMBER 2012

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- A. *Revised Wetland Delineation Report, City of Yreka Stormwater Attenuation and Floodplain Restoration Project.* PMC, April 2012.
- B. *Archaeological and Historical Resource Report for the Yreka Creek Trail Development Project.* Resource Management, September 2012.

(The appendix is included on a CD located on the back cover of this document. Hard copies are also available upon request at the City of Yreka, 701 Fourth Street, Yreka, CA 96097. Office hours are 8:00 a.m. – 5:00 p.m. Monday through Friday.)

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1.0 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study, with supporting environmental studies, which concludes that a Mitigated Negative Declaration is the appropriate California Environmental Quality Act (CEQA) document for the Yreka Creek Trail Development Project. This Mitigated Negative Declaration has been prepared in accordance with CEQA, Public Resources Code Section 21000, et seq., and the State CEQA Guidelines, California Code of 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 15063, an environmental impact report (EIR) must be prepared if an initial study indicates that the proposed project under review may have a potentially significant impact on the environment that cannot be initially avoided or mitigated to a level that is less than significant. A negative declaration may be prepared if the lead agency also prepares a written statement describing the reasons why the proposed project would not have a significant effect on the environment and therefore why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

- a) *The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or*
- 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 negative declaration is 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.*

If revisions are adopted in the proposed project in accordance with CEQA Guidelines Section 15070(b), including the adoption of mitigation measures included in this document, a mitigated negative declaration is prepared.

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 Yreka (City) is the lead agency for the proposed Yreka Creek Trail Development Project.

1.0 INTRODUCTION

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed Yreka Creek Trail Development Project. This document is divided into the following sections:

1.0 Introduction – This section provides an introduction and describes the purpose and organization of the 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 designation, zoning district, identification of surrounding land uses, and identification of other public agencies whose review, approval, and/or permits may be required. Also listed in this section is a checklist of the environmental factors that are potentially affected by the project.

3.0 Project Description – This section provides a detailed description of the proposed project.

4.0 Environmental Checklist – This section describes the environmental setting and 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.

5.0 References – This section identifies documents, websites, people, and other sources consulted during the preparation of this Initial Study.

1.4 EVALUATION OF ENVIRONMENTAL IMPACTS

Section 4.0, Environmental Checklist, is the analysis portion of this Initial Study. The section provides an evaluation of the potential environmental impacts of the project. There are eighteen environmental issue subsections within Section 4.0, including CEQA Mandatory Findings of Significance. The environmental issue subsections, numbered 1 through 18, consist of the following:

- | | |
|------------------------------------|--|
| 1. Aesthetics | 10. Land Use and Planning |
| 2. Agriculture Resources | 11. Mineral Resources |
| 3. Air Quality | 12. Noise |
| 4. Biological Resources | 13. Population and Housing |
| 5. Cultural Resources | 14. Public Services |
| 6. Geology and Soils | 15. Recreation |
| 7. Greenhouse Gases | 16. Transportation/Traffic |
| 8. Hazards and Hazardous Materials | 17. Utilities and Service Systems |
| 9. Hydrology and Water Quality | 18. Mandatory Findings of Significance |

Each environmental issue subsection is organized in the following manner:

The **Environmental Setting** summarizes the existing conditions at the regional, subregional, 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 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 that are specified after analysis would reduce the project-related impact to a less than significant level.

Potentially Significant Impact: An impact that is “potentially significant” but for which mitigation measures cannot be immediately suggested or the effectiveness of potential mitigation measures cannot be determined with certainty, because more in-depth analysis of the issue and potential impact is needed. In such cases, an EIR is required.

2.0 PROJECT INFORMATION

2.0 PROJECT INFORMATION

1. **Project title:** Yreka Creek Trail Development Project
2. **Lead agency name and address:** City of Yreka
701 Fourth Street
Yreka, CA 96097
3. **Contact person and phone number:** Steve Neill, PE – Public Works Director
(530) 841-2386
4. **Project location:** The proposed project is located in the City of Yreka in Siskiyou County, California. The project area, which totals approximately 20.5 acres, is situated on APNs 061-301-030, -050, -070, -080, -420, and -460; 061-352-020, and -190; and, 061-221-070; in Section 27 of Township 45 North, Range 7 West of the Mount Diablo Meridian (Latitude 41°43'0.65"N, Longitude 122°38'14.49"W). (See **Figure 3.0-1** for project location.) The project address is 220 E. Oberlin Road.
5. **Project sponsor's name and address:** City of Yreka
701 Fourth Street
Yreka, CA 96097
6. **General Plan designation:** Light Industrial (M1) and Recreation, School, Conservation (RSC), and Open Space (O)
7. **Zoning:** Industrial (I) and Open Space (O)
8. **Description of project:** The proposed project entails surfacing approximately 1,500 linear feet of existing trail; construction of approximately 1,900 linear feet of gravel trail; installation of approximately 100 linear feet of free-span bridge, including abutments and armoring; installation of seven "float aside" or seasonal upland channel waterway crossings, including abutments and armoring; installation of concrete, handicapped-accessible picnic tables and trash receptacles; construction of approximately 5,000 square feet of asphalt parking lot at the Oberlin Road trailhead; installation of a drinking fountain at the Oberlin Road trailhead; development and installation of a bond acknowledgement sign, a trail and site identification map/sign, and trailside interpretive signs; creation of an approximately 700-foot drainage swale that provides vegetative filtration of stormwater; and restoration of approximately 1 acre of floodplain by re-contouring flood constrictions, planting approximately 600 native plants and trees, and implementing erosion control measures.

2.0 PROJECT INFORMATION

9. Surrounding land uses and setting:

The project area, which consists of recently rehabilitated riparian floodplain and open grassland, is bordered by existing commercial and industrial development as well as by Interstate 5 and the Yreka Western Railroad. The project area is eventually intersected by Interstate 5 and passes under the freeway.

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

- California Department of Fish and Game (CDFG)
- California Department of Transportation (Caltrans)
- National Marine Fisheries Service (NMFS)
- North Coast Regional Water Quality Control Board (RWQCB)
- Siskiyou County Air Pollution Control District (SCAPCD)
- United States Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)

11. Environmental factors potentially affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "potentially significant impact" as indicated by the checklist on the following pages.

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

12. Determination: (To be completed by the lead agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

Signature

Steve Baker

Printed Name

City Manager

Title

Date

City of Yreka

Lead Agency

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The proposed project is located in the City of Yreka in Siskiyou County, California. The City of Yreka is located approximately 21 miles south of the California-Oregon border. Interstate 5, State Route 3, and State Route 263 pass through and provide regional access to the City. The project area, which totals approximately 20.5 acres, is accessed via Oberlin Road east of Interstate 5 and is situated on Siskiyou County Assessor's Parcel Numbers (APNs) 061-301-030, -050, -070, -080, -420, and -460; 061-352-020, and -190; and, 061-221-070. This corresponds with Section 27 of Township 45 North, Range 7 West of the Mount Diablo Meridian (Latitude: 41°43'4.82"N Longitude: 122°38'13.76"W). The address of the project is 220 E. Oberlin Road. (See **Figure 3.0-1, Project Location.**)

3.2 PROJECT OVERVIEW

The proposed project includes the development of public access trails along Yreka Creek and within the Yreka Creek Greenway, as well as the installation of recreation facilities to include both fixed and breakaway bridges, picnic tables, a trailhead parking facility, removal of floodplain constrictions, removal of noxious weeds, and planting of native riparian and upland vegetation. (See **Figure 3.0-2a** and **3.0-2b, Site Plan.**) In particular, the Yreka Creek Trail Development Project proposes the following improvements:

1. Construction of approximately 5,000 square feet of asphalt parking lot at the Oberlin Road trailhead;
2. Surfacing of approximately 1,500 linear feet of existing trail to make it ADA-accessible;
3. Construction of approximately 1,900 linear feet of gravel trail;
4. Installation of 2 free-span bridges having approximately 100 linear feet of total length, including abutments and armoring;
5. Installation of up to seven "float-aside" seasonal water crossings or upland channel crossings, including abutments and armoring;
6. Installation of armored dip crossings along with two temporary seasonal wet crossings for construction purposes and three in-channel "Rosgen-vein" hydrologic features;
7. Installation of armored concrete dip and armored box culverts across overflow channel.
8. Installation of concrete, handicapped-accessible picnic tables and trash receptacles;
9. Creation of an approximately 700-foot drainage swale that provides vegetative filtration of stormwater;
10. Restoration of approximately 1 acre of floodplain by re-contouring flood constrictions, planting approximately 600 native plants and trees, and implementing erosion control measures; and
11. Development and installation of a bond acknowledgement sign, a trail and site identification map/sign, a chainlink fence along west side of Young property, and trailside interpretive signs and a trailhead drinking fountain.

3.0 PROJECT DESCRIPTION

The proposed project serves to build upon the successes of the recently completed Yreka Stormwater Attenuation and Floodplain Restoration project, a Proposition 40 bond-funded project that restored 700 feet of Yreka Creek floodplain and approximately 14 acres of City-owned property within the current 20.5-acre project site. The proposed project also serves to implement a portion of the *Yreka Creek Greenway Master Plan* (City of Yreka 2005b), a plan that calls for 4.5 miles of continuous greenway along Yreka and Greenhorn creeks within Yreka city limits.

3.3 PROJECT CONSTRUCTION

CONSTRUCTION TIMING

It is anticipated that construction will begin during the 2013 construction year and, per grant conditions, be completed by May 2015; however, construction may be accelerated or delayed based on design progress, environmental conditions, available funding, weather, or other factors. Construction timing may also be affected by mitigation for sensitive environmental species.

CONSTRUCTION METHODS

Construction will generally occur between 7:00 a.m. and 7:00 p.m. Monday through Friday, excluding holidays. Traffic controls will be provided adjacent to the project site along Oberlin Road and South Main Street, as necessary, to maintain the flow of traffic at all times. Construction of bridges and restoration of the floodplain along Yreka Creek may require temporary stream crossings. All required permits will be obtained from responsible agencies prior to construction of any stream crossings and/or impacts to sensitive natural habitats.

3.4 PROJECT APPROVALS

The City of Yreka is the lead agency for this project. In addition, permits and/or approvals would be required from the following agencies:

US ARMY CORPS OF ENGINEERS (USACE)

The US Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act. Modifications to wetland areas on the project site that have been delineated under USACE criteria are subject to the Section 404 permitting process.

The USACE regulations describe two categories of permits: individual and general. A general permit means that the USACE authorization is issued on a nationwide or regional basis for activities with minimal or cumulative environmental effects. The most well-known of the general permits are the nationwide permits (NWP). Such permits can be issued in a shorter length of time than an individual permit.

It is anticipated that implementation of the project would require 404 permitting under Nationwide Permits 27, 33, and 42a.

REGIONAL WATER QUALITY CONTROL BOARD (RWQCB), NORTH COAST REGION

The RWQCB typically requires that a Construction General Permit be obtained for projects which disturb more than 1 acre of soil. Typical conditions issued with such a permit include the submittal of and adherence to a stormwater pollution and prevention plan (SWPPP), as well as prohibitions on the release of oils, grease, or other hazardous materials.

The RWQCB also issues a Water Quality Certification under authority of Section 401 of the Clean Water Act. After submittal of a Pre-Construction Notification Package to the USACE, the City of Yreka would need to submit a copy of the Section 404 Notification and appropriate fees directly to the RWQCB to obtain the Section 401 certification or waiver.

STATE WATER RESOURCES CONTROL BOARD (SWRCB)

The State Water Resources Control Board has the joint authority of water allocation and water quality protection. The SWRCB works to protect water quality in California through watershed management principals, including targeting both point and nonpoint source pollution. The SWRCB also issues permits for water rights specifying amounts, conditions, and construction timetables for water diversions and storage. The City may need to obtain a Section 401 permit from the SWRCB for work adjacent to Yreka Creek.

CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

A portion of the proposed project would be located within a California Department of Transportation right-of-way for Interstate 5. The City will be required to obtain an encroachment permit from Caltrans prior to any work within the Caltrans right-of-way.

CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG)

The CDFG is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. As such, prior to taking any action that may substantially modify a river, stream, or lake, the CDFG must be notified and a Streambed Alteration Agreement issued.

For any work within the stream channel or riparian zone of Yreka Creek, the project will require a 1602 Streambed Alteration Agreement from the California Department of Fish and Game.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

NOAA's National Marine Fisheries Service (NMFS) is the federal agency responsible for the stewardship of the nation's living marine resources and their habitat. The NMFS is responsible for the management, conservation, and protection of living marine resources within the United States. Because of the potential for Coho salmon to exist within the project area (i.e., Yreka Creek), the proposed project may be required to obtain a Biological Opinion from the NMFS.

US FISH AND WILDLIFE SERVICE (USFWS)

The Endangered Species Act, with some exceptions, prohibits activities affecting federally listed species unless authorized by a permit from the USFWS and the NMFS. The proposed project may be required to obtain a Biological Opinion for the project.

3.0 PROJECT DESCRIPTION

3.5 RELATIONSHIP OF PROJECT TO OTHER PLANS

CITY OF YREKA GENERAL PLAN

The proposed project will be located entirely within the City of Yreka. The City of Yreka General Plan was updated in 2002–2003 and adopted by the City Council on December 18, 2003. The City of Yreka General Plan is the fundamental document governing land use development in the incorporated areas of the city. The General Plan includes numerous goals and policies pertaining to land use, circulation, housing, conservation, open space, parks and recreation, noise, public health and safety, and public facilities. The proposed project will be required to abide by all applicable goals and policies included in the adopted General Plan.

YREKA CREEK GREENWAY MASTER PLAN

The *Yreka Creek Greenway Master Plan* was prepared by the Yreka Creek Greenway Committee, a citizen’s advisory group, in 1989 and has since been revised and updated. The Master Plan was most recently updated and adopted by the City in 2005. The purpose of the Master Plan is to support the goals and objectives developed by the Yreka Creek Greenway Committee and to develop recommendations to guide the development and prioritization of greenway projects along Yreka Creek.

The Master Plan includes an introduction and background to the Yreka Creek Greenway, the existing conditions, methods for implementation of goals and objectives identified in the plan, identification of issues and needs, trail segment value and gap analysis, trail system design, and trail infrastructure cost analysis, as well as recommendations.

CITY OF YREKA FLOOD DAMAGE PREVENTION ORDINANCE

The project will be subject to the City’s Flood Damage Prevention Ordinance (Chapter 11.34 of the City of Yreka Municipal Code), which regulates improvements in flood zones. Portions of the proposed project are located in Flood Zones X, AO, and AE, and the design of the project will need to comply with the requirements of the ordinance.

BASIN PLAN FOR THE NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD

The City of Yreka and the project site are located within the Klamath River Basin, which is under the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB). One of the duties of the RWQCB is development of “basin plans” for the hydrologic area over which it has jurisdiction. The Basin Plan sets forth water quality objectives for both surface water and groundwater for the region, and it describes implementation programs to achieve these objectives. The Basin Plan provides the foundation for regulations and enforcement actions of the North Coast RWQCB.

In May 2011, the North Coast RWQCB adopted the most recent version of the *Water Quality Control Plan for the North Coast Region* (Basin Plan). The Basin Plan defines existing and potential beneficial uses of surface water and groundwater in the Klamath River Basin and sets forth water quality objectives for these waters.

The proposed project is located within the Klamath River watershed. Existing or potential beneficial uses of the Klamath 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 (North Coast RWQCB 2011).

Consistent with the intent of the Basin Plan, one of the objectives of the project to reduce flood hazards associated with in-stream creek flows, the project will help to implement the goals, objectives and policies of the Plan. Additionally, the project incorporates design elements which seek to enhance water quality and advance the objectives of the overall Basin Plan.

NATIONAL MARINE FISHERIES SERVICE COHO RECOVERY PLAN

The proposed project is located within the Klamath River watershed in and along Yreka Creek. Yreka Creek is a tributary to the Klamath River and the Klamath River basin of which a portion of the territory of the watershed is incorporated in the NMFS Coho Recovery Plan coverage area. The proposed project is consistent with the goals and objectives of the plan and incorporates design elements intended to enhance the habitat value of the section of Yreka Creek for which the project will affect.

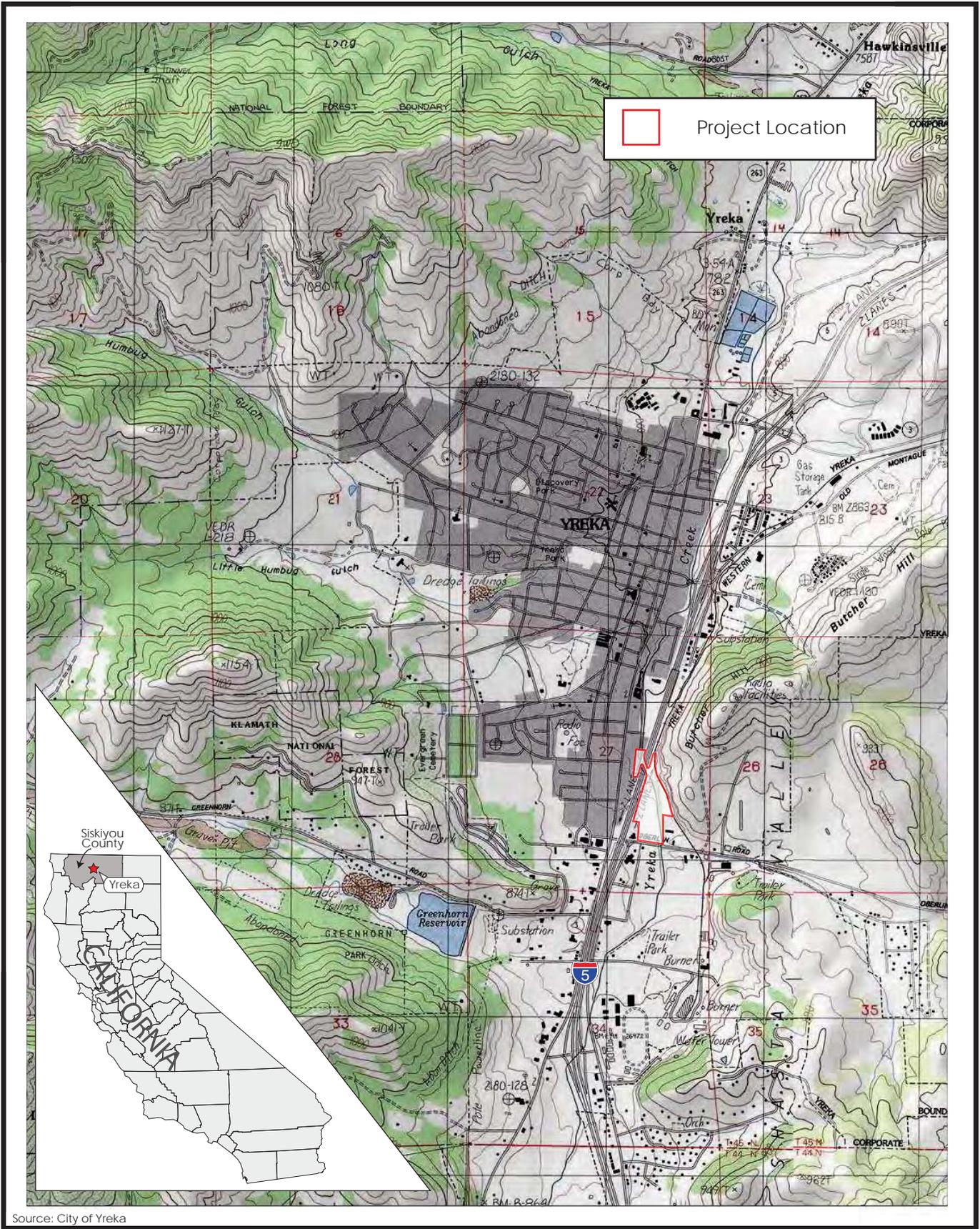
SHASTA RIVER WATERSHED PLAN

The *Shasta River Watershed Plan* was prepared by the Shasta River Coordinated Resource Management and Planning Committee (CRMP) and is implemented by the Shasta Valley Resource Conservation District. The plan includes the *Shasta CRMP Riparian Zone and Anadromous Fish Action Plan*, California Department of Fish and Game Anadromous Fish Biological Needs Assessment, *Shasta CRMP Uplands Plan/RMAC Plan*, *Yreka Creek Greenway Master Plan*, CRMP mid-term goals, work plan, original CRMP plan, Shasta River Remote Monitoring Station, Sport, Tribal and Commercial Salmon Harvest Information, and a discussion of the unique Shasta Valley geology.

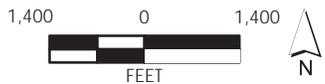
The *Shasta CRMP Riparian Zone and Anadromous Fish Action Plan* was developed to identify adverse impacts to water quality in the Shasta River and to identify methods of reducing them. The plan identifies problems as well as recommended action to alleviate problems associated with water, erosion, fish needs, fishery harvest, and the Klamath River. The proposed project supports a number of the identified actions identified in the *Shasta River Watershed Plan* to address identified impacts to water quality.

3.0 PROJECT DESCRIPTION

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Source: City of Yreka



3.0 PROJECT DESCRIPTION

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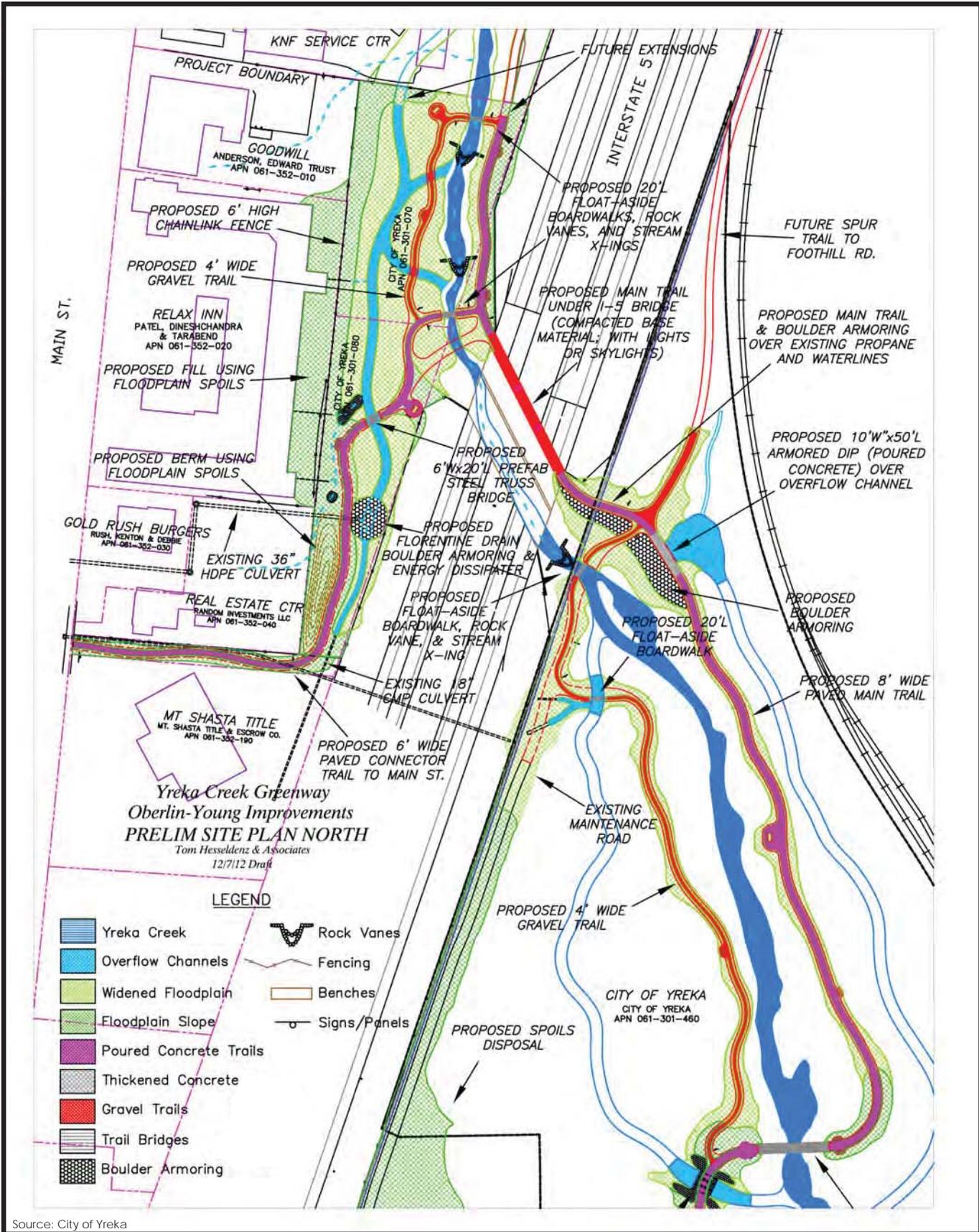


Figure 3.0-2a
Site Plan
PMC

3.0 PROJECT DESCRIPTION

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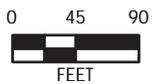
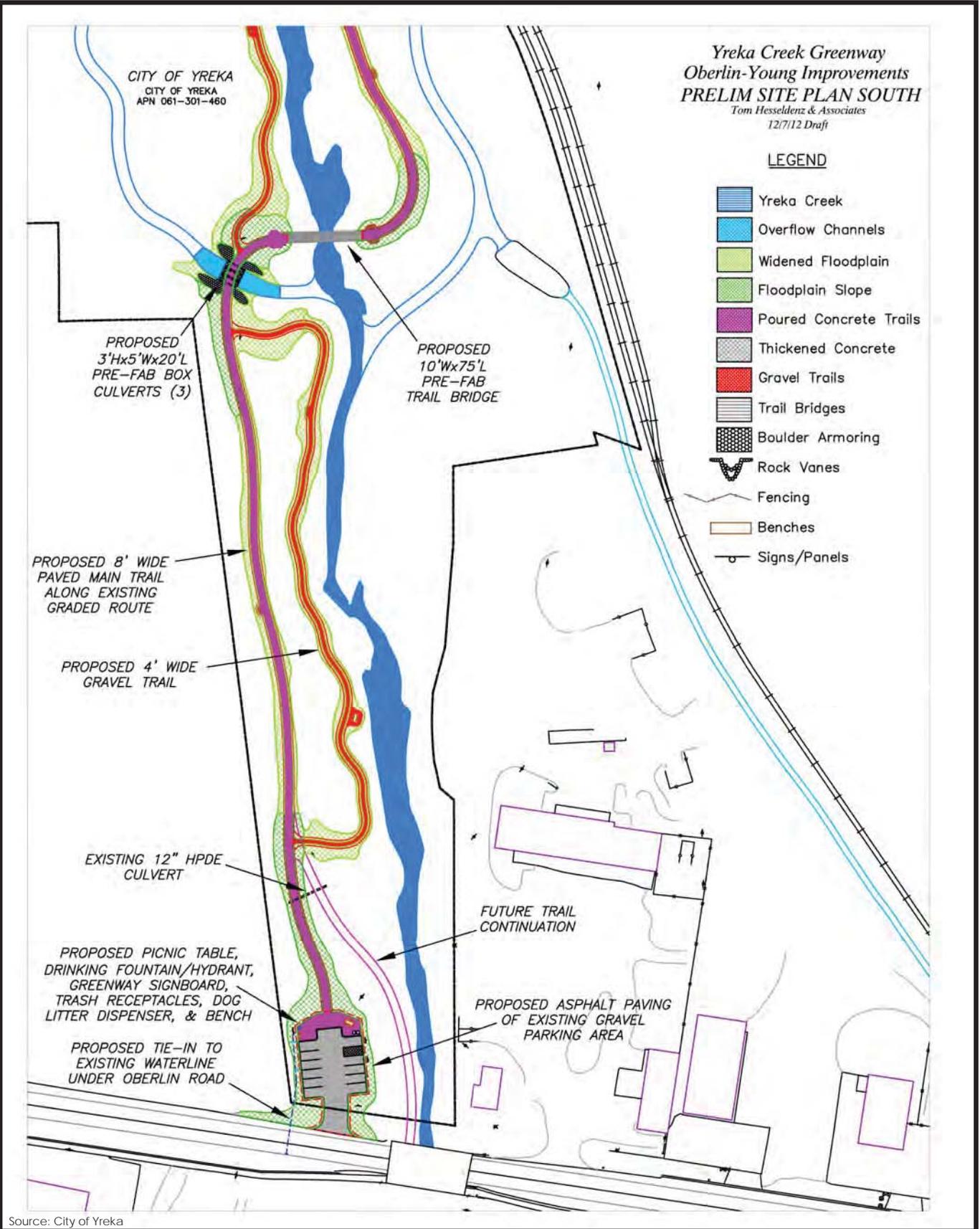


Figure 3.0-2b
Site Plan

3.0 PROJECT DESCRIPTION

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4.0 ENVIRONMENTAL CHECKLIST

4.0 ENVIRONMENTAL CHECKLIST

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

SETTING

The City of Yreka is located in an area considered to have high scenic value, lying in a valley surrounded by mountains in the Klamath National Forest on the north and west, Shasta Valley to the east, and the Kilgore Hills to the southeast. Nearby mountains rise 300 to 4,000 feet above the city and provide an attractive backdrop. Some areas of the city have longer views to the Siskiyou and Cascade ranges to the north and east, with Mt. Shasta as the prominent feature to the southeast. Mt. Shasta is a dormant volcano 14,179 feet in elevation. The near mountain ranges are covered with pine forests and oak. Winter brings snows to the higher elevations, while spring brings green hills and the fresh foliage of deciduous trees. Fall color in the oaks brings a bright gold, which contrasts with the green of pines. These views are readily seen from most residential areas and are visible from major highways traversing the city (i.e., Interstate 5, State Route 3, and State Route 263).

Although there are no state scenic highways nearby, the portion of Interstate 5 in the vicinity of the city has been designated as part of the Volcanic Legacy Scenic Byway All-American Road. This nationally recognized scenic route extends from Crater Lake in Oregon to Mount Lassen in California (Caltrans 2012).

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.* The project will be located along Yreka Creek in the central portion of the city. Temporarily, scenic vistas associated with Yreka Creek may be impacted by the project. Construction activities will include trail surfacing, bridge/picnic area installation and floodplain restoration activities, and the use of equipment and trucks to transport materials to and from the project site. The majority of project work will occur along Yreka Creek, north of Oberlin Road, an area that is currently adjacent to commercial and industrial uses, such as a veterinary office, metal fabricator, auto repair, locksmith, and a temporary concrete batch plant. One of the project's primary objectives is to provide public multipurpose access trails and bridges necessary to support access and enjoyment of Yreka Creek's scenic resources: its waters, the project area's recently restored riparian floodplain, wildlife viewing, and its scenic vistas outward to surrounding mountains. All facilities and restoration will be located and designed to blend with and complement the Greenway's

natural features and not interrupt scenic vistas in the community. Ongoing riparian revegetation activities, along with continuing establishment of recently planted native species, will result in increased scenic attractiveness over time. The project may have temporary, minor adverse effects on scenic resources adjacent to Yreka Creek during construction, but these improvements will contribute to the aesthetic value of Yreka Creek in the long term.

- b) *Less Than Significant Impact*. The project would include some vegetation removal and pruning activity along Yreka Creek and the adjacent upland area. The majority of the vegetation removal or thinning will occur west of Interstate 5 since the trailhead area and most of the proposed trail and bridge settings have already been cleared, graded, mulched, and seeded with native annual forbs. Existing mature riparian vegetation will be retained and enhanced in an effort to create a healthy riparian ecosystem and multi-use recreation area. Additionally, the limited removal and pruning of vegetation on the site will enhance the public viewshed, add to the scenic value of the site and allow for enhanced visual access for public safety and enjoyment of the project area. Although construction activities may temporarily affect views from Interstate 5, once completed, proposed improvements would be compatible with the existing environment and would enhance the overall aesthetic value of the area.
- c) *Less Than Significant Impact*. See Impacts 4.1(a) and 4.1(b) above. While there would be temporary visual impacts associated with construction of proposed improvements on the project site, those same improvements, when completed, would enhance the visual character of the project area.
- d) *No Impact*. No project components would generate new sources of light or glare. Further, because construction activities would occur between the hours of 7 a.m. and 7 p.m., temporary lighting would only be necessary in the event of an unforeseen emergency condition.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>4.2 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:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The project is located entirely within the City of Yreka. While there is some agricultural activity, such as grazing and hay production, located along the periphery of the City, there are no commercial agricultural operations within or adjacent to the project area and the site has not been used for commercial grazing activities in the last 50 years. The eastern portion of the project site is highly disturbed due to previous industrial land use activities and the western portion of the site is disturbed in various locations due to illegal occupation by transient occupants.

Although a portion of the site is designated as Grazing Land by the California Department of Conservation (2008) due to its ability to support grazing, no grazing activity occurs on the project site. Further, there are no Williamson Act or Timber Preserve contracted lands within or adjacent to the project site, and the site has been zoned Industrial (I) and Open Space (O) by the City.

DISCUSSION OF IMPACTS

- a) *No Impact.* As identified on the 2008 Siskiyou County Important Farmland Map published by the California Department of Conservation's Farmland Mapping and Monitoring Program, none of the land within the project area is considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.
- b) *No Impact.* There are no project components located on lands with a Williamson Act contract or adjacent to lands zoned for agricultural use.
- c) *No Impact.* The project site does not contain any forest resources, nor is it zoned for forest use.
- d) *No Impact.* See Impact 4.2(c) above. The project site does not contain any forest resources, nor is it zoned for forest use.
- e) *No Impact.* The project site is not used for agricultural or timber production purposes. Further, the site is not zoned for either of these uses and is not located adjacent to any other parcels with an agricultural zoning designation or forestlands.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.3 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

The City of Yreka is located in a region identified as the Northeast Plateau Air Basin (NEPAB), which principally includes Siskiyou, Modoc, and Lassen counties. This larger air basin is divided into local air districts, which are charged with the responsibility of implementing air quality programs. The local air quality agency affecting Yreka is the Siskiyou County Air Pollution Control District (SCAPCD). Within the SCAPCD, the primary sources of air pollution are wood-burning stoves, wildfires, farming operations, unpaved road dust, managed burning and disposal, and motor vehicles.

As noted above, the SCAPCD is the local air quality agency with jurisdiction over the project site. The SCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates agricultural and nonagricultural burning. Other district responsibilities include monitoring air quality, preparing air quality plans, and responding to citizen air quality complaints.

AMBIENT AIR QUALITY STANDARDS

Air quality standards are set at both the federal and state levels of government (**Table 4.3-1**). The federal Clean Air Act requires the Environmental Protection Agency (EPA) to establish ambient air quality standards for six criteria air pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and suspended particulate matter. The California Clean Air Act also sets ambient air quality standards. The state standards are more stringent than the federal standards, and they include other pollutants as well as those regulated by the federal standards. When the concentrations of pollutants are below the allowed standards within an area, that area is

considered to be in attainment of the standards. The City of Yreka has been designated as an attainment area for the constituent elements described below.

**TABLE 4.3-1
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	Federal Primary ¹	Federal Secondary ¹	California ²
Ozone	8 Hour	0.075 ppm	0.075 ppm	0.07 ppm
	1 Hour	0.12 ppm	0.12 ppm	0.09 ppm
Carbon Monoxide	8 Hour	9 ppm	--	9 ppm
	1 Hour	35 ppm	--	20 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.053 ppm	--
	1 Hour	--	--	0.25 ppm
Sulfur Dioxide	Annual	0.03 ppm	--	--
	24 Hour	0.14 ppm	--	0.04 ppm
	3 Hour	--	0.5 ppm	--
	1 Hour	--	--	0.25 ppm
Fine Suspended Particulate Matter (PM _{2.5})	Annual	15.0 µg/m ³	15.0 µg/m ³	12 µg/m ³
	24 Hour	35.0 µg/m ³	35.0 µg/m ³	--
Suspended Particulate Matter (PM ₁₀)	Annual	--	--	30 µg/m ³
	24 Hour	150 µg/m ³	150 µg/m ³	50 µg/m ³
Sulfates	24 Hour	--	--	25 µg/m ³
Lead	30 Day Calendar Qtr	-- 1.5 µg/m ³	-- 1.5 µg/m ³	1.5 µg/m ³ --
Hydrogen Sulfide	1 Hour	--	--	0.03 ppm
Vinyl Chloride	24 Hour	--	--	0.01 ppm
Visibility-Reducing Particles	8 Hour (10 am - 6 pm PST)	--	--	(³)

Source: CARB 2012a

¹ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public.

National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.

² California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter - PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

³ Extinction coefficient of 0.23 per kilometer - visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.

Air Quality Monitoring

Ozone (hourly and 8-hour average) is the only contaminant that receives continuous monitoring in Siskiyou County, while suspended particulate matter (PM_{2.5} and PM₁₀) are monitored every six days.

The closest air quality monitoring station is located along Foothill Drive in Yreka, approximately 2,300 feet north of the project site. This station monitors particulate matter (PM₁₀ and PM_{2.5}) and

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ozone (hourly and 8-hour averages). **Table 4.3-2** shows particulate matter and ozone data from monitoring efforts over the past three years from the Foothill Drive station.

**TABLE 4.3-2
SISKIYOU COUNTY AIR QUALITY DATA**

Pollutant	Standard	Year		
		2009	2010	2011
<i>Ozone (O₃)</i>				
Maximum 1-Hour Concentration (ppm)		0.076	0.070	0.069
Maximum 8-Hour Concentration (ppm)		0.063	0.067	0.061
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	0	0	0
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	0	0	0
Number of Days Exceeding Federal 8-Hour Standard	> 0.08 ppm	0	0	0
<i>Inhalable Particulates (PM₁₀)</i>				
Maximum 24-Hour Concentration (µg/m ³)		33.4	25.2	28.7
Estimated No. of Days Exceeding State Standard	> 50 µg/m ³	0	0	0
Estimated No. of Days Exceeding Federal Standard	> 150 µg/m ³	0	0	0
<i>Ultra-Fine Particulates (PM_{2.5})</i>				
Maximum 24-Hour Concentration (µg/m ³)		16.5	17.0	15.8
Estimated No. of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	0	0	0

Source: CARB 2012b

Monitored Air Pollutants

Ozone is a gas comprising three oxygen atoms. It occurs both in the earth's upper atmosphere and at ground level. Ozone can be either beneficial or detrimental to human health, depending on its concentration and where it is located. Beneficial ozone occurs naturally in the earth's upper atmosphere, where it acts to filter out the sun's harmful ultraviolet rays. Bad ozone occurs at ground level and is created when cars, industry, and other sources emit pollutants that react chemically in the presence of sunlight. Ozone exposure can result in irritation of the respiratory system, decreased lung function, aggravated asthma, and possible lung damage with persistent exposure.

PM₁₀ (i.e., suspended particulate matter less than 10 microns) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited.

PM_{2.5} (i.e., suspended particulate matter less than 2.5 microns) is similar to PM₁₀ in that it is an air contaminant that consists of tiny solid or liquid particles, though in this case the particles are about 0.0001 inches or smaller (often referred to as fine particles). PM_{2.5} is typically formed in the atmosphere from primary gaseous emissions that include sulfates emitted by power plants and

industrial facilities and nitrates emitted by power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions.

Inhalation of PM_{2.5} and PM₁₀ can cause persistent coughing, phlegm, wheezing, and other physical discomfort. Long-term exposure may increase the rate of respiratory and cardiovascular illness.

As shown in **Table 4.3-2** above, neither the City of Yreka nor Siskiyou County have been identified as having significant air quality problems and are considered to be in attainment or unclassified for federal and state air quality standards. As a result, Siskiyou County is not subject to an air quality attainment or maintenance plan.

DISCUSSION OF IMPACTS

- a) *No Impact*. The project site lies within the boundaries of the Northeast Plateau Air Basin. While the other counties in the NEPAB are identified as currently being in nonattainment for exceeding state criteria pollutant levels for PM₁₀, Siskiyou County and the City of Yreka are identified as being in attainment or unclassified for all federal and state air quality standards. As such, it is not subject to an air quality plan.
- b) *Less Than Significant With Mitigation Incorporated*. As noted above, Siskiyou County and the City of Yreka are in attainment or unclassified for federal and state air quality standards. While some particulate matter (i.e., dust) may be generated as a result of construction activities, implementation of mitigation measure **MM 4.3.1** addressing construction-related dust control measures would reduce this impact to a level that is considered less than significant.

In terms of operational air pollutant emissions, the project would not include the provision of new permanent stationary or mobile sources of emissions; therefore, by the very nature of the project, it will not generate quantifiable criteria emissions from operations. While the proposed project would require ongoing maintenance, which would contribute emissions primarily through the transport of City maintenance workers, it is not anticipated that ongoing maintenance of the improvements proposed by the project would result in a substantial increase of criteria pollutant emissions. Furthermore, the City already employs maintenance staff for existing maintenance needs.

- c) *No Impact*. Because Siskiyou County is in attainment or is identified as unclassified for all monitored air quality standards, and because of the relatively limited scale and duration of the project, no net increase of criteria pollutants will result from the project.
- d) *Less Than Significant Impact*. Sensitive receptors are generally defined as facilities that house or attract groups of children, the elderly, persons with illnesses, and others who are especially sensitive to the effects of air pollutants. Schools, hospitals, residential areas, and senior care facilities are examples of sensitive receptors. Being located adjacent to commercial and industrial development, the project site is not located in the vicinity of known sensitive receptors. The nearest quasi-residential use is the Relax Inn motel located adjacent to the project site along South Main Street. While the project may result in minor dust and diesel emissions in the vicinity of the motel during construction activities, as noted in Response 4.3(b) above, implementation of mitigation measure **MM 4.3.1** would reduce the project's particulate matter emissions to a negligible level, considered less than significant.

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- e) *Less Than Significant Impact*. Offensive odors rarely cause any physical harm; however, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Odor impacts on residential areas and other sensitive receptors, such as daycare centers and schools, are of particular concern. Major sources of odor-related complaints by the general public commonly include wastewater treatment facilities, landfill disposal facilities, food processing facilities, agricultural activities, and various industrial activities (e.g., petroleum refineries, chemical and fiberglass manufacturing, painting/coating operations, feed lots/dairies, composting facilities, landfills, and transfer stations).

The project may result in temporary and localized odors associated with the use of diesel-powered equipment. However, any such odors would be temporary, are will not be in concentrations high enough to affect nearby land uses, and would completely cease upon completion of construction activities.

MITIGATION MEASURES

MM 4.3.1 The following dust control measures shall be incorporated into the project to reduce short-term emissions resulting from construction. Depending on weather and site conditions, measures shall include, but are not limited to, the following:

- 1) Regular watering shall be used to control dust generation as described below.
- 2) When transporting soil and other dust-generating materials by truck during construction activities, 2 feet of freeboard shall be maintained and/or materials shall be covered.
- 3) Paved streets adjacent to construction sites shall be washed or wet-swept daily as necessary to remove accumulated dust.
- 4) During earth-moving operations, conduct watering as necessary to prevent visible emissions from extending beyond active areas.
- 5) Water all unpaved roads used for any vehicular traffic at least once per every two hours of active operations and restrict vehicle speed on unpaved roads to 15 miles per hour (mph), or as appropriate to reduce dust.
- 6) Pave, maintain a wet surface or apply dust suppressants on all unpaved access roads, parking areas and staging areas.
- 7) Land clearing, grading, earth-moving, or excavation activities shall be suspended when winds exceed 20 miles per hour.
- 8) Cover inactive storage piles of topsoil or landscape materials.
- 9) Post a publicly visible sign with the number and person to contact regarding dust complaints. This person shall have the authority and responsibility to respond and take corrective action within 24 hours.
- 10) No temporary asphalt or concrete batch plants will be allowed to operate on site.

- 11) Construction staging areas should be located at a distance that would reduce odors and dust emissions from existing schools and residential areas.

Timing/Implementation: Prior to and during construction

Enforcement/Monitoring: City of Yreka Public Works Department; Siskiyou County Air Pollution Control District

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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.4 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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

A PMC Biologist undertook two steps to characterize the environmental setting on and adjacent to the project. First, preliminary database searches were performed to identify special-status species with the potential to occur in the area. Second, a pedestrian survey was conducted on September 14, 2012 to collect site specific data regarding habitat suitability for special-status species, as well as the identification of potentially jurisdictional waters.

Database searches were performed on the following websites:

- US Fish and Wildlife Service's Arcata Office Species Lists (Service 2012a);
- US Fish and Wildlife Service's Critical Habitat Portal (Service 2012b)

- California Natural Diversity Database (CNDDDB) (DFG 2012); and
- California Native Plant Society’s Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2012).

A search of the Services’ database was performed for the *Yreka, California* USGS 7.5-minute quadrangle to identify special-species within their jurisdiction that may be affected by the proposed project. In addition, a query of the Service’s Critical Habitat Portal was conducted to identify potential critical habitat designations within the vicinity of the project. A query of the CNDDDB database provided a list of known occurrences for special-status species within a one (1) and five (5) mile radius of the proposed project (**Figure 4.4.1**). Lastly, the CNPS database was queried to identify special-status plant species with the potential to occur within the *Yreka, California* USGS 7.5 minute quadrangle.

The site review conducted on September 14, 2012, revealed two land cover/habitat types within the proposed project: urban/ruderal and montane riparian (**Table 4.4-1, Figure 4.4.2**). The urban land cover type is distinguished by the presence of both native and exotic species maintained in a relatively static composition within a downtown, residential, or suburban setting. Species richness in these areas depends greatly upon community design (e.g., open space considerations) and proximity to the natural environment. Typical vegetation in these areas consists primarily of introduced ornamental trees and shrubs and manicured lawns, as well as invasive weeds in disturbed areas. The onsite urban/ruderal land cover type includes ruderal or disturbed habitat adjacent to commercial development. Ruderal land cover types occur in areas of disturbances such as along roadsides, trails, parking lots, etc; and are subjected to ongoing or past disturbances (e.g., vehicle activities, mountain bikes, mowing). Ruderal land cover types are characterized by weedy flora including Johnson grass (*Sorghum halepense*), Canadian horseweed (*Conyza canadensis*), milk thistle (*Silybum marianum*), star thistle (*Centaurea solstitialis*), Mediterranean hoary-mustard (*Hirschfeldia incana*), curly dock (*Rumex crispus*), and mustards (*Brassica* spp.). Species observed within the PSA include star thistle, cutleaf geranium (*Geranium dissectum*), crane’s bill geranium (*Geranium molle*), bottlebrush (*Elymus elymoides*), horehound (*Marrubium vulgare*), wild oat (*Avena* sp.), Russian thistle (*Salsola tragus*), mustard, field hedge parsley, and blue wild rye.

The onsite montane riparian community occurs as an open to dense stand of broadleaved deciduous trees interspersed with shorter shrubs along Yreka Creek. Canopy species included willow (*Salix* spp.), Oregon ash (*Fraxinus latifolia*), white alder (*Alnus rhombifolia*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), and Fremont cottonwood (*P. fremontii*). Understory species included rose (*Rosa* spp.), American dogwood (*Cornus sericea*), western choke-cherry (*Prunus virginiana* var. *demissa*), poison hemlock (*Conium maculatum*), and Himalayan blackberry (*Rubus discolor*). A variety of herbaceous species were also identified including wild teasel (*Dipsacus fullonum*), field hedge parsley (*Torilis arvensis*), and blue wild rye (*Elymus glaucus* ssp. *glaucus*).

**TABLE 4.4-1
EXISTING LAND COVER CLASSIFICATIONS**

Land Use	Acreage
Urban/Ruderal	17.48
Montane Riparian	2.71
Total	20.19

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SPECIAL STATUS SPECIES

Candidate, sensitive, or special status species are commonly characterized as species that are at potential risk; or actual risk to their persistence in a given area, or across their native habitat. These species have been identified and assigned a status ranking by governmental agencies such as DFG, the Service, and private organizations such as CNPS. The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species' or population's persistence include habitat loss, degradation, and fragmentation; as well as human conflict, and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under FESA (50 CFR §17.11 – listed; 61 Federal Register (FR) §7591, February 28, 1996 candidates);
2. Listed or proposed for listing under the CESA (FGC 1992 §2050 et seq.; 14 California Code of Regulations (CCR) §670.1 et seq.);
3. Designated as Species of Special Concern by the DFG;
4. Designated as Fully Protected by the DFG (FGC §§3511, 4700, 5050, 5515); and
5. Species that meet the definition of rare or endangered under the CEQA (14 CCR §15380), including CNPS List 1 and 2.

The result of the Service, CNDDDB, and CNPS database queries identified several special-status species with the potential to be impacted by the proposed project. **Table 4.4-2**, below provides a summary of all species identified in the search results, a description of the habitat requirements for each species, as well as conclusions regarding the potential for each species to be impacted by the proposed project.

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TABLE 4.4-2
SPECIAL STATUS SPECIES OCCURRENCES

Common Name	Scientific Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	Potential to be affected by the Project
Plants						
alkali hymenoxys	<i>Hymenoxys lemmonii</i>	-	-	2.2	Great Basin scrub, lower montane coniferous forest, meadows and seeps (subalkaline) (CNPS 2012).	No impact. All of the onsite uplands have been disturbed in association with previously approved projects, or urban encroachment. Due to the altered nature of the site, and the lack of suitable habitats for these species, it is unlikely the proposed project will result in impacts to special-status plants.
blushing wild buckwheat	<i>Eriogonum ursinum</i> var. <i>erubescens</i>	-	-	1B.3	Rocky, scree, talus soils in montane chaparral, and lower montane coniferous forest (CNPS 2012).	
Oregon polemonium	<i>Polemonium carneum</i>	-	-	2.2	Coastal prairie, coastal scrub, and lower montane coniferous forest (CNPS 2012).	
Peck's lomatium	<i>Lomatium peckianum</i>	-	-	2.2	Volcanic soils in chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland (CNPS 2012).	
pendulous bulrush	<i>Scirpus pendulus</i>	-	-	2.2	Mesic meadows and seeps, freshwater marshes and swamps (CNPS 2012).	
Scott Mountain bedstraw	<i>Galium serpyllifolium</i> ssp. <i>scotticum</i>	-	-	1B.2	Lower montane coniferous forest with serpentine soils (CNPS 2012).	
Scott Valley phacelia	<i>Phacelia greenei</i>	-	-	1B.2	Serpentine soils in closed-cone coniferous forest, lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest (CNPS 2012).	
Shasta orthocarpus	<i>Orthocarpus pachystachyus</i>	-	-	1B.1	Great Basin scrub, meadows and seeps, valley and foothill grassland (CNPS 2012).	
single-flowered mariposa-lily	<i>Calochortus monanthus</i>	-	-	1A	Meadows and seeps (CNPS 2012).	
Siskiyou mariposa-lily	<i>Calochortus persistens</i>	C	R	1B.2	Rocky, acidic soils in lower montane coniferous forest, and North Coast coniferous forest (CNPS 2012).	
woolly balsamroot	<i>Balsamorhiza lanata</i>	-	-	1B.2	Rocky, volcanic soils in cismontane woodlands (CNPS 2012).	

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Common Name	Scientific Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	Potential to be affected by the Project
Yreka phlox	<i>Phlox hirsuta</i>	E	E	1B.2	Serpentine and talus soils in lower montane and upper montane coniferous forests (CNPS 2012).	
Invertebrates						
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	-		Vernal pools, vernal pool like habitat (Service 2005).	No impact. Onsite riparian habitat not suitable for this species.
Fish						
coho salmon	<i>Oncorhynchus kisutch</i>	T	T		Streams and small freshwater tributaries with stable gravel substrates (NMFS 2012).	Less than significant with mitigation incorporated. The onsite portions of Yreka Creek provide suitable spawning/rearing habitat for this species.
Reptiles						
western pond turtle	<i>Emys marmorata</i>	-	SSC		Ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. Logs, rocks, cattail mats, and exposed banks are required for basking (Nafis 2012).	Less than significant with mitigation incorporated. The onsite portions of Yreka Creek provide suitable habitat for this species.
Avifauna						
northern goshawk	<i>Accipiter gentilis</i>	-	SSC		Various forest types, with preference for mature stands (Cornell 2012).	Less than significant with mitigation incorporated. The onsite riparian habitat may provide suitable habitat for this species.
Western yellow-billed cuckoo	<i>Coccyzus americanus</i>	C	E		Open woodlands with clearings and dense scrubby vegetation, often along water (Cornell 2012). Current breeding distribution includes the Sacramento River and South Fork Kern River; other potential breeding sites include Feather River, Prado Flood Control Basin, Armagosa River, Santa Clara River, Mojave River, and Colorado River (Laymon 1998).	No impact. Project not within current breeding distribution.

4.0 ENVIRONMENTAL CHECKLIST

Common Name	Scientific Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	Potential to be affected by the Project
northern spotted owl	<i>Strix occidentalis caurina</i>	T	-		Mature, old-growth coniferous and mixed evergreen forests with high canopy closure (Service 2012).	No impact. The onsite montane riparian habitat does not meet the nesting, roosting, or foraging requirements of this species due to species composition, size, and riparian corridor may provide suitable dispersal habitat; however, impacts to canopy species within the riparian corridor will be deminimis.
Mammals						
Pacific fisher	<i>Martes pennanti (pacifica)</i> DPS	C	-		Late-successional forest habitats with dense canopy closure, large diameter trees, snags with cavities and other deformities, large diameter down wood, multiple canopy layers (Service 2012c).	No impact. The onsite montane riparian habitat may provide suitable dispersal habitat; however, impacts to the riparian corridor will be deminimis.

Key	
Federal & State Status	
(E) Endangered	
(I) Threatened	
(SSC) Species of special concern.	
(C) Candidate for listing	
(R) Rare	
CNPS Rare Plant Rank	
Rareness Ranks	
(1A) Presumed Extinct in California	
(1B) Rare, Threatened, or Endangered in California and Elsewhere	
(2) Rare, Threatened, or Endangered in California. But More Common Elsewhere	
Threat Ranks	
(0.1) Seriously Threatened in California	
(0.2) Fairly threatened in California	

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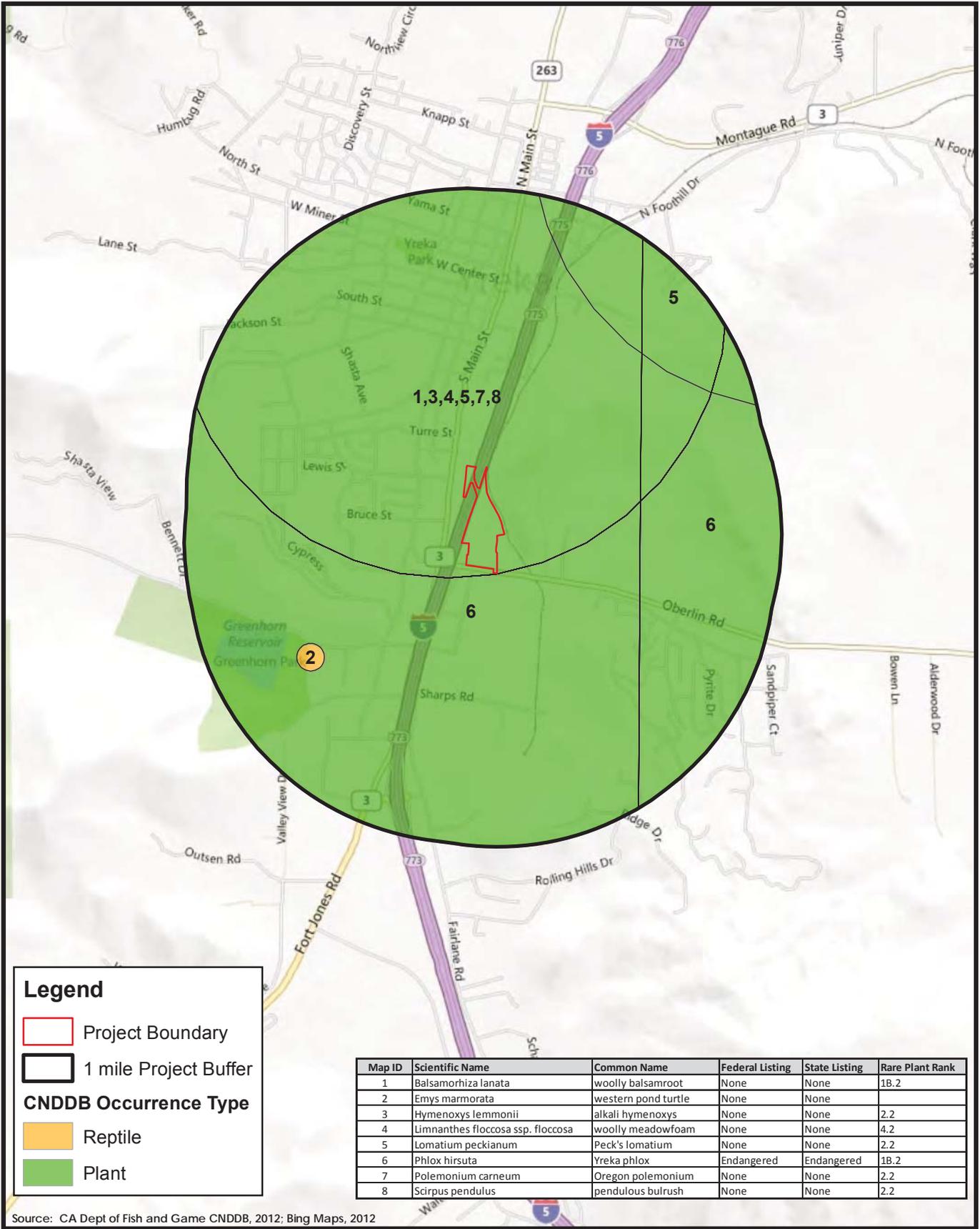


Figure 4.4-1
Previously Recorded Occurrences of Special-Status Species within One-mile of the Project Study Area

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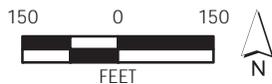
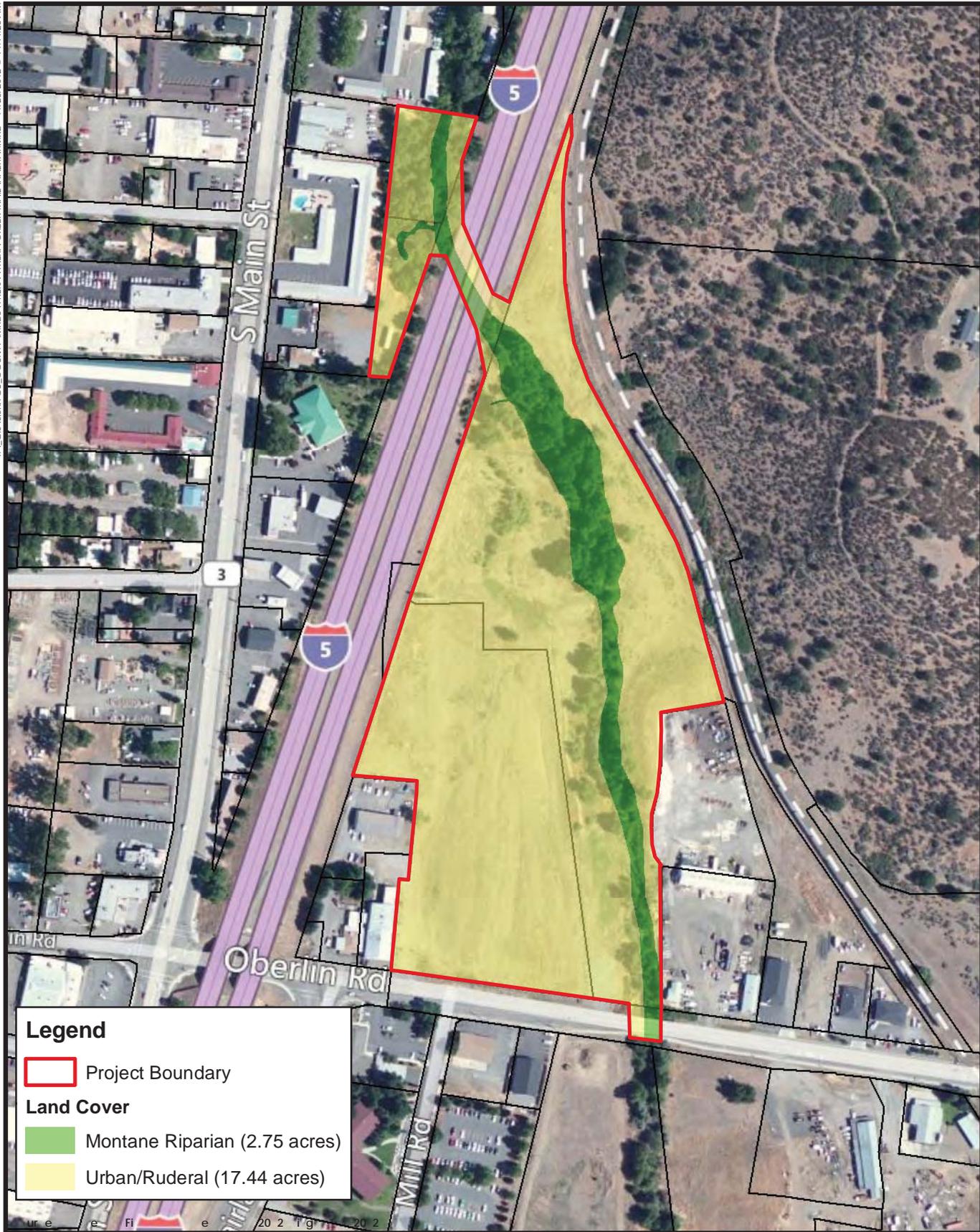


Figure . -2
Existing Land Cover Map

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4.0 ENVIRONMENTAL CHECKLIST

DISCUSSION OF IMPACTS:

a) *Less Than Significant with Mitigation Incorporated.*

Plants: No impacts to special-status plant species are likely to occur as a result of the proposed project, due to a lack of suitable habitat. No mitigation is proposed.

Invertebrates: No impacts to special-status invertebrates are likely to occur as a result of the proposed project. The flashy, perennial hydroperiod of the onsite creek and the lack of pooling/ponding preclude this system from providing habitat suitable for a viable population of vernal pool crustaceans. Therefore, no impacts to this species would occur as a result of the proposed project.

Fish: Yreka Creek contains a key population of coho salmon that is part of the Shasta Valley coho salmon recovery unit (DFG 2002). As part of the Coho Salmon Recovery Strategy, Yreka Creek is considered a key population to maintain or improve (DFG 2004). Coho are known to spawn in the lower three miles of Yreka Creek, and utilize gravel areas similar to those used by steelhead. Yreka Creek is also designated critical habitat for the Southern Oregon/Northern California Coast Coho Salmon Evolutionarily Significant Unit (ESU) (NMFS 1999).

Restoration activities proposed within Yreka Creek could potentially result in adverse impacts to coho salmon. The majority of these impacts are considered temporary impacts; however, they would be considered potentially significant. Implementation of proposed mitigation measures **MM 4.4.1** and **MM 4.4.2** as well as close consultation with the National Marine Fisheries Service (NMFS) throughout project would reduce impacts to this species to a less than significant level. Work areas within the creek and sensitive habitats have been reduced to the greatest extent feasible, and staging areas have been planned to be located in areas that would reduce the impact area and chance of potential pollution affecting coho salmon habitat. In addition, restoration of the Yreka Creek streambed to natural conditions would provide safe year-round passage for coho salmon and other wildlife, creating a positive project impact to coho salmon and its habitat.

The applicant has been and is currently consulting with NMFS regarding potential impacts to coho salmon. Implementation of mitigation measures **MM 4.4.1** and **MM 4.4.2** identified below would assist in reducing potential adverse impacts to a less than significant level.

Reptiles: The CNDDDB database query identified the presence of western pond turtle within five miles of the project. DFG's California Wildlife Habitat Relationships System describes the specific habitat requirements for this species as including "permanent ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams" (Zeiner 1988-1990). Implementation of the proposed project may impact habitat and/or result in the take of individuals should they be present. However, implementation of the proposed project is not expected to reduce the populations of these wildlife species below self-sustaining levels within the region. Mitigation measures **MM 4.4.1** and **MM 4.4.3** are recommended to ensure no impacts to this species occur as a result of the proposed project.

Avifauna: Three special-status avian species were identified as having the potential to occur within the project vicinity. However, no suitable habitat occurs onsite for the northern spotted owl, and the project is not within the known distribution of the western yellow-billed cuckoo. The project may support nesting and/or foraging for the northern goshawk, raptors and birds protected under the Migratory Bird and Treaty Act (MBTA), as

well FGC §3503.5 and 3800-3806. However, impacts to migratory birds and raptors would be less than significant with the mitigation measures **MM 4.4.4** and **MM 4.4.5** incorporated.

Mammals: The Service's database query revealed the potential for the Pacific fisher to occur in the project vicinity. No suitable habitat for this species occurs onsite; therefore, no impact to this species would occur as a result of the proposed project.

- b) *Less Than Significant with Mitigation Incorporated*. Sensitive habitats include those that are of special concern to resource agencies and those that are protected under the CEQA, Section 1600 of the FGC, and Section 404 of the Clean Water Act (CWA). Implementation of the proposed project could result in disturbance and degradation of riparian habitat identified in local or regional plans, policies, or regulations, or by the DFG or the Service. This impact is considered potentially significant.

Project activities may result in the loss of riparian habitat from proposed vegetation disturbance or removal. A 1602 Streambed Alteration Agreement for removal of or disturbance to riparian habitat and waters of the State (e.g., stream, lake, or river) from the CDFG may be required for the proposed project. This agreement would include measures to minimize and restore riparian habitat. Implementation of mitigation measure **MM 4.4.6**, described below, would ensure that impacts to riparian communities would be less than significant.

- c) *Less Than Significant with Mitigation Incorporated*. Implementation of the proposed project could result in the loss of jurisdictional waters of the State and United States (US), which would be considered potentially significant.

Jurisdictional delineations for the project area have been previously reviewed by the Corps under two (2) previous project. The larger portion of the project, located east of I-5, was previously reviewed and verified under Corps file number 2007-400463, in association with floodplain restoration activities conducted on this segment of Yreka Creek. The smaller portion of the project, located west of I-5, was also reviewed by the Corps in 2009 in association with a storm drain installation/construction project. An updated jurisdictional delineation has been prepared and submitted to the Corps for verification that combines these two (2) previous delineations into one (1) cohesive jurisdictional boundary (see **Appendix A**). This updated delineation has not been verified by any state or federal agencies. However, the onsite water feature is presumed to be jurisdictional to the Army Corps of Engineers, Regional Water Quality Control Board (WQB), and DFG. Authorization to place fill within the onsite jurisdictional feature may be required by the Army Corps of Engineers, through the CWA §404 permitting process prior to project implementation. If a CWA §404 permit were to be required, a CWA §401 permit would be also required from the WQB. If it is determined that the onsite jurisdictional feature qualifies as waters of the State, and would be affected by the proposed project, the applicant would be required to obtain authorizations from the WQB and DFG to fill/disturb these features prior to project implementation. Furthermore, construction related impacts to water quality would be mitigated through the implementation of Best Management Practices (BMP's).

Implementation of mitigation measure **MM 4.4.7**, described below, would reduce impacts to waters of the State and US to a less than significant level.

- d) *Less Than Significant with Mitigation Incorporated*. Implementation of the proposed project could interfere substantially with the movement of native resident or migratory fish or wildlife species. Yreka Creek provides a wildlife movement corridor for migrations, foraging, and

4.0 ENVIRONMENTAL CHECKLIST

movement. However, implementation of mitigation measures **MM 4.4.6** and **MM 4.4.7** address the potential impacts to the creek and riparian areas, thereby reducing impacts to wildlife movements and migratory corridors to a less than significant level.

- e) *No Impact*. There are currently no adopted or proposed local policies or ordinances that affect the proposed project. Therefore, the no conflict with occur, and no mitigation is proposed.
- f) *No Impact*. There are currently no adopted or proposed Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that affect the proposed project. Therefore, the no conflict with occur, and no mitigation is proposed.

MITIGATION MEASURES

MM 4.4.1 Worker Environmental Awareness Training. Before the start of construction activities the project proponent will retain a qualified professional to conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the identified locations of sensitive biological resources, including how to identify species (visual and auditory) most likely to be present, the need to avoid impacts to biological resources (e.g., special-status wildlife and jurisdictional waters), and to brief them on the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor will ensure that they receive the mandatory training before starting work.

Timing/Implementation: Prior to construction activities

Enforcement/Monitoring: City of Yreka Public Works Department

MM 4.4.2 Coho Salmon Avoidance. NMFS shall be notified of the work timetable, including start dates and expected completion dates for the project at least one week in advance of the start of restoration work within and adjacent to Yreka Creek. NMFS representatives may show up to inspect the work site and to assist with avoidance measures, if deemed necessary.

- To the greatest extent feasible, work within the creek will be conducted during the summer and fall "dry season" when water flow is at its lowest. The restoration associated with Yreka Creek will be scheduled during the time of historic low flows and 7-day clear weather forecast to avoid wet weather that may increase the likelihood of runoff into the creek.
- In the event that work is conducted during periods when coho salmon are known to be and/or determined to be present in the creek, a fish survey shall be conducted by a qualified professional prior to the start of any in-stream construction activity. The survey shall include the project area, and 100 feet upstream and downstream of the project area boundaries. If coho salmon are found in or near the project, NMFS shall be contacted immediately before proceeding with any work. The NMFS representative shall provide guidance with appropriate removal or avoidance measures (i.e. "herding" of fish) to provide for the continuation of construction.

- If coho salmon are stuck in pools in or near the project and need to be physically relocated, all work in the creek shall cease and NMFS shall be contacted immediately to determine how to appropriately remove the fish. Capturing and physically relocating fish by hand is considered an adverse effect and is prohibited without an incidental take permit authorized in a formal Biological Opinion (BO) from NMFS.
- If work is conducted in flowing or standing water, prior to the start of construction the water flow through the creek shall be analyzed to determine whether a water diversion would be necessary. If a water diversion is necessary to prevent working in flowing or standing water, a water diversion plan shall be created in consultation with NMFS. Restoration of a channel made for water diversion would either be allowed to occur naturally or as recommended by regulatory agencies.
- If a water diversion is not necessary, but there is flowing or standing water within the creek, block nets shall be placed upstream and downstream of the work area after fish surveys are performed and fish are removed from the area if present. If block nets are needed, this may temporarily impede the movement and migration of coho salmon within the creek should they be present. The type and location of block netting shall be in consultation with NMFS. The block netting shall be removed when project work is completed.
- If a temporary channel crossing(s) are necessary, the City and their contractor shall work closely with NMFS to design the crossing/crossings that utilize gravels appropriate to be utilized as spawning gravels and to ensure minimal impact to coho salmon. Stream gravel used for the temporary crossing over Yreka Creek shall consist of clean washed material ranging from ¼ inch to 2 inches in size, rounded, evenly graded from small to large, and thoroughly mixed. Gravel shall be completely free of dirt, silt, sand, oils, clay, debris, and organic material. Gravel must be washed at least once and have a cleanliness value of 90 or higher based on California Department of Transportation (CalTrans) Test #227. Crushed material shall not be used. Stream cobble and gravel used for channel and swale armoring shall consist of material ranging from ¼ inch to 6 inches in size, rounded, evenly graded from small to large, and thoroughly mixed.
- Since downstream sedimentation and turbidity is harmful to aquatic life, a Storm Water Pollution Protection Plan (SWPPP) shall be created and implemented to ensure the proper installation and maintenance of sediment control measures. Implementation of the SWPPP shall be phased for the suitable timing for dry-weather protection measures and rainy season protective measures.
- These minimization and avoidance measures are typically required by NMFS and the Army Corps of Engineers for bank stabilization and channel work, and they are non-discretionary. Capturing and physically relocating fish by hand is an adverse effect and is prohibited without an incidental take permit authorized in a formal BO.

Timing/Implementation: Prior to and during construction

Enforcement/Monitoring: City of Yreka Public Works Department

4.0 ENVIRONMENTAL CHECKLIST

MM 4.4.3 Preconstruction Survey and Avoidance of Western Pond Turtles. A qualified professional shall conduct a preconstruction survey for western pond turtles no more than 30 days prior to construction in suitable aquatic habitats within the project boundaries. If the species is found near any proposed construction areas, impacts to individuals and their habitats shall be avoided to the greatest extent feasible. If occupied habitat can be avoided, an exclusion zone shall be established around the habitat and temporary fencing shall be installed around the buffer area with "Sensitive Habitat Area" signs posted and clearly visible on the outside of the fence. If avoidance is not possible and the species is determined to be present in work areas, the qualified professional with approval from DFG may capture turtles prior to construction activities and relocate them to nearby suitable habitat, a minimum of 300 feet up/downstream from the work area. Exclusion fencing should be installed if feasible to prevent turtles from reentering the work area. For the duration of work in these areas the qualified professional should conduct monthly follow-up visits to monitor effectiveness.

Timing/Implementation: Prior to and during construction activities

Enforcement/Monitoring: City of Yreka Public Works Department

MM 4.4.4 Survey and Avoidance of Nesting Migratory Birds. If clearing and/or construction activities will occur during the migratory bird nesting season (April 15 – August 15), then preconstruction surveys for nesting migratory birds shall be conducted by a qualified professional, up to 14 days before initiation of construction activities. The qualified professional shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.

If active nest(s) are identified during the preconstruction survey, then a qualified professional shall monitor the nest to determine when the young have fledged. Monthly monitoring reports, documenting nest status, will be submitted to the County Public Works Department until the nest(s) is deemed inactive. The biological monitor shall have the authority to cease construction if there is any sign of distress to a raptor or migratory bird. Reference to this requirement and the MBTA shall be included in the construction specifications.

Timing/Implementation: Prior to construction activities

Enforcement/Monitoring: City of Yreka Public Works Department

MM 4.4.5 Survey and Avoidance of Active Raptor Nests. If construction activities will occur during nesting season for raptors (January 15 – August 15), then all suitable raptor nesting habitat within 0.5 mile of the impacted area will be surveyed for active raptor nests before construction activity commences. If an active raptor nest is located within 0.5 mile of the construction site, a no-activity buffer will be erected around the nest while it is active to protect the nesting raptors. This buffer distance may be amended to account for nests that are not within the line-of-sight of the construction activity.

Timing/Implementation: Prior to construction activities

Enforcement/Monitoring: City of Yreka Public Works Department

MM 4.4.6 No Net Loss of Riparian Vegetation. The project applicant shall ensure that there is no net loss of riparian vegetation. Mitigation can include on-site restoration or purchase of mitigation credits at a US Army Corps of Engineers (Corps) approved or

mitigation bank. Mitigation associated with regulatory permits issued through the DFG, Corps, or the Water Resources Control Board may be applied to satisfy this measure. Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed project.

Timing/Implementation: Prior to construction activities

Enforcement/Monitoring: City of Yreka Public Works Department

MM 4.4.7 Mitigate for Loss of Waters of the US. If the Corps of Engineers identifies that the feature is jurisdictional, the project applicant shall ensure that the project will result in no net loss of waters of the US by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permits and/or 1602 Streambed Alteration Agreement.

Compensatory mitigation may consist of (a) obtaining credits from a mitigation bank; (b) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities. Evidence of compliance with this mitigation measure shall be provided prior to construction and grading activities for the proposed project.

Timing/Implementation: Prior to construction

Enforcement/Monitoring: City Yreka Public Works Department

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.5 CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

An archaeological and historical investigation was completed for the project by Resource Management and is included as **Appendix B** to this document. The investigation included a pedestrian survey, a records search at the Northeast Information Center at California State University, Chico, consultation with the Native American community, and a Native American Heritage Commission (NAHC) sacred lands file search. This investigation did not identify any prehistoric or historic sites or other cultural or historic resources within or immediately adjacent to the project Area of Potential Effects (APE).

DISCUSSION OF IMPACTS

- a) *Less Than Significant With Mitigation Incorporated.* As described above, no historical resources have been identified within or adjacent to the project area. According to the Archaeological and Historical Resource Report (2012) prepared for the project, the site contains no known, potentially significant cultural resources (Resource Management 2012). The project is a “no historic properties” undertaking for the purposes of Section 106 of the National Historic Preservation Act (Resource Management 2012). However, ground disturbance associated with development of the site has the potential to impact subsurface historic resources should any be present. Therefore, mitigation measure **MM 4.5.1** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.
- b) *Less Than Significant With Mitigation Incorporated.* While no evidence of archaeological resources has been identified within the project area, ground disturbance has the potential to impact subsurface archaeological resources should any be present. Therefore, mitigation measure **MM 4.5.1** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.
- c) *Less Than Significant With Mitigation Incorporated.* Although no evidence of paleontological resources has been identified within the project area, unanticipated and accidental discoveries of paleontological resources are possible during project implementation and have the potential to impact paleontological resources. Therefore, mitigation measure **MM 4.5.2** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.

- d) *Less Than Significant With Mitigation Incorporated*. The cultural resource investigation conducted for the project indicated that there is little likelihood for Native American archaeological sites, or burial sites, to be present in the area (Resource Management 2012), and no comments on this subject were received from the local tribal consultation effort. Regardless, there is a possibility of the unanticipated and accidental discovery of human remains during ground-disturbing project-related activities. Therefore, mitigation measure **MM 4.5.3** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.

MITIGATION MEASURES

MM 4.5.1 If, during the course of project implementation, cultural resources (i.e., prehistoric sites, historic features, isolated artifacts, and features such as concentrations of shell or glass) are discovered, work shall be halted immediately within 50 feet of the discovery, the City of Yreka Public Works 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.

Timing/Implementation: *During construction activities*

Enforcement/Monitoring: *City of Yreka Public Works Department*

MM 4.5.2 If, during the course of project implementation, paleontological resources (e.g., fossils) are discovered, work shall be halted immediately within 50 feet of the discovery, the City of Yreka Public Works Department shall be immediately notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. The City shall consider the mitigation recommendations presented by a professional paleontologist 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.

Timing/Implementation: *During construction activities*

Enforcement/Monitoring: *City of Yreka Public Works Department*

4.0 ENVIRONMENTAL CHECKLIST

MM 4.5.3 If, during the course of project implementation, human remains are discovered, all work shall be halted immediately within 50 feet of the discovery, the City of Yreka Public Works Department shall be immediately notified, and the County Coroner must be notified, according to Section 5097.98 of the California Public Resources Code and Section 7050.5 of the California 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 California Code of Regulations Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *During construction activities*

Enforcement/Monitoring: *City of Yreka Public Works Department*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.6 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

Several earthquake faults exist within the Yreka area as indicated on the 2010 Fault Activity Map of California (California Department of Conservation 2010). Some notable faults include the Greenhorn Fault north of the city and the Soap Creek Ridge Fault to the southwest. One small fault has been identified in the northern portion of the city near the Interstate 5/State Route 3 junction. None of these faults have shown evidence of any activity within the last 1.6 million years. The nearest recently active fault is the Cedar Mountain Fault Zone 35 miles east in the Hebron-Macdoel area and a fault located approximately 99 miles east in the Klamath Falls area (California Department of Conservation 2012).

4.0 ENVIRONMENTAL CHECKLIST

The Seismic Safety and Safety Element of the Siskiyou County General Plan (1975) states that over a 120-year period, nine or ten earthquakes capable of “considerable damage” have occurred in the region. No deaths have been reported from these quakes, and building damage was considered minor or unreported. No known damage has resulted from an earthquake in the Yreka area.

Landslides are not prominent in the area, since the mountains of the region consist of stable bedrock material with little likelihood of sliding. While Yreka is in an area having undulating and varying topography, standard construction practices limit the amount of potential erosion, and the California Building Code addresses necessary construction techniques to accommodate soils in the area with expansive characteristics.

According to the USDA Natural Resources Conservation Service (NRCS), which classifies soils throughout the United States, the project area is classified as #145-Dumps, which in this particular instance consists of waste rock associated with dredging (USDA-NRCS 1994). Given the unknown nature of the parent material, the NRCS does not provide any details as to permeability, runoff potential, erosion hazard, or shrink-swell characteristics.

The eastern portion of the project site (east of Interstate 5) has been used for mining and mineral extraction activities at various times in the past. As a result, that portion of the site is highly disturbed and is characterized as heavily laden with mine tailings and waste cobble deposits. The proposed project will enhance soil stability and reduce erosion activity along the creek by undertaking minor grading activities which will “lay-back” vertical cut-faces along the creek which currently experience highly erosive scour and land slump activity during high-flow storm events.

DISCUSSION OF IMPACTS

a)

- i) *Less Than Significant Impact.* There are no known active or potentially active faults within or adjacent to the city. The closest mapped faults to the project area lie approximately 30 miles to the east, near Butte Valley. The California Geologic Survey does not identify the City of Yreka as a city affected by this fault or any other Alquist-Priolo Earthquake Fault Zone.
- ii) *Less Than Significant Impact.* See Response 4.6(a)(i). The city, along with all of Siskiyou County, is located in a region with moderate to high probability that the area is subject to earthquakes which may cause structural damage. Buildings constructed in California are subject to more stringent seismic safety standards than those constructed elsewhere in the United States. Earthquakes centered about 20 miles east of Mt. Shasta were recorded in 1978 with Richter magnitudes of 4.0 to 4.6. However, an earthquake history compiled for the Seismic Safety and Safety Element of the Siskiyou County General Plan indicated that over a 120-year period, no deaths related to earthquakes have been recorded, and reported building damage has never been more than “minor.” Given the past history of seismic activity in Siskiyou County, the California Building Code standards would ensure that improvements in the project area are able to withstand ground shaking with no significant damage. The State of California provides minimum standards for building design through the California Building Code [California Code of Regulations, Title 24]. The California Building Code is based on the Uniform Building Code (UBC), which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for conditions in California. State

regulations and engineering standards related to geology, soils, and seismic activity are reflected in the California Building Code requirements. Through the California Building Code, the State of California provides a minimum standard for building design and construction. The California Building Code contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

iii) *Less Than Significant Impact*. Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Liquefaction can result in the following types of seismic-related ground failure:

- Loss of bearing strength – soils liquefy and lose the ability to support structures
- Lateral spreading – soils slide down gentle slopes or toward stream banks
- Flow failures – soils move down steep slopes with large displacement
- Ground oscillation – surface soils, riding on a buried liquefied layer, are thrown back and forth by shaking
- Flotation – floating of light buried structures to the surface
- Settlement – settling of ground surface as soils reconsolidate
- Subsidence – compaction of soil and sediment

Three factors are required for liquefaction to occur: (1) loose, granular sediment; (2) saturation of the sediment by groundwater; and (3) strong shaking. Although the exact characteristics of the underlying soils are unknown, impacts associated with liquefaction are unlikely given the low incidence of strong earthquakes in the region and the lack of project components that would be adversely affected if it were to occur.

iv) *No Impact*. Aside from the streambanks proposed for re-contouring, the project site is relatively flat. As such, the potential for landslides is considered extremely low.

- b) *Less Than Significant Impact*. Those activities associated with minor grading of existing trails, development of new trails, and re-contouring the streambank would disturb soils and potentially expose these soils to wind and water erosion. However, because more than 1 acre of ground would be disturbed, the City will be required to prepare a stormwater pollution prevention plan (SWPPP) in order to comply with the Regional Water Quality Control Board's General Construction Storm Water Permit. The SWPPP will identify best management practices (BMPs) to be implemented on the project site to minimize soil erosion and protect local waterways and existing drainage systems. Compliance with the State's General Construction Storm Water Permit would minimize soil erosion and loss of topsoil from project implementation and reduces this potential impact to a level that is considered less than significant.
- c) *Less Than Significant Impact*. The potential for landslides on the project site was addressed under Response 4.6(a)(iv) and was determined to have no impact. The potential for lateral spreading, liquefaction, subsidence, and other types of ground failure or collapse was addressed under Response 4.6(a)(iii) and was determined to be less than significant.

4.0 ENVIRONMENTAL CHECKLIST

- d) *Less Than Significant Impact*. Expansive or shrink-swell soils are soils that swell when subjected to moisture and shrink when dry. Expansive soils typically contain clay minerals that attract and absorb water, greatly increasing the volume of the soil. This increase in volume can cause damage to foundations, structures, and roadways. While the clay content of project site soils in the vicinity of proposed improvements is currently unknown, standard procedures used in the construction of concrete footings as required by the California Building Code will reduce this potential impact to a level that is considered less than significant.
- e) *No Impact*. No septic tanks or alternative wastewater disposal systems are associated with the project.

MITIGATION MEASURES

None required.

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

SETTING

No air district or other regulatory agency in Northern California has identified a significance threshold for greenhouse gas (GHG) emissions generated by a proposed project or a methodology for analyzing impacts related to GHG emissions or global climate change. By the adoption of Assembly Bill (AB) 32 and Senate Bill (SB) 97, however, the State of California established GHG reduction targets and has determined that GHG emissions as they relate to global climate change are a source of adverse environmental impacts in California. AB 32, the California Climate Solutions Act of 2006 (see Statutes 2006, Chapter 488, enacting Health and Safety Code Sections 18500–38599), establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions.

The impact that GHG emissions have on global climate change does not depend on whether the emissions were generated by stationary, mobile, or area sources, or whether they were generated in one region or another. Thus, consistency with the state’s requirements for GHG emissions reductions is the best metric for determining whether the proposed project would contribute to global warming. In the case of the proposed project, if the project substantially impairs the state’s ability to conform to the mandate to reduce GHG emissions to 1990 levels by the year 2020, then the impact of the project would be considered significant.

DISCUSSION OF IMPACTS

- a) *Less Than Significant Impact.* The proposed project would result in minor greenhouse gas emission impacts associated with the use of fossil fuel-powered equipment during temporary construction activities. However, all emissions of greenhouse gases associated with construction activities would be short term and negligible. Once construction activities are complete, the generation of GHG emissions would cease. The project would not include the provision of new permanent stationary or mobile sources of GHG emissions; therefore, by the very nature of the project, it will not generate quantifiable GHG emissions from operations. While the proposed project would require ongoing maintenance, which would contribute emissions primarily through the transport of City maintenance workers, it is not anticipated that ongoing maintenance of the improvements proposed by the project would result in a substantial increase of GHG emissions. Furthermore, the City already employs maintenance staff for existing maintenance needs.
- b) *No Impact.* The project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions.

4.0 ENVIRONMENTAL CHECKLIST

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.8 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR), Title 22, Section 662601.10, as follows:

4.0 ENVIRONMENTAL CHECKLIST

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

Most hazardous material regulation and enforcement in Siskiyou County is managed by the Siskiyou County Public Health Department, which refers large cases of hazardous materials contamination or violations to the North Coast Regional Water Quality Control Board (RWQCB) and the California Department of Toxic Substances Control (DTSC). When issues of hazardous materials arise, it is not at all uncommon for other agencies to become involved, 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, both the California Department of Toxic Substances Control and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists, as well as follow-up communication with RWQCB staff, identified one open case of hazardous waste violations in the vicinity of proposed improvements and none on the project site. The one open case is currently being reviewed as a low-level contamination risk and is expected to be closed in the very near future (DTSC 2012; SWRCB 2012).

DISCUSSION OF IMPACTS

- a) *Less Than Significant Impact.* With the exception of the one open case described above, no known hazardous materials storage sites are present within or immediately adjacent to the project area. Additionally, no special hazard or listed substances will be used or transported as a result of project implementation.
- b) *Less Than Significant Impact.* See Response 4.8(a). Although unlikely, a potential release of hazardous materials could occur during construction work on the project. Any such releases would most likely be spillages of motor vehicle fuels and oils. Given the need for General Construction Storm Water Permit form the RWQCB, the project will be required to prepare a stormwater pollution prevention plan (SWPPP), which will stipulate how and where vehicles can be refueled and what measures are needed to avoid spills adjacent to streams and minimize the effects of such spills.
- c) *No Impact.* The project is located within one-half mile of the Mattole Valley Charter School. However, compliance with existing regulations and standard safety procedures related to the handling of hazardous materials and waste would reduce potential impacts to a level of insignificance resulting in a No Impact determination.
- d) *No Impact.* According to the DTSC Envirostor database and SWRCB GeoTracker database, which were reviewed on September 14, 2012, the project site has not been identified as a hazardous material spill site.
- e) *No Impact.* The project site is more than 2 miles from a public or private airport. The closest public airport to the City of Yreka is the Montague-Yreka Rohrer Field Airport, located approximately 4.5 miles to the east.

- f) *No Impact*. See Response 4.8(e). The project site is not located in the vicinity of a private airstrip.
- g) *Less Than Significant Impact*. According to the City, traffic controls will be provided adjacent to the project site along Oberlin Road, as necessary, to maintain the flow of traffic at all times. As such, impacts to emergency response and evacuation are considered less than significant.
- h) *Less Than Significant Impact*. Although there is the potential for wildland fires in the region given the relatively dry summer climate, with hot days and wind, the project site is located in an urban environment in an area that is not likely to be affected by wildland fires.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.9 HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

One of the most significant hydrology-related issues in Yreka is occasional flooding from storm events. The City is traversed by a number of natural and man-made drainages which

experience dramatic seasonal fluctuations in flow and occasional short-term “pulse flow” conditions resulting in flooding. Occasional flooding due to naturally occurring storm events does occur along these drainages and at a few intersections throughout the City.

As noted above, several creeks and/or intermittent drainages flow through Yreka: Yreka Creek, Humbug Creek, Juniper Creek, and Greenhorn Creek. Yreka Creek, an ephemeral waterway, does not maintain a year-round surface flow in many of its reaches. Within the project area, segments of Yreka Creek may flow subsurface in late summer. The proposed project is located along Yreka Creek in the central portion of city. The proposed project includes implementation of several of the improvements identified in the *Yreka Creek Greenway Master Plan*, which is intended to improve recreational opportunities and water quality, enhance wildlife habitat, and attenuate peak stormwater flows in Yreka Creek. Localized flooding, while rare, is known to occur during intense periods of rain. Flooding has recently occurred on Miner Street, Main Street, and Broadway Street, as well as at the Siskiyou County Fairgrounds, the project site, and many Yreka Creek streamside areas.

As mapped by the Federal Emergency Management Agency (FEMA; 2011) Flood Insurance Rate Mapping program, portions of the project area are located within the 100-year (Zones AO and AE) and 500-year (Zone X) floodplains of Yreka Creek (FIRM Maps 06093C1557D and 06093C1559D). It is also noted that areas within and immediately adjacent to the project site are subject to a LOMR (Letter of Map Revision) modifying areas of designated floodway on portions of the project site due to fill activities which have occurred previously (LOMR Case No. 10-09-0185A).

The design of the project incorporates numerous features or elements that will improve and address hydrologic and water quality issues. Minor grading will be undertaken to reduce the gradient of the incised channel banks thereby reducing scour erosion activity and sediment inflow into the creek, the floodplain and floodway will be widened to increase hydrologic capacity and reduce flooding and the removal and thinning of vegetation in the area east of Interstate 5 should help to address illegal squatting activities in the area that result in trash and waste entering the creek in this location.

DISCUSSION OF IMPACTS

- a) *Less Than Significant Impact*. See Response 4.6(b). The project includes removal of debris and refuse from a small riparian area adjacent to the creek corridor, along with floodplain restoration, both of which are intended to improve water quality in the Yreka Creek watershed. Because the project would require a General Construction Storm Water Permit from the RWQCB, the City’s contractor will be required to prepare a stormwater pollution prevention plan subject to RWQCB review and approval. The SWPPP will include best management practices designed to reduce or eliminate erosion and runoff into waterways. BMPs typically include the use of straw wattles, covering of stockpiled materials, revegetation that includes hydroseeding, silt fences, and other physical means of slowing stormwater flow from graded areas in order to allow sediment to settle before entering stream channels. The method used will be described in the SWPPP and may vary depending on the circumstances of construction.
- b) *Less Than Significant Impact*. Although the project would result in the creation of impervious surfaces, including approximately 5,000 square feet of asphalt parking lot and 1,500 linear feet of existing trail, the addition of these surfaces would not interfere with groundwater recharge, as there are sufficient pervious and vegetated surfaces adjacent to these improvements to accommodate any potential minor increase in stormwater runoff. Further,

4.0 ENVIRONMENTAL CHECKLIST

the proposed project would not generate a need for new water production, increase water use or demand, or propose new wells.

- c) *Less Than Significant Impact.* See Responses 4.6(b), 4.9(a), and 4.9(b). The project will result in alteration of a small portion of floodplain along Yreka Creek, with the intent to attenuate stormwater flows during and immediately following storms, as well as to enhance riparian habitat and floodplain function. Given the design of the project, as well as BMPs that will be implemented as part of the stormwater pollution prevention plan, implementation of the proposed project would not result in substantial erosion or siltation on or off site.
- d) *Less Than Significant Impact.* See Responses 4.6(b), 4.9(a), and 4.9(c). The proposed project would not alter the existing drainage pattern or course of Yreka Creek such that there would be increased flooding on or off site. It is anticipated that the project would have the net effect of decreasing flood potential on and off site.
- e) *Less Than Significant Impact.* See Response 4.9(b). Although the project would result in the creation of impervious surfaces, which would contribute to a minor increase in stormwater runoff, among the primary functions of the project are the enhancement of riparian habitat and the improvement of floodplain function along Yreka Creek, both of which will decrease erosion, reduce sediment transport, and improve water quality in the long term. These functions will be accomplished through the creation of an approximately 700-foot drainage swale that provides vegetative filtration of stormwater, the restoration of approximately 1 acre of floodplain by re-contouring flood constrictions, the planting of approximately 600 native plants and trees, and the implementation of erosion control measures. Potential short-term impacts associated with stormwater runoff will be mitigated through implementation of best management practices included in the SWPPP required for the General Construction Storm Water Permit as well as through the mitigation measures contained herein.
- f) *Less Than Significant Impact.* See Responses 4.9(a) through 4.9(e).
- g) *No Impact.* Although portions of the project site are located in Zones AO and AE as mapped by FEMA, the project does not include the creation of housing or otherwise place housing within a 100-year flood hazard area.
- h) *Less Than Significant Impact.* The proposed project includes the surfacing of a multi-use trail, construction of seasonal crossings and boardwalk / upland crossings for pedestrian use designed as "float-aside" features, and picnic areas within the mapped 100-year floodplain. The bridges/boardwalks will be anchored into the adjacent bank to ensure that in the event that the feature breaks-away to permit the unimpeded flow of water during a high-water event, that the structure does not travel down-stream and create flow impediments at down-stream locations. These facilities will be designed to remain in place without incurring or causing flood-related damage. Two permanent footbridges will be constructed on existing landform abutments located above the 100-year floodplain. Therefore, the project will not place vulnerable or problematic structures within a 100-year flood hazard area.
- i) *No Impact.* The project will slightly increase floodplain capacity along Yreka Creek, with the ultimate goal of further attenuating the effects of floods on the City of Yreka similar to prior restoration activities within the project site. The project will not result in the failure of a levee or dam, nor will it expose people or structures to a significant risk of loss, injury, or death involving flooding.

- j) *No Impact*. The project site is not located near an ocean or large body of water with potential for seiche or tsunami. The project area is not at risk for mudflows.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.10 LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The basis for land use planning in the City of Yreka is the City's General Plan. The Land Use Element of the City of Yreka General Plan (2003) provides the primary guidance on issues related to land use and land use intensity. The Land Use Element provides designations for land within the city and outlines goals and policies concerning development and use of that land. In concert with the General Plan, the Yreka Zoning Ordinance establishes zone districts within the city and specifies allowable uses and development standards for each district. Under state law, each jurisdiction's zoning ordinance must be consistent with its general plan.

Pursuant to Sections 16.36.070 and 16.40.070 of the City of Yreka Municipal Code, both project zoning districts permit parks and picnic areas upon approval of a use permit. However, pursuant to California Government Code Section 53090, because the property is owned by the City of Yreka, no use permit is required. Therefore, the project is more or less consistent with the City's General Plan and Zoning Ordinance. Further, as described in Section 3.0, Project Description, of this document, the project includes recreation improvements, open space, and restoration of the Yreka Creek floodplain consistent with the *City of Yreka Master Plan of Drainage (2005a)*, *Yreka Creek Greenway Master Plan (2005b)* (included in the City's General Plan in its entirety), and *City of Yreka Bicycle Transportation Plan (2006)*.

DISCUSSION OF IMPACTS

- a) *No Impact.* The project will not result in the division of an existing community.
- b) *No Impact.* The project will not conflict with applicable plans that have jurisdiction over the project area. The project is consistent with the City's General Plan, Zoning Ordinance, Master Plan of Drainage, Bicycle Transportation Plan, and the *Yreka Creek Greenway Master Plan*.
- c) *No Impact.* See subsection 4, Biological Resources. No habitat conservation or natural community conservation plans are applicable to the project area.

MITIGATION MEASURES

None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.11 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

Historically, gold mining was responsible for the establishment of the City of Yreka. With thousands of gold miners hoping to strike it rich, dredge mining occurred along Yreka Creek between the 1850s and 1930s. Although some mining still takes place on the Shasta and Klamath rivers, the resource is essentially depleted and no longer plays a significant role in Yreka’s economy. Nevertheless gold continues to provide a tourist draw to the region for many amateur gold-seekers.

The State Mining and Geology Board has the responsibility to inventory and classify mineral resources and could designate such mineral resources as having a statewide or regional significance. If this designation occurs, the local agency must adopt a management plan for such identified resources. At this time, there are no plans to assess local mineral resources for the project area or Siskiyou County.

The project site is located in an area that has been previously disturbed due to both historic mining activities at the site and along the creek and past land use activities. The site is characterised as having a highly cobbled composition as a result.

DISCUSSION OF IMPACTS

- a) *No Impact.* The project would not result in the loss of an available known mineral resource that would be of value to the region or residents of the state.
- b) *No Impact.* See Impact 4.11(a). There are no locally important mineral resource recovery sites within the project area delineated in the City or County general plans.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.12 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

Noise sources in Yreka include local and through traffic, commercial and industrial uses, races at the fairgrounds, and occasional railroad operations of the Yreka Western Railroad. The most consistent noise sources in Yreka are local and through traffic. Interstate 5, which traverses the full length of the community from north to south, is likely the most significant noise source. Since the project site is located adjacent to the interstate and to the Yreka Western Railroad, it is subject to elevated ambient noise levels.

DISCUSSION OF IMPACTS

- a) *Less Than Significant With Mitigation Incorporated.* The project will generate temporary noise levels during construction of the project that may affect nearby noise-sensitive receptors. Noise-sensitive receptors located in the vicinity of proposed improvements include a number of residences in a nearby Mobile Home Park, the Mattole Valley Charter School, and three motels located along South Main Street. Temporary construction noise will likely consist of heavy equipment, backup alarms, construction trucks, and paving equipment. Although construction noise is temporary in nature, it could pose a nuisance to noise-sensitive receptors adjacent to the project area. Provisions of the City's General Plan limit the majority

of construction to between the hours of 7 a.m. and 7 p.m., which greatly reduces potential noise impacts. However, implementation of mitigation measure **MM 12.1** would further reduce potential noise impacts to a level that is considered less than significant.

- b) *Less Than Significant Impact.* During grading and construction, the project may generate limited groundborne vibration as a result of heavy equipment operations. However, this would be a temporary impact that would cease completely with the end of construction activities. Additionally, the project does not involve any blasting or pile-driving activities or any special equipment known to make or generate excessive groundborne vibration.
- c) *No Impact.* The project will not result in a permanent increase in ambient noise levels.
- d) *Less Than Significant With Mitigation Incorporated.* See Response 4.11(a).
- e) *No Impact.* The project is not located within an airport land use plan area.
- f) *No Impact.* The project is not located in the vicinity of a private airstrip.

MITIGATION MEASURES

MM 4.12.1 The contractor shall maintain and service all construction equipment as required to ensure its efficient operation. Additionally, all equipment utilized for construction of all phases of the project shall include the following noise reduction devices:

- All vehicles and engines shall be equipped with the appropriate manufacturer's noise reduction device(s), including, but not limited to, a manufacturer's muffler (or equivalently rated material) that is free of rust, holes, and exhaust leaks.
- All engine housing doors shall be kept closed and noise-insulating material shall be mounted on the engine housing to reduce noise, to the extent practical without interfering with the manufacturer's guidelines for engine operation or exhaust.
- Portable compressors, generators, pumps, and other such devices shall be covered with noise-insulating fabric to the extent practical without interfering with the manufacturer's guidelines for engine operation or exhaust, and shall further reduce noise by operating such devices at lower engine speeds during work to the maximum extent possible.
- Construction equipment not actively being utilized shall be turned off.
- Vehicle idling on site shall be limited to 5 minutes.
- Reduce volume backup alarms shall be used for all construction vehicles when practicable.

Timing/Implementation: *During grading and construction of improvements*

Enforcement/Monitoring: *City of Yreka Public Works Department*

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.13 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

According to the California Department of Finance, the population of the City of Yreka was approximately 7,750 as of January 2012, with 3,392 occupied dwelling units and an average of 2.247 persons per household.

DISCUSSION OF IMPACTS

- a) *No Impact.* The proposed project includes the development of recreation facilities and restoration of the Yreka Creek floodplain consistent with the *Yreka Creek Greenway Master Plan*. There are no components of the project that will directly or indirectly result in population growth.
- b) *No Impact.* As the project area is undeveloped, the project would not displace any housing.
- c) *Less Than Significant Impact.* Despite the availability of emergency shelters in Yreka and nearby Montague, there are a number of transient encampments located adjacent to Yreka Creek, including within the project site. It is anticipated that as recreational opportunities are expanded and the floodplain restored, public use of the site will increase and these illegal encampments will be abandoned. Therefore, although the project may displace some transients, camping on City-owned property is prohibited and shelters are available.

MITIGATION MEASURES

None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.14 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

FIRE PROTECTION

Fire protection services in Yreka are provided by the Yreka Fire Department. The fire station is located at 401 West Miner Street. The department is staffed by volunteers. The department also provides Basic Life Support services. Although the personnel are volunteers, equipment needs are funded through the City of Yreka’s property assessment for fire services.

The service boundaries of the department are the city limits, although the department has a mutual aid agreement with the California Department of Forestry and Fire Protection (Cal-Fire) to provide fire protection services to outlying areas (City of Yreka 2003, p. 6-4).

POLICE PROTECTION

Police protection services within the City of Yreka are provided by the Yreka Police Department, which operates from the main police station located at 412 West Miner Street. The department anticipates that the current police force will be adequate to provide police protection needs to Yreka residents at the same level of service through 2022, barring a large increase in population due to a major change such as a large employer locating in Yreka (City of Yreka 2003, p. 6-6).

SCHOOLS

The Yreka Union Elementary School District serves school-aged children in kindergarten through eighth grade (K–8). Three public schools serve elementary school-aged children: Evergreen School, Jackson Street School and Matole Valley Charter School. The Yreka Union High School District serves high school-aged children in grades 9 through 12 at Yreka High School (City of Yreka 2003, p. 7-2).

PARKS AND RECREATION

Recreational opportunities for both youth and adults are varied in Yreka. A well-rounded variety of programs and activities is available to Yreka’s residents at City, school, and private

4.0 ENVIRONMENTAL CHECKLIST

recreational facilities in and around the community. Funded by the City's General Fund, the City operates and maintains nine parks, one pool, two ball fields, and the Yreka Creek Greenway.

OTHER PUBLIC FACILITIES

Other local public facilities found in Yreka include Siskiyou County Administration, Courts, Public Health, and Library; College of the Siskiyous; Yreka City Administration; California Highway Patrol; National Forest Service; California Department of Forestry; County Fairgrounds; and a variety of other state and federal offices.

DISCUSSION OF IMPACTS

- a) *No Impact.* The project would not affect the provision of fire protection services. The project would accommodate existing and planned stormwater filtration needs, would enhance access options onto and within the site, would reduce the volume of flammable vegetation and encourage the relocation of persons illegally squatting on the site; therefore, no negative impacts to fire protection services would result from the project.
- b) *No Impact.* Despite the availability of emergency shelters in Yreka and nearby Montague, a number of transient encampments are located adjacent to Yreka Creek, including within the project site. Aside from the substantial sanitary and water quality implications associated with these unauthorized encampments, these camps generate law enforcement service calls due to occasional disturbances and because camping is prohibited on City-owned property.

During restoration of the floodplain, the project would remove debris generated by the transients and thin existing vegetation in the vicinity of the encampments. The project would also improve access throughout the site in order to increase recreational opportunities for the public. It is anticipated that with floodplain improvements and increased public use of the site, illegal camping within the project site would cease, which should serve to decrease the current number of law enforcement service calls to the project site.

- c) *No Impact.* The project would not affect school enrollments nor generate a need for new facilities.
- d) *Less Than Significant Impact.* During construction of improvements and restoration of the floodplain, the project will temporarily limit access to the primitive streamside trail that crosses the project site between Oberlin Road to the south and the Klamath National Forest Service Center to the north. However, consistent with the *Yreka Creek Greenway Master Plan*, the project will also improve the existing trail in order to make it ADA-accessible and establish new trails and picnic areas to increase recreational opportunities on the project site. The potential impacts associated with these improvements are discussed in the relevant sections of this document and, in each instance, have been mitigated to a level that is considered less than significant through the inclusion of mitigation measures contained herein.
- e) *No Impact.* The project will not impact any other governmental services or facilities. The proposed project would not include any actions, except to create a new trail and resurface another, that would result in increased human presence or need for new governmental facilities or services.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.15 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

Recreational opportunities for both youth and adults are varied in Yreka. A well-rounded variety of programs and activities is available to Yreka's residents at City, school, and private recreational facilities available to the city's residents. Funded by the City's General Fund, the City's Department of Public Works operates and maintains nine parks, one pool, two ball fields, and the Yreka Creek Greenway. Private recreational facilities include a community theater, YMCA, fitness centers, theaters, and a bowling alley.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.* See Response 4.14(d). As discussed in subsection 4.14, Public Services, the proposed project would construct improvements consistent with the *Yreka Creek Greenway Master Plan*. Closure of existing recreation facilities would be limited to as small an area as practical to allow for construction activities to occur in a safe manner. The remainder of the currently available segments of the Yreka Creek Greenway will remain open to use by the public. Currently about one-half of the city's 5 miles of streamside zones are available to the public through public and private partnerships.

While the project would temporarily limit recreational opportunities within the project site, which may in turn increase use of other parks and recreation areas, it is not expected that there would be a significant increase in use on any one recreational facility such that substantial physical deterioration of facilities would occur or be accelerated.

b) *Less Than Significant Impact.* See Responses 4.14(d) and 4.15(a).

MITIGATION MEASURES

None required.

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

SETTING

The city is located in northern Siskiyou County and is served by Interstate 5, State Route 3, and State Route 263. Within the city, a number of significant roadways, including Main Street, Oregon Street, Miner Street, and Oberlin Road, provide internal circulation and connectivity to the Siskiyou County roadway system.

The County of Siskiyou provides a public bus system, the Siskiyou Transit and General Express (STAGE), that makes several stops in Yreka, while providing transportation to the communities in Siskiyou County generally along Interstate 5. Another STAGE route travels State Route 3 from Etna into Yreka and returns along the same route. A senior bus service is also provided in Yreka by the Yreka Senior Center. This service works in conjunction with STAGE to provide a greater service area for STAGE.

4.0 ENVIRONMENTAL CHECKLIST

The terrain and layout of Yreka is favorable for bicycle and pedestrian circulation. Sidewalks exist on most streets. Most streets have sufficient width and low traffic volumes, permitting their safe use by bicyclists. Streets in the city have designated areas between the vehicle travel-way and the edge of pavement of sufficient width to accommodate bicyclists. These include State Route 3 throughout the city, Oregon Street, and State Route 263 from State Route 3 north. The Yreka Creek Greenway is identified as a Class I bike path, which is identified as a completely separate right-of-way for the exclusive use of bicycles and pedestrians (City of Yreka 2006).

DISCUSSION OF IMPACTS

- a) *Less Than Significant Impact.* The proposed project would not include features that would substantially increase the use of existing roadways or human presence in the area. The project will increase non-motorized circulation options available in the City and would result in the construction of circulation linkages that do not currently exist in the City. Additionally, the project does assist in implementing various goals and objectives of the City's Circulation Element. During construction, temporary minor traffic increases would occur as a result of construction equipment vehicles and employee vehicle trips to and from the area. These impacts, however, would be temporary in nature and would end upon project construction; therefore, impacts resulting in increased traffic and service levels would be less than significant.
- b) *No Impact.* See Response 4.16(a). The proposed project would not conflict with any applicable congestion management plan or any adopted plans or policies regarding alternative transportation. The project will increase non-motorized circulation options available in the City and would result in the construction of circulation linkages that do not currently exist in the City. Additionally, the project does assist in implementing various goals and objectives of the City's Circulation Element. The proposed project would improve the City of Yreka's existing stormwater drainage facilities and would not interfere with existing or proposed travel demand forecasts, level of service, or alternative transportation plans or policies. In fact, the project would serve to implement a portion of the *Yreka Creek Greenway Master Plan*, a plan which calls for 4.5 miles of continuous Greenway along Yreka and Greenhorn creeks within Yreka city limits
- c) *No Impact.* The closest public airport to the City of Yreka is the Montague-Yreka Rohrer Field Airport, located approximately 4.5 miles to the east. However, there are no project components that would affect air traffic patterns.
- d) *No Impact.* The project will result in short-term impacts to traffic and circulation as discussed in Response 4.16(a), but will not result in any long-term increase in hazards due to design features since all improvements will be located outside of public roadways.
- e) *Less Than Significant Impact.* During construction activities, the project may temporarily impact emergency access adjacent to the project area as vehicles and equipment are brought on and off site. It is anticipated that equipment will enter and exit the site from Oberlin Road for improvements located east of Interstate 5 and from South Main Street for improvements located west of Interstate 5. However, access from South Main Street is contingent upon private landowners granting access through their properties. If a temporary easement is not granted, equipment may need to access the western portion of the project site via the large box culvert located under Interstate 5. Regardless, as described in Section 3.0, Project Description, the City will provide traffic controls adjacent to the project site, as necessary, to maintain the flow of traffic at all times.

- f) *No Impact*. The project will not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The project will increase non-motorized circulation options available in the City and would result in the construction of circulation linkages that do not currently exist in the City. Additionally, the project does assist in implementing various goals and objectives of the City's Circulation Element and the City's Greenway Master Plan.

MITIGATION MEASURES

None required.

4.0 ENVIRONMENTAL CHECKLIST

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

SETTING

WATER

Water supply for the City of Yreka originates from the Fall Creek Pumping Station and is piped to the city. Water is filtered and chlorinated at the source and again at the Treatment Plant before entering the city. The water system is largely gravity fed, with eight existing storage tanks. The City has a current winter usage of 1.0 million gallons per day, while summer usage can increase up to 6.0 million gallons per day during peak demands. Most of the system is looped, and adequate pressure is available throughout most of the city (City of Yreka 2003).

WASTEWATER

The wastewater treatment facility for Yreka is located between State Route 263 (North Main Street) and Yreka Creek, approximately 600 feet north of the intersection of Montague Road (State Route 3) and State Route 263. The wastewater treatment plant has a design capacity of

1.3 million gallons per day of average dry weather flow. Current dry weather flow is 0.7 to 0.9 million gallons per day.

STORM DRAINAGE

The city is traversed by a number of natural and man-made drainages that all eventually lead to Yreka Creek, which flows north to the Shasta River, a tributary to the Klamath River. Overall drainage in the city is adequate, with only localized flooding during storm events. Floodwater and drainage have had a negative effect on the wastewater collection and treatment systems. The City prepared and adopted the comprehensive *City of Yreka Master Plan of Drainage* in 2005.

SOLID WASTE

The County of Siskiyou owns and operates a transfer site southeast of the City of Yreka off Oberlin Road. By agreement between the City of Yreka and the County of Siskiyou, the City has access to the facility for 25 years, commencing in 2007. Solid waste from Yreka is subsequently transported and disposed of at the Anderson Solid Waste Landfill in Shasta County. Under existing state permits, the landfill may accept 1,850 tons of solid waste per day until the year 2055 and had an estimated remaining capacity of 16,840,000 cubic yards in 2008 (CalRecycle 2012).

DISCUSSION OF IMPACTS

- a) *No Impact*. The project will have no impact on the City's wastewater collection and treatment systems and therefore will not exceed the wastewater treatment requirements of the Regional Water Quality Control Board.
- b) *No Impact*. See Response 4.17(a). The project includes installation of a drinking fountain at the Oberlin Road trailhead, which will not require construction of new water or wastewater treatment facilities or expansion of existing facilities.
- c) *Less Than Significant Impact*. The project includes development of approximately 600 linear feet of bioswale along the northwestern boundary of the project site in order to improve drainage of the site west of Interstate 5. All potentially significant impacts associated with this improvement will be mitigated through implementation of best management practices include in the SWPPP prepared for the Construction General Permit required by the RWQCB and through implementation of mitigation measures contained herein.
- d) *No Impact*. Aside from installation of a drinking fountain at the Oberlin Road trailhead, the project will have no impact on water supply.
- e) *No Impact*. See Response 4.17(a).
- f) *Less Than Significant Impact*. The project proposes to remove debris located on site as part of the floodplain restoration and cleanup of the site. The volume of solid waste is not considered significant relative to the amount of permitted daily input or existing capacity at the Anderson Solid Waste Landfill.
- g) *Less Than Significant Impact*. The proposed project will comply with all state and federal statutes regarding solid waste.

4.0 ENVIRONMENTAL CHECKLIST

MITIGATION MEASURES

None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.18 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 wildlife 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF IMPACTS

- a) *Less Than Significant With Mitigation Incorporated.* While several Initial Study sections have identified the potential for significant environmental impacts without mitigation, including potential impacts to habitat, protected species, and cultural resources, with the implementation of mitigation measures proposed in the relevant sections of this Initial Study, all potential projects impacts would be reduced to a level that is considered less than significant.
- b) *Less Than Significant With Mitigation Incorporated.* Implementation of the proposed project, in conjunction with other approved or pending projects in the region, has the potential to result in potentially cumulatively impacts to the physical environment for analysis areas which include biological resources and air quality. However, with implementation of mitigation measures proposed in the relevant sections of this Initial Study, these potential impacts would be reduced to a level that is considered less than significant.
- c) *No Impact.* The proposed project will have no adverse impacts on human beings, either directly or indirectly. The primary intent of the project is to improve floodplain function and riparian habitat adjacent to Yreka Creek in order to reduce and/or eliminate potential on- and off-site flooding, as well as to provide additional open space and recreation improvements for public utilization and enhance biological function of the creek.

5.0 REFERENCES

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

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

CalFish. 2009. "Anadromous Fish and Habitat Data Program." CDFG Biogeographic Data Branch and CDFG NCNCR Information Services Branch, powered by IMAPS.

California Department of Conservation. 2008. Division of Land Resource Protection Farmland Mapping and Monitoring Program. "Siskiyou County Important Farmland Map." <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/>.

———. 2010. California Department of Conservation, California Geological Survey. "2010 Fault Activity Map of California." <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>.

———. 2012. California Department of Conservation, California Geological Survey. "Alquist-Priolo Earthquake Fault Zones." http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.

California Department of Finance. 2012. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011 and 2012, with 2010 Benchmark. <http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php>.

California Department of Fish and Game (DFG). 2002. *Status Review of California Coho Salmon North of San Francisco*. DFG; Northern California and North Coast Region, CA.

———. 2004. *Recovery Strategy for California Coho Salmon*. DFG Native Anadromous Fish and Watershed Branch; Sacramento, CA.

———. 2012. *California Natural Diversity Database – Rarefind 4* (<http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>). DFG Biogeographic Data Branch; Sacramento, CA. Accessed on October 26, 2012.

CalRecycle (California Department of Resources Recycling and Recovery). 2012. "Solid Waste Facility Listing/Details." <http://www.calrecycle.ca.gov/SWFacilities/Directory/45-AA-0020/Detail/>.

Caltrans (California Department of Transportation). 2012. "California Scenic Highway Mapping System." http://www.dot.ca.gov/hq/LandArch/scenic_highways/.

CARB (California Air Resources Board). 2012a. "Ambient Air Quality Standards." <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

———. 2012b. "Top 4 Measurements and Days Above the Standard." <http://www.arb.ca.gov/adam/>.

CDFG (California Department of Fish and Game). 2012a. Life History Accounts and Range Maps. California Wildlife Habitat Relationships System. Sacramento: CDFG. <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>.

———. 2012b. California Natural Diversity Database (CNDDDB). Sacramento: Wildlife and Habitat Data Analysis Branch, CDFG.

5.0 REFERENCES

- City of Yreka. 2003. *City of Yreka General Plan, 2002–2022*. <http://ci.yreka.ca.us/sites/ci.yreka.ca.us/files/City-Government/Planning/General-Plan.pdf>.
- . 2004. *City of Yreka Municipal Code Ordinance*.
- . 2005a. *City of Yreka Master Plan of Drainage*.
- . 2005b. *Yreka Creek Greenway Master Plan*.
- . 2006. *City of Yreka Bicycle Transportation Plan*.
- CNPS (California Native Plant Society). 2012. *Inventory of Rare and Endangered Plants, v8-01a* (<http://www.rareplants.cnps.org/>). California Native Plant Society; Sacramento, CA. Accessed on November 20, 2012.
- Cornell Lab of Ornithology. 2012. *All About Birds – Bird Guide (online edition)*. Cornell University. Ithaca, NY. Accessed on November 20, 2012.
- DTSC (California Department of Toxic Substances Control). 2012. Envirostor database. <http://www.envirostor.dtsc.ca.gov/public/>.
- FEMA (Federal Emergency Management Agency). 2011. Flood Insurance Rate Map, Map Numbers. 06093C1557D and 06093C1559D. <https://msc.fema.gov/webapp/wcs/stores/servlet/StoreCatalogDisplay?storeId=10001&catalogId=10001&langId=-1&userType=G>.
- Laymon, SA. 1998. *Yellow-billed Cuckoo (Coccyzus americanus)*. In *The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California*. California Partners in Flight; Bakersfield, CA.
- Nafis, Gary. 2012. *California Herps: A Guide to Amphibians and Reptiles of California (online edition)*. Accessed on October 22, 2012.
- NMFS (National Marine Fisheries Service). 1999. "Designated Critical Habitat; Central California Coast and Southern Oregon/Northern California Coasts Coho Salmon; Final Rule and Correction." Federal Register Vol. 64, No. 86. NMFS, National Oceanic and Atmospheric Administration, Commerce.
- . 2012. *Public Draft Recovery Plan for Southern Oregon/Northern California Coast Coho Salmon (Oncorhynchus kisutch)*. NMFS; Arcata, CA.
- North Coast RWQCB (North Coast Regional Water Quality Control Board). 2011. *Water Quality Control Plan for the North Coast Region*.
- Resource Management. 2012. *Archaeological and Historical Resource Report for the Yreka Creek Trail Development Project*. November 2012.
- Shasta River CRMP (Shasta River Coordinated Resource Management and Planning Committee). *Shasta River Watershed Plan*.
- Siskiyou County. 1975. *Siskiyou County General Plan, Seismic Safety and Safety Element*. <http://www.co.siskiyou.ca.us/PHS/planning/docs/generalplan/Seismic%20Safety%20&%20Safety%20Element.pdf>.

- Siskiyou County Department of General Services. 2012. "STAGE (Siskiyou Transit and General Express)." <http://www.co.siskiyou.ca.us/GS/stageschedule.aspx>.
- SWRCB (State Water Resources Control Board). 2012. GeoTracker Database. <http://geotracker.waterboards.ca.gov/>.
- US Census Bureau. 2012. American FactFinder. Census 2010. Yreka City, California. <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
- USDA (United States Department of Agriculture) 2009. *CalVeg Vegetation Classification and Mapping System – Vegetation Descriptions Central Valley Ecological Province, CalVeg Zone 5*. USDA Forest Service Pacific Southwest Division; Vallejo, CA.
- USDA-NRCS (United States Department of Agriculture, Natural Resources Conservation Service). 1994. *Soil Survey of Siskiyou County, California, Central Part*.
- USFWS (Service). 2005. *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon*. Service; Portland, OR.
- . 2011. *Revised Recovery Plan for the Northern Spotted Owl (Strix occidentalis caurina)*. U.S. Fish and Wildlife Service, Portland, OR.
- . 2012a. *Arcata Fish & Wildlife Office Species List* (<http://www.fws.gov/arcata/specieslist/default.htm>). Accessed on October 16, 2012.
- . 2012b. *Critical Habitat Portal* (<http://criticalhabitat.fws.gov/crithab/>). Accessed on October 29, 2012.
- . 2012c. *Local Species Information – Fisher (Martes pennanti)* (<http://www.fws.gov/yreka/fisher.html>). Yreka Fish and Wildlife Office; Yreka, CA.
- Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. *California's Wildlife. Vol. I-III*. DFG; Sacramento, CA.

**APPENDIX A REVISED WETLAND DELINEATION
REPORT, CITY OF YREKA STORMWATER
ATTENUATION AND FLOODPLAIN RESTORATION
PROJECT. PMC, APRIL 2012.**



November 27, 2012

Kelley Reid
US ARMY CORPS OF ENGINEERS
North Branch
601 Startare Drive, Suite 100
Eureka, CA 95501

RE: YREKA CREEK TRAIL - PRELIMINARY JURISDICTIONAL DETERMINATION

Dear Mr. Reid:

The City of Yreka is proposing to develop public access trails and associated facilities along Yreka Creek, within the Yreka Creek Greenway. The project site represents approximately 20.5 acres within the City of Yreka, in Siskiyou County, California (**Figure 1**). Access to the project site can be obtained from Interstate 5 (I-5). From I-5 north, take the exit for CA-3/Yreka/Fort Jones/Etna; turn right onto Moonlit Oaks Avenue; turn left onto Fairlane Road/Old US 99; and finally turn right onto Oberlin Road. Access to the site can be obtained from a small gravel parking lot, located approximately 600 feet down Oberlin Road, on the left. From I-5 south, take the exit for Montague/Yreka, turn right onto Montague Road, turn left onto North Main Street (signs for CA-3), and finally turn left onto Oberlin Road. The small gravel parking lot will be located approximately 0.25 mile down Oberlin Road, on the left.

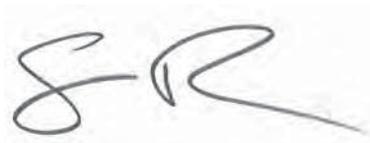
Jurisdictional delineations for the project area have been reviewed by the US Army Corps of Engineers (Corps) under two (2) previous projects. The larger portion of the project, located east of I-5, was previously reviewed under Corps file number 2007-400463 (**Exhibit A**), in association with floodplain restoration activities conducted on this segment of Yreka Creek. The smaller portion of the project, located west of I-5, was also reviewed in 2009 in association with a storm drain installation/construction project (Florentine Street Storm Drain Project); however, no Corps permit was required (**Exhibit B**). In association with the two (2) previous projects, preliminary jurisdictional delineation reports were prepared (**Exhibits C - D**), and submitted to the Corps for review and verification.

On September 14, 2012, a review of the project site was conducted to verify whether the data presented in the two (2) previous delineation reports was still accurate. The site review revealed that the data collected and presented in the two (2) previous delineation reports was consistent with current site conditions. However, the portion of Yreka Creek that runs beneath I-5 has been added to provide connectivity between the two (2) previous delineations. In addition, the

delineation has been extended beneath Oberlin Road to encompass the anticipated construction zone, and two (2) small overflow channels were mapped. The new features are depicted on **Figure 2** as "Additional Perennial Stream" and were mapped utilizing the Ordinary High Water Mark. An updated preliminary jurisdictional delineation map depicting the extent of Waters of the US within the project area has been created (**Figure 2**). This map combines the two (2) original jurisdictional boundaries and new features into one (1) cohesive boundary. Based on these data, the project site contains 2.74 acres of perennial stream and associated montane riparian habitat. The City of Yreka is requesting reverification of the jurisdictional delineation presented on **Figure 2**.

Your assistance with this project is greatly appreciated. Please do not hesitate to contact me at (916) 517-4496 or spardo@pmcworld.com with any questions regarding the information contained herein, or requests for additional information.

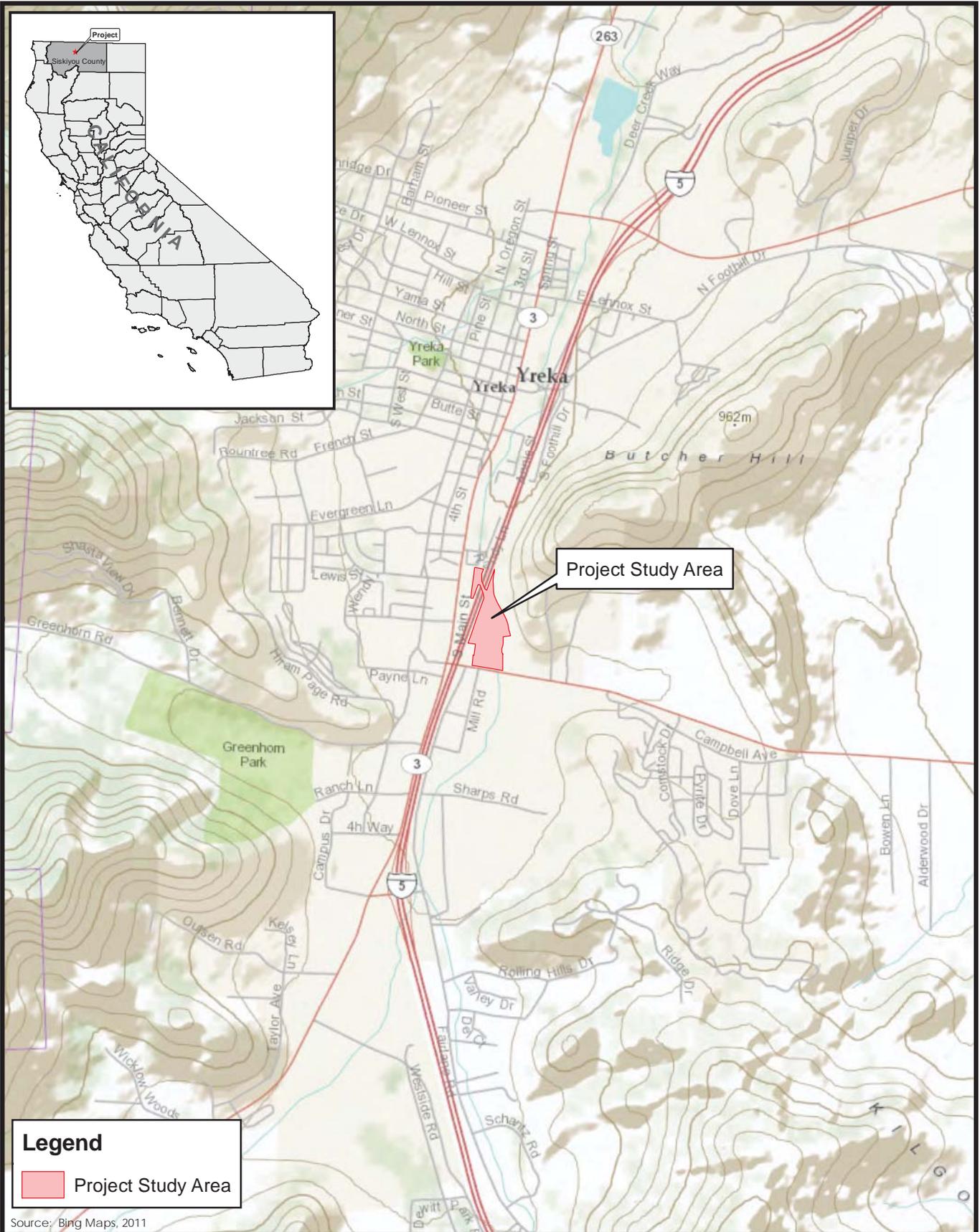
Sincerely,

A handwritten signature in black ink, appearing to read 'SP', is centered on the page.

Summer Pardo
Associate Biologist

Cc: Jeannette Hook - City of Yreka
Scott Friend - PMC
Joyce Hunting - PMC

FIGURES



Legend

 Project Study Area

Source: Bing Maps, 2011

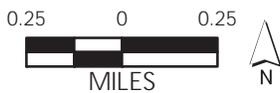


Figure
Project Location

EXHIBIT A
YREKA CREEK CORPS PERMIT



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET, 16th Floor
SAN FRANCISCO, CALIFORNIA 94103-1398

AUG 23 2007

1005 F 2 21

Regulatory Branch

SUBJECT: File No. 2007-400463

Ms. Jeanette Hook
City of Yreka
701 Fourth Street
Yreka, California 96097

Dear Ms. Hook:

This letter is in response to your submittals of April 30 and July 20, 2007, concerning Department of the Army authorization to reconstruct portions of the Yreka Creek floodplain within the City of Yreka, Siskiyou County, California. The restoration project contains two sites, including 1) a five-acre triangular parcel (APN 061-301-300) bordered on the west by Interstate Highway 5 and to the south by Oberlin Road, and 2) a six-acre parcel (APNs 062-051-400, -220, -190, -200; 062-141-080; 061-301-070, -080, -140, -150, -160) which runs approximately 1500 feet northeast along the creek from Sharps Road. The five-acre site is commonly referred to as the northern portion and the six-acre site is the southern portion.

The plan for the northern portion includes the removal of approximately 30,000 cubic yards (cy) of fill material in order to restore approximately 19 acre-feet of stormwater storage, removal of garbage and concrete rip-rap, re-vegetation of the created floodplains with native species, construction of a temporary gravel crossing, re-alignment of the floodplain to enhance riparian and aquatic habitat and to allow room for a recreational trail. The northern portion work would be completed before October 15, 2007, and between May 1 and June 15, 2008.

The plan for the southern portion includes removal and disposal of concrete rock-slope protection, abandoned vehicles, and other debris along the creek; widening the floodplain, removing non-native vegetation, and providing allowance for recreational trail. The restoration project would result in the removal of approximately 8,000 cubic yards of fill material from the adjacent banks to improve floodplain capacity.

The enclosed map entitled, "Figure 3e: Delineation of Waters of the U.S., Yreka Creek Restoration Area," in one (1) sheet date certified August 17, 2007, accurately depicts the extent and location of Corps jurisdiction within the project boundary area. The jurisdictional determination is based on the current conditions of the site, as verified during a field investigation of March 16, 2007, and other data included with your submittal. This jurisdictional determination will expire in five years (5) from the date of this letter, unless new information or a change in field conditions warrants a revision to the delineation map prior to the expiration date. Since your delineation information was received before June 5, 2007, the effective date of the

official interagency guidance interpreting the Supreme Court decision, *Rapanos v. United States*, 126 S. Ct. 2208 (2006), the Corps did not apply this guidance in rendering the jurisdictional determination for the property in question.

You are advised that the Corps has established an Administrative Appeal Process, as described in 33 C.F.R. Part 331 (65 Fed. Reg. 16,486; Mar. 28, 2000), and outlined in the enclosed flowchart and "Notification of Administrative Appeal Options, Process, and Request for Appeal (NAO-RFA) Form." If you do not intend to accept the approved jurisdictional determination, you may elect to provide new information to the District Engineer for reconsideration or submit a completed NAO-RFA Form to the Division Engineer to initiate the appeal process. You will relinquish all rights to appeal, unless the Corps receives new information or a completed NAO-RFA Form within sixty (60) days of the date of this letter.

All proposed discharges of dredged or fill material into waters of the United States must be authorized by the Corps of Engineers pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1344). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands. Your proposed activity is within our jurisdiction and a permit will be required for your project.

Based on a review of the information in your submittal, the project qualifies for authorization under Department of the Army Nationwide Permit (NWP) 27 for *Aquatic Habitat Restoration, Establishment, and Enhancement Activities* and NWP 33 for *Temporary Construction, Access, and Dewatering* (72 Fed. Reg. 11092, Mar. 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344). All work shall be completed in accordance with the plans and drawings titled "SWA Yreka Creek-North Reach Site Plan," dated July 12, 2007; "SWA Yreka Creek -South Reach Site Plan," dated July 13, 2007; "SWA Yreka Creek -North Reach Grading Plan," sheets YCrN-2. and YCrN-3, both dated July 12, 2007; "SWA Yreka Creek - South Reach Grading Plan," sheet YCrS-2 dated June 28, 2007, and sheet YCrS-3 dated July 13, 2007.

The project must be in compliance with the Terms and Conditions of the NWP's cited in Enclosure 2 and any Special Conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any Term or Condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps of Engineers. Upon completion of the project and all associated mitigation and monitoring requirements, you shall signed and return the statement cited in Enclosure 3, certifying all work complies with the Terms and Conditions of the NWP. Project authorization under the NWP does not obviate any requirement to obtain other Federal, State, or local approvals necessitated by law.

Project authorization will remain valid for a period of two (2) years from the date of this letter, unless the NWP's are modified, suspended, or revoked. If the project has commenced or is under contract to commence construction prior to any modification, suspension, or revocation of the NWP's and the project could not comply with any newly issued NWP, you shall have twelve (12) months from that expiration date to complete the project under the present Terms and Conditions of this NWP authorization.

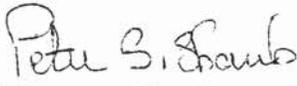
This authorization will not be effective until you have obtained a Section 401 water quality certification from the Central Valley Regional Water Quality Control Board (RWQCB). If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps may presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

This Corps permit does not authorize you to take an endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit or a Biological Opinion (BO) under ESA Section 7 with "incidental take" provisions with which you must comply). The enclosed U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) Consultation letters dated January 3, 2007, and February 14, 2007, respectively contain project design criteria required to ensure that the project does not affect coho salmon. Your authorization under this Corps permit is conditional upon your compliance with all of the criteria included in the consultation letters, which are incorporated by reference in this permit. Failure to comply with the criteria, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The FWS and NMFS are the appropriate authorities to determine compliance with the terms and conditions of their consultation letters and with the ESA.

You may refer any questions on this matter to Kelley Reid of my Regulatory staff by telephone at 707-443-0855. All correspondence should be addressed to the Regulatory Branch, Eureka Field Office, USACE, P.O. Box 4863, Eureka, California 95502, and refer to the File

Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at our website:
<http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,


for Jane M. Hicks
Chief, Regulatory Branch

Enclosures

Copies Furnished (w/o encls):

US FWS, Arcata, CA ATTN: Ms Janine Silveira.
US NMFS, Arcata, CA ATTN: Mr. Don Flickinger
CA DFG, Redding, CA
CA RWQCB, Santa Rosa, CA

Greg Matuzak
Pacific Municipal Consultants
2729 Prospect Park Drive, Ste 220
Rancho Cordova, CA 95670



Figure 3e: Delineation of Waters of the US
 Yreka Creek Restoration Area

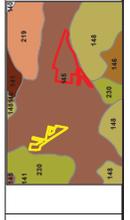
Delineated By: Greg Metzrak
 Drafted By: Bob Moyes
 Date: March 12, 2007

PMIC

Scale: 1" = 200'
 North Arrow
 UTM Zone 18N UTM
 789187N 566, 28, 27, 34, 35

Soil Types

- 1H: DOTTAPPALELLI CORA 8 TO 2 FEET DEPT SOILS
- 1H: DAMPS
- 1H: DAZEL GRIBBELLY CORA 15 TO 2 FEET DEPT SOILS
- 1H: DAZEL GRIBBELLY CORA 15 TO 2 FEET DEPT SOILS
- 1H: DAZEL GRIBBELLY CORA 15 TO 2 FEET DEPT SOILS
- 1H: DAZEL GRIBBELLY CORA 15 TO 2 FEET DEPT SOILS
- 2H: STONE CORVALLI SANDY LOAM 2 TO 3 FEET DEPT SOILS



Symbol	Feature	Length (ft)	Acres
[Red Outline]	Biological Study Area - North	N/A	24.14
[Yellow Outline]	Biological Study Area - South	N/A	6.98
[Blue Line]	Yreka Creek North	2911	3.03
[Blue Line]	Yreka Creek South	1486	1.16
[Blue Line]	Contours (5 Meter Intervals)		

Source: NAD 83, County of Butte, USGS-AFDC, and Data Map, PMIC 2007

EXHIBIT B
FLORENTINE DRAIN CORPS PERMIT

Jeannette Hook

From: Reid, Kelley E SPN [Kelley.E.Reid@usace.army.mil]
Sent: Thursday, April 02, 2009 3:47 PM
To: Jeannette Hook
Subject: Florentine Street storm drain

I did look at the file and recall that the storm drain is outside our jurisdiction. But the project was bundled with another that was within our jurisdiction. I forget what the second part was, but there's no Corps permit necessary for the storm drain work.



Kelley Reid
U.S. Army Corps Eng.
601 Startare Dr, Slip 14

Eureka, CA 95501 

CITY OF YREKA
DEPARTMENT OF PUBLIC WORKS

701 FOURTH STREET, YREKA, CA 96097

PHONE: (530) 841-2386 FAX (530) 842-4836

LETTER OF TRANSMITTAL

To: Don Flickinger
National Marine Fisheries Service
c/o US Fish and Wildlife
1829 S. Oregon St.
Yreka, CA 96097

Date: 2-10-09

Project: Florentine Street Storm Drain & Young parcel restoration

Please find:

- Engineer's Estimates
- Submittals
- Specifications
- Prints
- Tracings
- Memorandum
- Addenda
- Copy of Letter
- other

Subject: ACOE and NCRWQCB permit applications

Remarks: Hi Flick-

I'm enclosing copies of the 401 & 404 permit applications for your reference.

I did leave in the possibility of a temporary stream crossing like we did at the Oberlin site, but I expect to try to avoid needing to use it. This will depend somewhat on the equipment needed to complete work and the final design plans.

Please call if you have any questions. Thanks.

For your:

- Checking
- Approval
- Information
- File
- Distribution
- Return by
- Use
- Comments
- Review

As:

- Requested
- Promised
- No exception taken
- Make correction noted
- Rejected
-

From: Jeannette Hook, Confidential Administrative Assistant

Copies to: Steve Neill, Director of Public Works



City of Yreka
701 Fourth Street • Yreka, CA 96097
(530) 841-2386 • FAX (530) 842-4836



mailed 2/10

February 9, 2009

Kelley Reid
Army Corps of Engineers
Eureka Field Office
PO Box 4863
Eureka, CA 95502

Request for Permit Amendment:
ACOE File #2008-00086 (Storm Drain Improvements) or 2007-400463 (Yreka Creek)

Dear Mr. Reid:

The City would like to request, if appropriate, an amendment to an existing permit to facilitate installation of a new storm drain outlet on the west side of I-5 at the easterly extension of Florentine Street. This installation was considered within the Stormwater Attenuation Project Initial Study/Mitigated Negative Declaration dated June 13, 2007 (previously provided to your office).

The existing Florentine Street storm drain outlet crosses beneath I-5 and discharges into the recently completed Yreka Creek Restoration Project where the restoration work created an open bioswale channel to convey and filter stormflow before it enters Yreka Creek. The existing storm drain pipe is undersized which allows excess storm runoff to sheet flow north on Main Street/Highway 3 before it is conveyed to Yreka Creek at various locations.

As we discussed when we provided you some pictures in April 2007, the City has been partnering with CalTrans regarding the installation of a new and larger storm drain pipe at the easterly extension of Florentine Street to more effectively handle storm flows. CalTrans is contributing funds to install a new pipe across Main Street, but these funds have an expenditure deadline of June 30, 2009. Therefore, we have an urgent need for your assistance. We don't believe the proposed outlet itself is in an ACOE jurisdictional area due to the distance from the channel of Yreka Creek but we have obtained a wetland delineation prepared by a qualified consultant. We request your review of this delineation to confirm whether the storm drain outlet (phase 1) and the phase 2 work is outside of ACOE jurisdiction. When we reviewed this location with National Marine Fisheries Service in February 2007, we discussed an additional opportunity to outlet this flow into a bioswale on property owned by the City which would require some minor excavation and topographic recontouring in jurisdictional areas.

The proposed new storm drain pipe will reach the existing grade and daylight approximately 150' south of Yreka Creek on the west side of the I-5 overcrossing. The proposed outlet would be installed in an area of non-native fill adjacent to an area where the flow from an existing small drainpipe is conveyed

towards Yreka Creek. If permits are required, we hope you agree that this work is similar enough to existing permitted work that we can to amend one of the prior permits in order to complete the storm drain construction before June 30, 2009. The proposed work is scheduled in two phases, each of which is similar to one of the permits listed. Our current funding is for the storm drain pipe installation, while the proposed restoration activities have been submitted for current grant funding and is awaiting notification of funding award.

We enclose a summary of the proposed activities and will submit draft permit applications so you have the available information. We respectfully request your review and advice for how best to proceed in order to complete the project within the current funding deadline.

Sincerely,



Steven D. Neill, P.E.
Director of Public Works

S:\Steve's\Storm Drains\Florentine Drain\Permit Applications\Request for Permit Amendment.ACDE 2-9-09.docx

Cc: Jeannette Hook, Administrative Assistant
Don Flickinger, National Marine Fisheries Service

Enclosures

404/NWP application with location maps
Wetland Delineation
Florentine Street storm drain improvement plans
Mitigated Negative Declaration
Young parcel improvements concept diagram
401/WDR application

EXHIBIT C
YREKA CREEK WETLAND DELINEATION REPORT

REVISED WETLAND DELINEATION REPORT
CITY OF YREKA STORMWATER ATTENUATION
AND FLOODPLAIN RESTORATION PROJECT

City of Yreka, CA
April 20, 2007



Prepared by

PMC
10461 Old Placerville Road, Suite 110
Sacramento, CA 95827

Prepared for

City of Yreka, Siskiyou County, California
701 Fourth Street
City of Yreka, CA 96097

REVISED WETLAND DELINEATION REPORT
CITY OF YREKA
STORMWATER ATTENUATION AND
FLOODPLAIN RESTORATION PROJECT

Yreka, CA
April 20, 2007

Prepared by



PMC
10461 Old Placerville Road, Suite 110
Sacramento, CA 95827
(916) 361-8384
(916) 361-1574 *fax*

Prepared for

City of Yreka
701 Fourth Street
Yreka, CA 96097

SECTIONS

1.0 Summary 1

2.0 Project Location 2

3.0 Environmental Setting..... 2

4.0 Delineation Methods 6

5.0 Delineation Results 7

6.0 Reference.....11

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Figure 2 Project Location Map: Greenhorn Creek Restoration Project

Figure 2a Project Location Map: Proposed Retention Basins

Figure 2b Project Location Map: Greenhorn Reservoir Dredging Project

Figure 2c Project Location Map: Yreka Creek Restoration Area

Figure 3 Delineation of Waters of the US: Greenhorn Creek

Figure 3a Delineation of Waters of the US: Terrace Basin, City of Yreka

Figure 3b Delineation of Waters of the US: Humbug Basin, City of Yreka

Figure 3c Delineation of Waters of the US: Shasta Avenue Basin, City of Yreka

Figure 3d Delineation of Waters of the US: Greenhorn Reservoir

Figure 3e Delineation of Waters of the US: Yreka Creek Restoration Area

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Table 1 Project Area Acreage Summary

Table 2 Waters of the US Types Acreage Summary

APPENDICES

Appendix A Plants and Habitats of the City of Yreka Stormwater Project

Appendix B Routine Wetland Determination Forms

PROJECT: CITY OF YREKA STORMWATER ATTENUATION AND FLOODPLAIN RESTORATION PROJECT

APPLICANT: CITY OF YREKA

PREPARED BY: PMC

DATE: APRIL 20, 2007

1.0 SUMMARY

On behalf of the City of Yreka, PMC has conducted a delineation of “waters of the United States (US)” occurring within the Biological Study Area (BSA). The BSA includes three potential stormwater detention basin sites, Greenhorn Reservoir, and two floodplain restoration sites along Greenhorn and Yreka Creeks. The project is known as the City of Yreka Stormwater Attenuation and Floodplain Restoration project. This phase of the Stormwater Project involves three components:

- 1) **Stormwater Attenuation Detention Basins:** Installation of three upslope detention basins, to be located along tributaries to Yreka Creek. Detention basins will be located at Wetzel Way near Northridge Drive (Terrace Basin), Shasta Avenue near French Street (Shasta Avenue Basin), and at Little Humbug Creek near Lane Street (Humbug Basin). Detention basins will be designed to accommodate a 100-year rain event in an effort to attenuate peak storm runoff.
- 2) **Excavation of Greenhorn Reservoir:** Excavation of Greenhorn Reservoir to restore and increase water storage capacity in the reservoir. This portion of the project is located within the existing City recreational facility, Greenhorn Park.
- 3) **Floodplain Restoration - Yreka Creek:** **(a) Northern Portion:** Fill removal and floodplain restoration along 650 feet of Yreka Creek and approximately 4 acres of City owned property located near Interstate 5 and the Yreka Railroad. **(b) Southern Portion:** Fill removal and floodplain restoration along approximately 2,100 feet of Yreka Creek and approximately 15 acres of property that is currently owned by the City, in agreement with the City, or in the process of forming agreements with the City of Yreka for such restoration work. **Greenhorn Creek:** Fill removal and floodplain restoration along almost one mile of Greenhorn Creek above Greenhorn Reservoir.

PMC biologists conducted initial site visits to all sites within the BSA on October 17, 2006 and January 25, 2007. PMC biologists then systematically delineated all “waters of the US,” including wetlands within the BSA on February 13, 2007. All potential “waters of the US,” including wetlands were delineated within part of the Terrace Basin (formerly Wetzel) site, Little Humbug Creek and associated floodplain, the unnamed drainage within the Shasta Ave Basin site, and Yreka Creek. Greenhorn Reservoir and Greenhorn Creek were both surveyed for the presence of “waters of the US,” including wetlands and the results of those surveys and the delineation of “waters of the US,” including wetlands is included in this revised wetland delineation report.

This delineation of “waters of the US” is subject to verification by the US Army Corps of Engineers (ACOE). PMC advises all parties to treat the information contained herein as preliminary until the ACOE provides written verification of the boundaries of their jurisdiction.

2.0 PROJECT LOCATION

- a) **Project Location:** The five project sites are located within the City of Yreka, along Interstate 5 in northern California, about 20 miles south of the Oregon Border (**Figure 1**). The project sites are located on the Yreka 7.5 minute quadrangle, portions of section 21, 22, 27, and 33, Township 45N, Range 07W MDB&M.
- b) **Acreage of Delineation Study Area:** The study areas (BSA’s) encompass a total of 194.81 acres, including 11.55 acres in the Humbug Basin, 2.23 acres in the Wetzel Basin, 8.33 acres in the Shasta Avenue Basin, and 31.12 acres along Yreka Creek.
- c) **Proximity to Major Highways and Streets:** The City of Yreka is located along Interstate 5 near the junction with State Highway 163. The proposed detention basins are located along the west side of the city near the following intersections: Northridge Drive and Terrace Road (Wetzel Basin), Green Heron Drive and Lane Street (Humbug Basin) and Shasta Avenue and French Street (Shasta Ave. Basin). The floodplain restoration sites are situated along Greenhorn Creek at Greenhorn Reservoir and along Yreka Creek north of Oberlin Road (**Figures 2a-2c**)
- d) **USGS Hydrological Unit:** City of Yreka is located within the Shasta River watershed (USGS Cataloging Unit 18010207).

3.0 ENVIRONMENTAL SETTING

- a) **Current and Historical Land Uses:** The City of Yreka is developed along the Interstate 5 corridor stretching for nearly five (5) miles north and south and two (2) miles east and west. The City limits contain approximately ten (10) square miles, comprised of a variety of land uses. The majority of land within the City of Yreka is developed, including such uses as residential, industrial, and commercial. Open space is approximately 14 percent of the land within the City limits (City of Yreka 2003).

The primary managed resources in the rural area surrounding Yreka are timber and agricultural production. While these activities are on the periphery of community, neither of these activities significantly affects land use within the community. Historically mining and timber harvest were important resource-related economic activities that resulted in the founding of the city (City of Yreka 2003).

b) **Elevation/Topography:** The proposed retention basins are along the base of the mountains, hills and ridges that surround the City of Yreka. The restoration sites are along the gently sloping floodplains of Greenhorn and Yreka Creeks. The elevation of project sites ranges from about 2650 feet along the Yreka Creek restoration site to approximately 2850 feet at the Wetzel Basin retention basin site.

c) **Climate:**

Type: The climate of the City of Yreka is considered to be that of high desert. (WRCC 2006).

Precipitation: The average precipitation for the area is 55 inches, with an average of 2.4 inches as snow (WRCC 2006).

Air Temperature: The 30-year average annual total precipitation in Yreka is 19.59 inches, including 18.10 inches of snow (WRCC).

d) **Hydrology:** Streams in the vicinity of Yreka flow into Yreka Creek. Yreka Creek flows north into the Shasta River, and later to the Klamath River. The City of Yreka is located within the Klamath River watershed.

e) **Soils:** The National Cooperative Soil Survey for the Yreka Area, California (USDA 2007) identifies four mapped soils units within the study area:

- **145 Dumps:** The Dumps series consist of smoothed or uneven accumulations or piles of waste rock and general refuse, typified at this site by surface areas covered with stones and boulders.
- **146 Duzel Gravelly Loam, 5 to 9 percent slopes:** The Duzel series consists of moderately deep, well drained soils that formed in material weathered from metamorphic rocks. Duzel soils are on hills and mountainous uplands.
- **206 Pit Clay:** The Pit series consists of very deep, poorly drained soils that formed in fine-textured alluvium weathered from extrusive and basic igneous rocks. Pit soils are on flood plains and in basins.
- **230 Stoner Gravelly Sandy Loam, 2 to 5 percent slopes:** The Stoner series consists of very deep, well drained soils that formed in alluvium from mixed metamorphic rocks. Stoner soils are on terraces and alluvial fans.

Most of the soils of the Yreka region are derived from sedimentary rocks and metasedimentary rocks including chert, conglomerate, limestone, schist, and wacke.

f) **Plant Communities:** This region is within the Klamath Range (KR) subregion of the Northwestern California geographic subdivision of California (Hickman, ed. 1993) and contains several distinct habitat types containing several plant communities. A comprehensive list of plants and habitats documented within the BSA is located in **Appendix A**. The plant communities in the BSA were

characterized using the California Wildlife Habitat Relationships (WHR) system (Mayer and Laudenslayer 1988). The terrestrial habitats in the area of the detention basins and the proposed restoration sites include mixed chaparral, montane hardwood, perennial grassland, annual grassland, montane riparian and wet meadow.

MIXED CHAPARRAL

This thick, shrubby vegetation type dominated many of the well drained slopes within the project area. Mixed chaparral was a major component of the Terrace Basin project site, and was also observed within or adjacent to the Greenhorn Reservoir and Yreka Creek sites. The dominant species of this vegetation type include wedgeleaf ceanothus (*Ceanothus cuneatus*), birchleaf mountain mahogany (*Cercocarpus betuloides*), and common manzanita (*Arctostaphylos manzanita*). Additional shrubby species in the chaparral include young Oregon oaks (*Quercus garryana*), western juniper (*Juniperus occidentalis*), skunkbrush (*Rhus trilobata*), and rubber rabbitbrush (*Chrysothamnus nauseosus*).

MONTANE HARDWOOD (OREGON OAK WOODLAND)

The Yreka region was dominated by Jeffrey pine forest on the upper slopes, mixed chaparral on the lower slopes, Great Basin shrubs and grasses along the valley bottom and riparian forests along the creeks. Montane hardwood woodlands dominated by deciduous trees were uncommon. A small patch of Oregon oak woodland was found near the western end of the Terrace Basin project site. Growing on a small knoll near the western end of the project site, the woodland patch was defined by a stand of 20'-30' Oregon oaks with a few shrubs, annual grasses and herbs in the understory.

PERENNIAL GRASSLAND (GREAT BASIN GRASSLAND)

The Great Basin perennial grassland occurred on the flat upland bench east of Yreka Creek. This area was dominated by clumps of perennial grasses (*Elymus multisetus*, *Achnatherum sp*, others), with rubber rabbitbrush and yellow star thistle (*Centaurea solstitialis*). Numerous other species including woad (*Isatis tinctoria*), tarplant (*unknown species*), California poppy (*Eschscholzia californica*), and gumplant (*Grindelia*) were mixed in between the dominant species.

PERENNIAL GRASSLAND

Perennial grasses dominate the flat uplands of the Shasta Avenue Basin project site. From a distance, the entire project site appeared to be of the same herbaceous vegetation. However, upon walking the site, two distinct vegetation types were noted. The drier, better drained soils of this site were dominated by a uniform stand of tall perennial grasses interspersed with common hedge parsley (*Torilis arvensis*), tarplant, star thistle, chicory (*Cichorium intybus*) and curly dock (*Rumex crispus*). Adjacent wet soils provide habitat for wet meadow vegetation, discussed below.

ANNUAL GRASSLAND

The gravelly soils of the Humbug project site were dominated by various annual plants including cheat grass (*Bromus tectorum*), star thistle, woad, and tarplant. Although this was the only site dominated by annual species, openings within the shrub and tree dominated habitats of Terrace Basin site included significant inclusions of annual species such as these.

MONTANE RIPARIAN (RIPARIAN FOREST)

Montane riparian forest habitats in the study area occur as narrow to wide, open to dense stands of tall (up to 50' or taller) broadleaved deciduous trees interspersed with shorter shrubs along Little Humbug Creek and Yreka Creek. The montane riparian habitat type is diverse, and its species composition varies. Trees often form a complete canopy over the creek and dominate the montane riparian habitat. Common tree species within the BSA, include several species of willow (*Salix laevigata*, *S. lutea* and *S. exigua*), Oregon ash (*Fraxinus latifolia*), white alder (*Alnus rhombifolia*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), Fremont cottonwood (*P. fremontii*), big-leaved maple (*Acer macrophyllum*) and black locust (*Robinia pseudoacacia*). The understory was similarly diverse and included numerous shrubs and vines including rose (*Rosa* spp.), skunkbrush, American dogwood (*Cornus sericea*), western choke-cherry (*Prunus virginiana* var. *demissa*), Pennsylvania blackberry (*Rubus pensilvanicus*) and virgin's bower (*Clematis ligusticifolia*). A variety of herbaceous species were also encountered. Montane riparian forest vegetation was found at the Humbug Basin and Yreka Creek project sites.

MONTANE RIPARIAN (RIPARIAN SCRUB)

The montane riparian scrub vegetation type is found at the Terrace Basin, Humbug Basin, and Yreka Creek project sites. The montane riparian scrub is typically shorter (10'-20' tall) and more dense with less understory than the montane riparian forest noted above. Often, this vegetation type consisted of a thick, willow dominated scrub found growing in thickets along drainages, around ponds, in openings of riparian forest, or around seeps. The various species of willow (*Salix* spp.) found in this habitat type were frequently found in association with Pennsylvania blackberry, rose, wild teasel (*Dipsacus fullonum*) and woolly mullein (*Verbascum thapsus*).

WET MEADOW (FRESHWATER MARSH)

A culvert to the west of the Shasta Avenue Basin project site provides enough water to support extensive mats of Mexican rush (*Juncus mexicanus*), sedge (*Carex* sp.), curly dock and perennial grasses on wet soils. Although much of the Shasta Avenue Basin project site is upland in nature, supporting a perennial grassland typical of drier soils, the culvert drainage, topography, and soils of the Shasta Avenue Basin site support a significant wet meadow/marsh. In addition to the typical wetland species, the meadow also supported bull thistle (*Cirsium vulgare*), poison hemlock (*Conium maculatum*), chicory (*Cichorium intybus*),

prickly lettuce (*Lactuca serriola*), and an unidentified mustard. This vegetation type was only encountered at the Shasta Avenue Basin project site.

4.0 DELINEATION METHODS

- a) **Technical Method:** The routine onsite determination was based on field observations of soil, vegetation, and hydrologic characteristics as defined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Three (3) three-parameter data points were characterized and documented within the study area. Wetland determination data forms for these data points are presented in **Appendix B**.
- b) **Date of Field Observations:** Greg Matuzak and Tim Nosal conducted the field observations on February 13, 2007.
- c) **Wetland Vegetation Indicator Status Reference:** *National List of Plant Species that Occur in Wetlands, California Region 0* (US Fish and Wildlife Service 1996).
- d) **Hydric Soil Method of Determination:** A standard Munsell® soil color chart was used to determine soil matrix and mottle colors.
- d) **Wetland Hydrology Method of Determination:** Indicators of depth and duration of soil saturation, ponding, drainage patterns, and the ordinary high water mark were observed in the field.
- e) **Definitions of “waters of the US”:**

Wet Meadow and Riparian Habitat: The term "wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. This definition is according to the following regulations: (33 CFR 328.3(b); 40 CFR 230.3(t)). In California, wetlands are commonly classified according to the length of time that an area is inundated or saturated by water or the types of plants and animals an area supports. For example, if an area is only saturated or inundated for part of the year it can be classified as a seasonal wetland. Likewise, areas that are inundated or saturated throughout the entire year may be referred to as permanent wetlands.

Stream Channels: Rivers and streams, including intermittent streams, are defined by the ACOE as “waters of the US” and the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters from which fish or shellfish are or could be taken and sold in interstate or foreign commerce is regulated. Therefore, Greenhorn Creek and Yreka Creek are streams that are regulated by the ACOE, which has jurisdiction over filling streams with an OHWM.

OHWL as defined by the ACOE means that lines on the shore established by the fluctuations of water and indicated by physical characteristics such as mark (Source: 33 CFR 328 and 33 CFR 329):

- a. a clear, natural line impressed on the bank;
 - b. shelving;
 - c. changes in the character of soil;
 - d. destruction of terrestrial vegetation;
 - e. the presence of litter and debris; or
 - f. other appropriate means that consider the characteristics of the surrounding areas.
- f) **Wetland Boundary Determination:** Wetland features were indicated by a clear transition between wetland vegetation and upland vegetation; however, in most cases vegetation did not dictate a clear boundary, so the presence/absence of hydric soils as determined from soil pits was used to determine the boundary. Both Greenhorn Creek and Yreka Creek were indicated by the presence of a bed and bank (usually an incised channel) and a clearly defined OHWM.
- g) **Mapping Technique:** The boundaries of the delineated features were mapped using a Trimble Global Positioning System (GPS) capable of sub-meter accuracy and then later plotted on a recent (2006) aerial photograph of the site. The GPS data were overlain onto a current aerial photograph to calculate acreages of each wetland feature.

5.0 DELINEATION RESULTS

- a) **Features Delineated:** Three types of “waters of the US” were identified within the BSA: stream channels, montane riparian (forest and scrub), and wet meadow. These three types were assessed in this delineation and have been mapped within the BSA’s. **Table 1** below provides an acreage summary of the types of “waters of the US” delineated within the BSA. All “waters of the US” mapped within the BSA, except for Greenhorn Reservoir and Creek, are included in delineation maps, which include each feature location and acreage detail (**Figure 3a-3e**).

TABLE 1
ACREAGE SUMMARY

Waters of the US Type	Acreage
Terrace Basin	
Non-jurisdictional Channel	0.00 acres
Humbug Basin	
Stream Channel	0.13 acres
Riparian Habitat	1.81 acres
Shasta Avenue Basin	
Wet Meadow	3.54 acres
Yreka Creek	
Stream Channel	4.19 acres
Greenhorn Reservoir	
Open Water	24.95 acres
Degraded Wetlands	2.88 acres
Greenhorn Creek Floodplain	
Degraded Wetlands	27 acres
TOTAL	64.5 acres

b) Characteristics of Delineated Areas :

1) Terrace Basin (Figure 3a): This northernmost of the project sites consists of a wide flat drainage area with chaparral covered sloped on either side. A large willow thicket dominates the western terminus of the project area and a small stand of willows was also found at the east end of the project site near where the drainage enters a culvert. Several species of trees found within these thickets include various willows such as narrowleaf willow (*Salix exigua*), red willow (*S. laevigata*), and yellow willow (*S. lutea*) in addition to cottonwood (*Populus sp.*) and western choke-cherry (*Prunus virginiana var. demissa*). Herbaceous species encountered in the understory include mugwort (*Artemisia douglasii*) and woolly mullein (*Verbascum thapsus*). This is considered a non-jurisdictional drainage due to the lack of a defined bed and bank and OHWM (**Figure 3a**).

2) Humbug Basin (Figure 3b): This proposed retention basin site was bordered on the north and east by residential development, to the south by pine and shrub covered slopes, and to the west by a berm and associated willow thicket. The site itself was a large gravelly flat with Little Humbug Creek along the south side. A seep associated with the aforementioned berm is found near the center of the project site. The flat gravelly area supported star thistle (*Centaurea solstitialis*), cheat grass (*Bromus tectorum*), woad (*Isatis tinctoria*) and occasional rubber rabbitbrush (*Chrysothamnus nauseosus*). The seep supported a willow thicket with a sparse herbaceous understory. Little Humbug Creek is a seasonal creek that supports a tall riparian forest/woodland with willows (narrowleaf, red, and yellow) in the canopy and

western choke-cherry, Pennsylvania blackberry (*Rubus pensilvanicus*), mugwort, wild teasel (*Dipsacus fullonum*) and woolly mullein underneath. A second berm at the east end of the gravelly area showed ponding, but no wetland vegetation. The wetlands were limited to the montane riparian (forest and scrub) habitat found along Little Humbug Creek and the seep. A total of 1.81 acres of montane riparian habitat and 0.13 acres of stream channel were delineated in this area.

- 3) **Shasta Avenue Basin (Figure 3c):** The southernmost of the three detention basin sites is located near the center of the City of Yreka. The Meadowlark basin site is a broad flat plain dominated by herbaceous vegetation. A drainage that originates along the west side feeds a large wet meadow along the north and east portions of this project area. From a culvert under Shasta Road, the drainage follows a poorly defined path along the north edge of the project site which then spreads out towards the east. Plants recorded in this habitat include perennial species such as Mexican rush (*Juncus mexicanus*) and sedge (*Carex sp.*) in addition to annual species including curly dock (*Rumex crispus*), bull thistle (*Cirsium vulgare*), poison hemlock (*Conium maculatum*), chicory (*Cichorium intybus*) and prickly lettuce (*Lactuca serriola*). A total of 3.54 acres of wet meadow were mapped at the Shasta Avenue Basin site.
- 4) **Greenhorn Reservoir (Figure 3d)** contains open water with a few small islands. The reservoir is surrounded by riparian wetland habitat; however, the area between Greenhorn Park and the reservoir contains some riparian wetland habitat and some non vegetated areas. A total of 24.95 acres of open water within the reservoir were delineated and 2.88 acres of degraded wetland habitat surround the reservoir.
- 5) **Yreka Creek Restoration Area (Figure 3e):** The general topography of the northern portion of the Yreka Creek Restoration Area was a flat, upland bench between a shrub and juniper covered slope and railroad ROW (out of project area) and a narrow riparian forest along the creek. The creek was bordered on the east side by a 6-foot high bank and by a relatively low floodplain on the west side.

The upland bench was dominated by a yellow star-thistle (*Centaurea solstitialis*) and perennial grass (*Achnatherum sp.*, *Elymus glaucus ssp. glaucus*, and *Elymus multisetus*) association with occasional rubber rabbitbrush. The riparian corridor was a narrow 40-foot to 50-foot tall forest with big-leaf maple (*Acer macrophyllum*), Oregon ash (*Fraxinus latifolia*), willow (*Salix spp.*) and black locust (*Robinia pseudoacacia*); however, this habitat was found within the OHWM of the stream channel and did not extend outside of the OHWM or bank of the creek. The tall trees had an interlocking canopy, and shrubs and clumps of perennial grasses occurred in the understory. A total of 4.19 acres of stream channel were delineated along the creek.

Table 2
Acreage Summary of Each Waters of the US Type

Waters of the US Type	Acreage
Wet Meadow	3.54 acres
Stream Channel	4.32 acres
Riparian Habitat	1.81 acres
Degraded Wetland	29.88
Open Water	24.95 acres
Total	64.5 acres

6.0 REFERENCES

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1*. US Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- GlobeXplorer. 2006. Aerial photograph of the study area.
- Hickman, J. ed. 1993. *The Jepson Manual: Higher Plants of California*. UC Press
- Mayer, Kenneth E. and William F. Laudenslayer, Jr. 1988. *A Guide to Wildlife Habitats of California*. State of California, Resources Agency, Department of Fish and Game. Sacramento, CA. 166 pp.
- US Department of Agriculture (USDA). 2007. *National Cooperative Soil Survey*: (online) <http://websoilsurvey.nrcs.usda.gov/app/> Natural Resources Conservation Service.
- Western Regional Climate Center (WRCC). 2007. *California Climate Data Archive for City of Yreka*. <http://www.calclim.dri.edu/ccda/ncacoop.html> California Energy Commission. February 6.
- US Fish and Wildlife Service. 1996. *National List of Vascular Plant Species that Occur in Wetlands: California (Region 0)*. Draft Revision. St. Petersburg, Florida.

FIGURES

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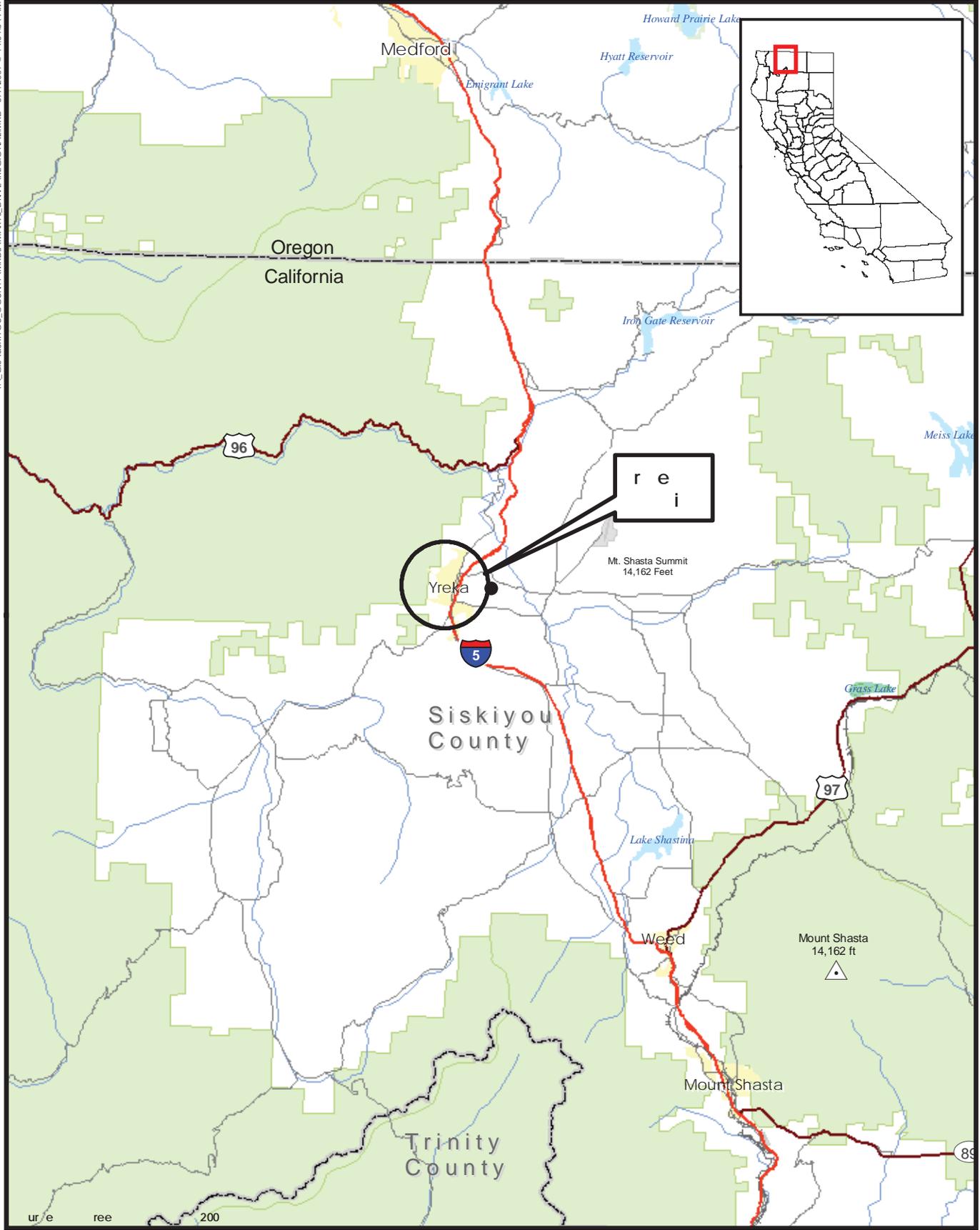


Figure
Regional Location Map
PMC

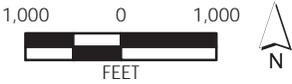
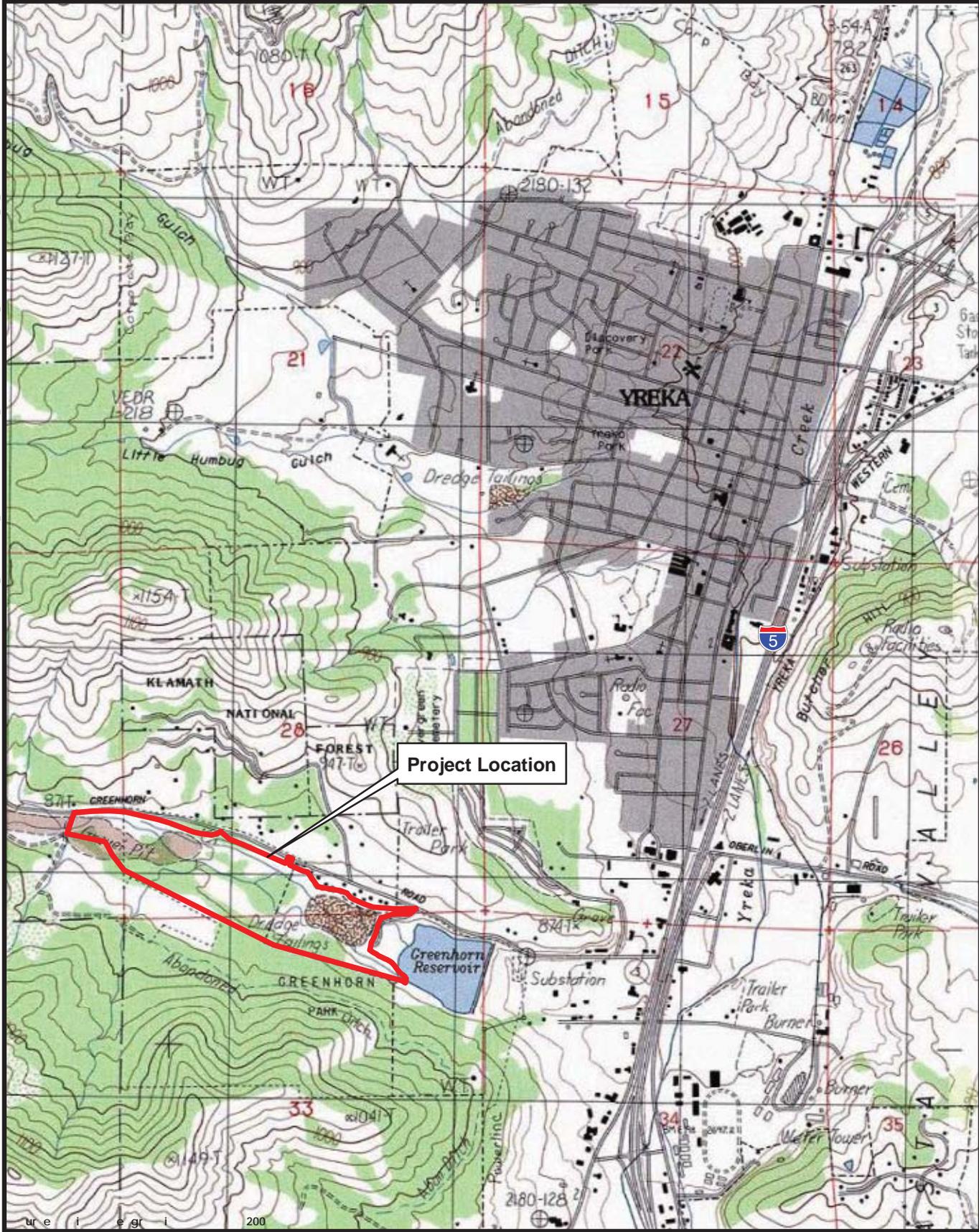


Figure 2
Project Location Map:
Greenhorn Creek Restoration Project
PMC

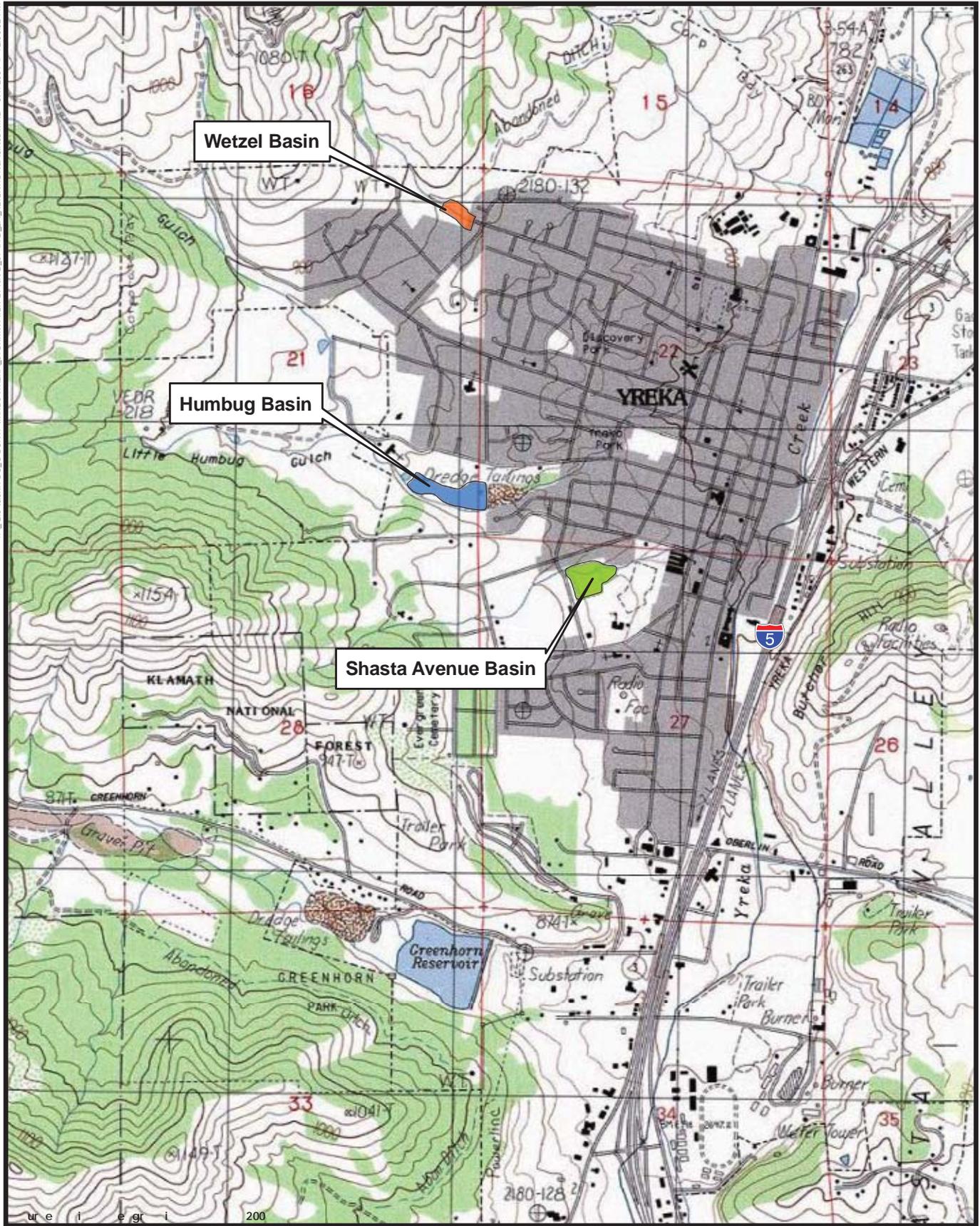


Figure 2
Project Location Map:
Proposed Retention Basins
PMC

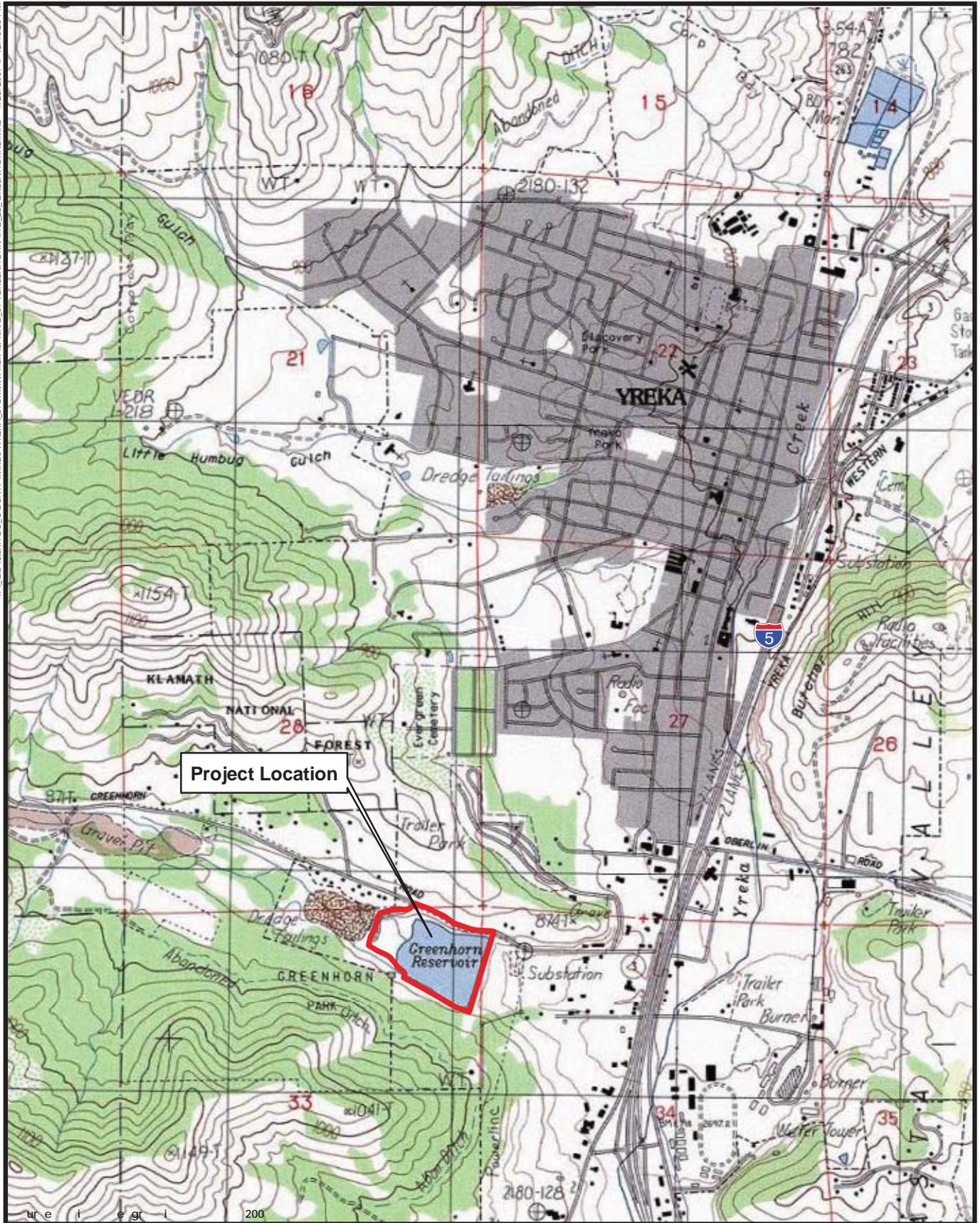


Figure 2b
Project Location Map:
Greenhorn Reservoir Dredging Project
PMC

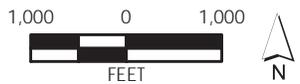
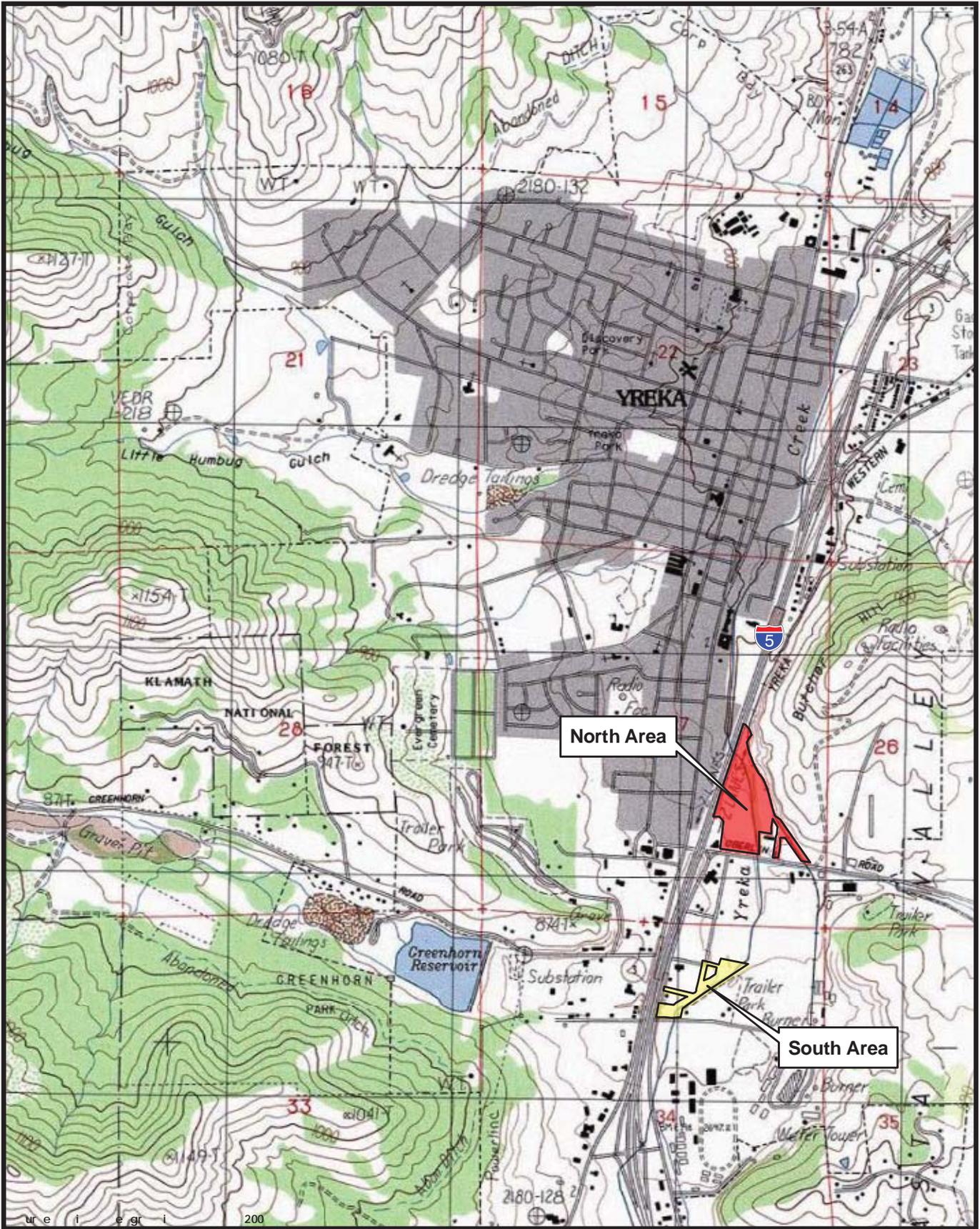


Figure 2
Project Location Map:
Yreka Creek Restoration Area
PMC



Source: Data from W100, 100-foot grid & LiDAR, PMCA 2017

Note: Total area of existing streams, ponds, and degraded wetlands = 27.0 acres

Legend

- Creek
- Degraded Wetland
- Project Study Area (126.87 acres)

Soil Types

- UG, UGAL, UGALC, UGALD, UGALD1, UGALD2, UGALD3, UGALD4, UGALD5, UGALD6, UGALD7, UGALD8, UGALD9, UGALD10, UGALD11, UGALD12, UGALD13, UGALD14, UGALD15, UGALD16, UGALD17, UGALD18, UGALD19, UGALD20, UGALD21, UGALD22, UGALD23, UGALD24, UGALD25, UGALD26, UGALD27, UGALD28, UGALD29, UGALD30, UGALD31, UGALD32, UGALD33, UGALD34, UGALD35, UGALD36, UGALD37, UGALD38, UGALD39, UGALD40, UGALD41, UGALD42, UGALD43, UGALD44, UGALD45, UGALD46, UGALD47, UGALD48, UGALD49, UGALD50, UGALD51, UGALD52, UGALD53, UGALD54, UGALD55, UGALD56, UGALD57, UGALD58, UGALD59, UGALD60, UGALD61, UGALD62, UGALD63, UGALD64, UGALD65, UGALD66, UGALD67, UGALD68, UGALD69, UGALD70, UGALD71, UGALD72, UGALD73, UGALD74, UGALD75, UGALD76, UGALD77, UGALD78, UGALD79, UGALD80, UGALD81, UGALD82, UGALD83, UGALD84, UGALD85, UGALD86, UGALD87, UGALD88, UGALD89, UGALD90, UGALD91, UGALD92, UGALD93, UGALD94, UGALD95, UGALD96, UGALD97, UGALD98, UGALD99, UGALD100

Scale & Projection

SCALE: 1" = 200'

TAKEN FROM: SEC. 28, 29, 32, 33

PMCA - 10050

UTM Zone 10 NAD 83

Figure 3: Delineation of Waters of the U.S.

Greenhorn Creek

Drafted By: Bob Noyes

Delineated By: Greg Matuzak

PMCA

Date: April 26, 2007



Figure 3a: Delineation of Waters of the U.S.
Terrace Basin, City of Yreka

Delineated By: Greg Matuzak
Date: March 9, 2007

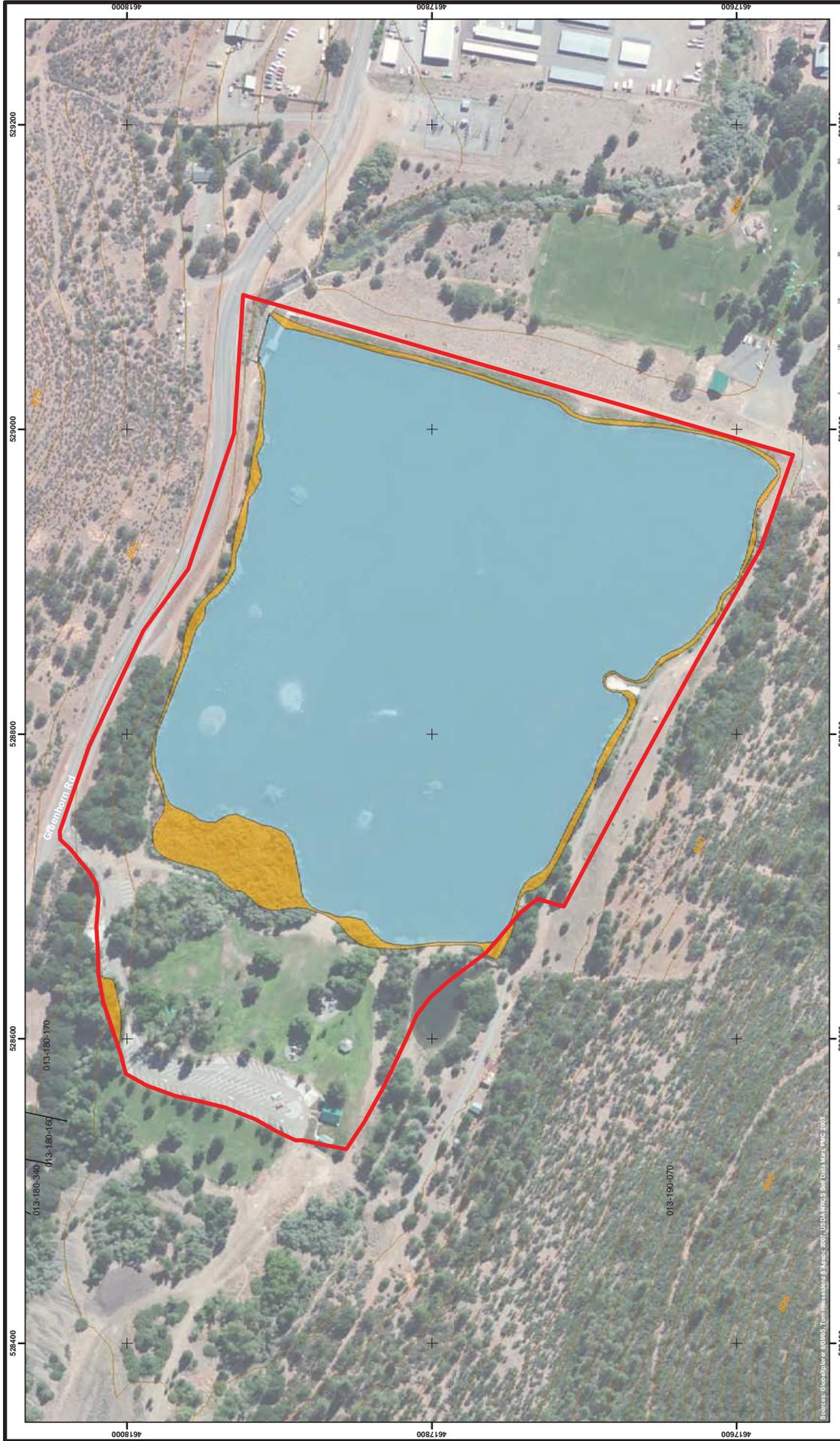
Scale: 1" = 100'
Scale Contour: 100'
NAD 83
UTM Zone 10 NAD 83

Soil Types

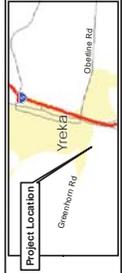
- 146 DUZEL GRAVELLY LOAM S TO 8 PERCENT SLOPES
- 148 DUZEL-HILSON-FACEY COMPLEX, 15 TO 60 PERCENT SLOPES

Symbol	Feature	Length (ft)	Acres
	Biological Study Area	N/A	2.23
	Data Point	N/A	2.23
	Contours (5 Meter Intervals)		
	Parcels		

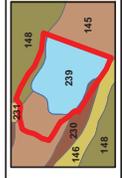
Note: No Waters of the U.S. are present on this site.



Sources: Geobase, 10/2005; ComPlan/Storm & Drain/2007; USDA/NRCS Soil Data; MapInfo 2007



- Contour (5 Meter Intervals)
- Project Study Area (38.61 acres)
- Degraded Wetlands (2.88 acres)
- Water (24.95 acres)



- Soil Types**
- 145 DUMPS
 - 146 DUEZ GRAVELLY CLAY TO PERCENT SLOPES
 - 148 DUEZ GRAVELLY CLAY TO PERCENT SLOPES
 - 195 STONER GRAVELLY SANDY CLAY TO PERCENT SLOPES
 - 231 STONER GRAVELLY SANDY CLAY TO 15 PERCENT SLOPES
 - 230 WATER

Figure 3d: Delineation of Waters of the U.S.
Greenhorn Reservoir

Delineated By: Greg Maruzak
Drafted By: Bob Noyes
Date: April 25, 2007

SCALE: 1" = 200'
DATE: 10/15/2012
PROJECT: 10050
TERRITORY: SEC. 33, 34
UTM Zone: 10NAD83



Appendix A

PLANTS AND HABITATS OF THE
CITY OF YREKA STORMWATER PROJECT

APPENDIX A:

PLANTS AND HABITATS OF THE
CITY OF YREKA STORMWATER PROJECT
Taxonomy follows Hickman, 1994

SCIENTIFIC NAME	COMMON NAME	HABITATS	REG IND
<i>Achnatherum sp.</i>	Needlegrass	1Great Basin Grassland	NI
<i>Brassicaceae</i>	Mustard	1Great Basin Grassland	NI
<i>Centaurea solstitialis</i>	Yellow star thistle	1Great Basin Grassland	NI
<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	1Great Basin Grassland	NI
<i>Elymus glaucus ssp. glaucus</i>	Blue wild-rye	1Great Basin Grassland	FACU
<i>Elymus multisetus</i>	Big squirreltail	1Great Basin Grassland	FACU
<i>Eriogonum nudum</i>	Naked-stemmed buckwheat	1Great Basin Grassland	NI
<i>Eriophyllum lanatum</i>	Wooly sunflower	1Great Basin Grassland	NI
<i>Eschscholzia californica</i>	California poppy	1Great Basin Grassland	NI
<i>Grindelia nana (c.f.)</i>	Gumplant	1Great Basin Grassland	FACU*
<i>Hirschfeldia incana</i>	Short-pod mustard	1Great Basin Grassland	NI
<i>Holcus lanatus</i>	Velvet grass	1Great Basin Grassland	FAC
<i>Iris sp.</i>	Bearded iris	1Great Basin Grassland	NI
<i>Isatis tinctoria</i>	Woad	1Great Basin Grassland	NI
<i>Rhamnus purshiana</i>	Cascara	1Great Basin Grassland	NI
<i>Ribes sp. 1</i>	Gooseberry	1Great Basin Grassland	NI
<i>Ribes sp. 2</i>	Gooseberry	1Great Basin Grassland	NI
<i>Tarplant</i>	Tarplant	1Great Basin Grassland	NI
<i>Acer macrophyllum</i>	Big-leaf maple	1Montane Riparian Forest	FAC
<i>Alnus rhombifolia</i>	White alder	1Montane Riparian Forest	FACW
<i>Ambrosia psilostachya</i>	Western ragweed	1Montane Riparian Forest	FAC
<i>Artemisia douglasii</i>	Mugwort	1Montane Riparian Forest	FACW
<i>Berberis aquifolium var. aquifolium</i>	Oregon grape	1Montane Riparian Forest	NI
<i>Bromus sp.</i>	Brome	1Montane Riparian Forest	NI
<i>Cardaria pubescens</i>	Whitetop	1Montane Riparian Forest	NI
<i>Cercocarpus betuloides</i>	Birch-leaf mountain mahogany	1Montane Riparian Forest	NI
<i>Cichorium intybus</i>	Chicory	1Montane Riparian Forest	NI
<i>Clematis ligusticifolia</i>	Virgin's-bower	1Montane Riparian Forest	FAC
<i>Conium maculatum</i>	Poison hemlock	1Montane Riparian Forest	FACW
<i>Dipsacus fullonum</i>	Wild teasel	1Montane Riparian Forest	NI
<i>Euphorbia lathyris</i>	Caper spurge	1Montane Riparian Forest	NI
<i>Fescue sp. 2</i>	Fescue	1Montane Riparian Forest	NI
<i>Festuca sp. 1</i>	Fescue	1Montane Riparian Forest	NI
<i>Fraxinus latifolia</i>	Oregon ash	1Montane Riparian Forest	FACW
<i>Hirschfeldia incana</i>	Short-pod mustard	1Montane Riparian Forest	NI
<i>Leymus triticoides</i>	Alkali ryegrass	1Montane Riparian Forest	FAC+
<i>Mentha spicata var. spicata</i>	Spearmint	1Montane Riparian Forest	OBL
<i>Platanus racemosa</i>	California sycamore	1Montane Riparian Forest	FACW
<i>Populus balsamifera ssp. trichocarpa</i>	Black cottonwood	1Montane Riparian Forest	FACW
<i>Prunus cerasifera</i>	Cherry-plum	1Montane Riparian Forest	NI
<i>Prunus virginiana var. demissa</i>	Western choke-cherry	1Montane Riparian Forest	FAC-
<i>Rhus trilobata</i>	Skunkbrush	1Montane Riparian Forest	NI
<i>Robinia pseudoacacia</i>	Black locust	1Montane Riparian Forest	FAC*
<i>Rosa californica</i>	California rose	1Montane Riparian Forest	FAC+
<i>Rosa woodsii</i>	Interior rose	1Montane Riparian Forest	FAC-
<i>Rubus pensilvanicus</i>	Pennsylvania blackberry	1Montane Riparian Forest	FACW*
<i>Rumex crispus</i>	Curly dock	1Montane Riparian Forest	FACW-
<i>Salix exigua</i>	Narrowleaf willow	1Montane Riparian Forest	OBL
<i>Salix laevigata</i>	Red willow	1Montane Riparian Forest	FACW
<i>Salix lutea</i>	Yellow willow	1Montane Riparian Forest	OBL
<i>Saponaria officinalis</i>	Bouncing-bet	1Montane Riparian Forest	FACU

SCIENTIFIC NAME	COMMON NAME	HABITATS	REG IND
<i>Urtica dioica ssp holosericea</i>	Hoary creek nettle	1Montane Riparian Forest	FACW
<i>Verbascum thapsus</i>	Wooly mullein	1Montane Riparian Forest	NI
<i>Bromus diandrus</i>	Ripgut brome	2Annual grassland	NI
<i>Bromus hordeaceus</i>	Soft chess brome	2Annual grassland	FACU-
<i>Centaurea solstitialis</i>	Yellow star thistle	2Annual grassland	NI
<i>Elymus glaucus ssp. glaucus</i>	Blue wild-rye	2Annual grassland	FACU
<i>Elymus multisetus</i>	Big squirreltail	2Annual grassland	NI
<i>Isatis tinctoria</i>	Woad	2Annual grassland	NI
<i>Phacelia sp.</i>	Phacelia	2Annual grassland	NI
<i>Rumex sp.</i>	Dock	2Annual grassland	NI
<i>Taenatherum caput-medusae</i>	Medusa head	2Annual grassland	NI
<i>Arctostaphylos manzanita</i>	Common manzanita	2Mixed chaparral	NI
<i>Ceanothus cuneatus</i>	Wedgeleaf ceanothus	2Mixed chaparral	NI
<i>Cercocarpus betuloides</i>	Birch-leaf mountain mahogany	2Mixed chaparral	NI
<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	2Mixed chaparral	NI
<i>Juniperus occidentalis</i>	Western juniper	2Mixed chaparral	NI
<i>Pinus jeffreyi</i>	Jeffrey pine	2Mixed chaparral	NI
<i>Rhus trilobata</i>	Skunkbrush	2Mixed chaparral	NI
<i>Ribes sp. 1</i>	Gooseberry	2Mixed chaparral	NI
<i>Rosa spithamea (c.f.)</i>	Ground rose	2Mixed chaparral	NI
<i>Rubus pensilvanicus</i>	Pennsylvania blackberry	2Mixed chaparral	FACW*
<i>Torilis arvensis</i>	Common hedge parsley	2Mixed chaparral	NI
<i>Berberis aquifolium var. aquifolium</i>	Oregon grape	2Montane Hardwood	NI
<i>Lactuca serriola</i>	Prickly lettuce	2Montane Hardwood	FAC
<i>Quercus garryana</i>	Oregon oak	2Montane Hardwood	NI
<i>Artemisia douglasii</i>	Mugwort	2Montane Riparian Scrub	FACW
<i>Populus sp.</i>	Cottonwood	2Montane Riparian Scrub	FACW
<i>Prunus virginiana var. demissa</i>	Western choke-cherry	2Montane Riparian Scrub	FAC-
<i>Salix exigua</i>	Narrowleaf willow	2Montane Riparian Scrub	OBL
<i>Salix laevigata</i>	Red willow	2Montane Riparian Scrub	FACW
<i>Salix lutea</i>	Yellow willow	2Montane Riparian Scrub	OBL
<i>Verbascum thapsus</i>	Wooly mullein	2Montane Riparian Scrub	NI
<i>Berberis aquifolium var. aquifolium</i>	Oregon grape	3Annual grassland	NI
<i>Bromus tectorum</i>	Cheat grass	3Annual grassland	NI
<i>Centaurea solstitialis</i>	Yellow star thistle	3Annual grassland	NI
<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	3Annual grassland	NI
<i>Elytrigia intermedia ssp. intermedia</i>	Intermediate wheatgrass	3Annual grassland	NI
<i>Epilobium sp.</i>	Willowherb	3Annual grassland	NI
<i>Eriogonum nudum</i>	Naked-stemmed buckwheat	3Annual grassland	NI
<i>Eriogonum sp.</i>	Annual buckwheat	3Annual grassland	NI
<i>Isatis tinctoria</i>	Woad	3Annual grassland	NI
<i>Juniperus occidentalis</i>	Western juniper	3Annual grassland	NI
<i>Rumex crispus</i>	Curly dock	3Annual grassland	FACW-
<i>Salsola tragus</i>	Russian thistle	3Annual grassland	FACU
<i>Taenatherum caput-medusae</i>	Medusa head	3Annual grassland	NI
<i>Tarplant</i>	Tarplant	3Annual grassland	NI
<i>Trifolium sp.</i>	Clover	3Annual grassland	NI
<i>Verbascum thapsus</i>	Wooly mullein	3Annual grassland	NI
<i>Artemisia douglasii</i>	Mugwort	3Montane Riparian Forest	FACW
<i>Ceanothus cuneatus</i>	Wedgeleaf ceanothus	3Montane Riparian Forest	NI
<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	3Montane Riparian Forest	NI
<i>Cirsium (native)</i>	Thistle	3Montane Riparian Forest	NI
<i>Dipsacus fullonum</i>	Wild teasel	3Montane Riparian Forest	NI
<i>Isatis tinctoria</i>	Woad	3Montane Riparian Forest	NI
<i>Penstemon sp.</i>	Beardtongue	3Montane Riparian Forest	NI

SCIENTIFIC NAME	COMMON NAME	HABITATS	REG IND
<i>Pinus jeffreyi</i>	Jeffrey pine	3Montane Riparian Forest	NI
<i>Prunus virginiana</i> var. <i>demissa</i>	Western choke-cherry	3Montane Riparian Forest	FAC-
<i>Rubus pensilvanicus</i>	Pennsylvania blackberry	3Montane Riparian Forest	FACW*
<i>Salix exigua</i>	Narrowleaf willow	3Montane Riparian Forest	OBL
<i>Salix laevigata</i>	Red willow	3Montane Riparian Forest	FACW
<i>Salix lutea</i>	Yellow willow	3Montane Riparian Forest	OBL
<i>Verbascum thapsus</i>	Woolly mullein	3Montane Riparian Forest	NI
<i>Dipsacus fullonum</i>	Wild teasel	3Montane Riparian Scrub	NI
<i>Salix laevigata</i>	Red willow	3Montane Riparian Scrub	FACW
<i>Verbascum thapsus</i>	Woolly mullein	3Montane Riparian Scrub	NI
<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	4Perennial Grassland 1	NI
<i>Juniperus occidentalis</i>	Western juniper	4Perennial Grassland 1	NI
<i>Bromus hordeaceus</i>	Soft chess brome	4Perennial Grassland 2	FACU-
<i>Cichorium intybus</i>	Chicory	4Perennial Grassland 2	NI
<i>Isatis tinctoria</i>	Woad	4Perennial Grassland 2	NI
<i>Rumex crispus</i>	Curly dock	4Perennial Grassland 2	FACW-
Tall grass		4Perennial Grassland 2	NI
Tarplant	Tarplant	4Perennial Grassland 2	NI
<i>Torilis arvensis</i>	Common hedge parsley	4Perennial Grassland 2	NI
<i>Bromus</i> sp.	Brome	4Wet meadow	NI
<i>Carex</i> sp. (wet soils)	Sedge	4Wet meadow	OBL
<i>Cichorium intybus</i>	Chicory	4Wet meadow	NI
<i>Cirsium vulgare</i>	Bull thistle	4Wet meadow	FACU
<i>Conium maculatum</i>	Poison hemlock	4Wet meadow	FACW
<i>Juncus mexicanus</i>	Mexican rush	4Wet meadow	FACW
<i>Lactuca serriola</i>	Prickly lettuce	4Wet meadow	FAC
<i>Leymus triticoides</i>	Alkali rye-grass	4Wet meadow	FAC+
<i>Poa compressa</i>	Canadian bluegrass	4Wet meadow	FAC
<i>Ranunculus muricatus</i>	Prickle-seed buttercup	4Wet meadow	FACW+
<i>Rumex crispus</i>	Curly dock	4Wet meadow	FACW-
<i>Allium vineale</i>	Vineyard onion	4Wet meadow/seasonal wetland	NI
<i>Cardaria pubescens</i>	Whitetop	4Wet meadow/seasonal wetland	NI
<i>Elytrigia intermedia</i> ssp. <i>intermedia</i>	Intermediate wheatgrass	4Wet meadow/seasonal wetland	NI
<i>Arctostaphylos</i> sp.	Manzanita	5 Montane Riparian Forest	NI
<i>Artemisia douglasii</i>	Mugwort	5 Montane Riparian Forest	FACW
<i>Cornus sericea</i>	American dogwood	5 Montane Riparian Forest	FACW
<i>Dipsacus fullonum</i>	Wild teasel	5 Montane Riparian Forest	NI
<i>Fraxinus latifolia</i>	Oregon ash	5 Montane Riparian Forest	FACW
<i>Garrya flavescens</i>	Ashy silk-tassel	5 Montane Riparian Forest	NI
<i>Hypericum perforatum</i>	Klamath weed	5 Montane Riparian Forest	NI
<i>Juniperus occidentalis</i>	Western juniper	5 Montane Riparian Forest	NI
<i>Lupinus</i> sp.	Lupine	5 Montane Riparian Forest	NI
<i>Pinus jeffreyi</i>	Jeffrey pine	5 Montane Riparian Forest	NI
<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	Black cottonwood	5 Montane Riparian Forest	FACW
<i>Populus fremontii</i>	Fremont cottonwood	5 Montane Riparian Forest	FACW
<i>Prunus virginiana</i> var. <i>demissa</i>	Western choke-cherry	5 Montane Riparian Forest	FAC-
<i>Quercus garryana</i>	Oregon oak	5 Montane Riparian Forest	NI
<i>Quercus kelloggii</i>	California black oak	5 Montane Riparian Forest	NI
<i>Rhus trilobata</i>	Skunkbrush	5 Montane Riparian Forest	NI
<i>Rosa</i> sp.	Rose	5 Montane Riparian Forest	NI
<i>Rubus pensilvanicus</i>	Pennsylvania blackberry	5 Montane Riparian Forest	FACW*
<i>Salix laevigata</i>	Red willow	5 Montane Riparian Forest	FACW
<i>Salix lutea</i>	Yellow willow	5 Montane Riparian Forest	OBL
<i>Verbascum thapsus</i>	Woolly mullein	5 Montane Riparian Forest	NI

Habitats of the Yreka Stormwater Project:

Habitat, WHR (Other description)	Description	Site
Mixed Chaparral	Typically on slopes dominated by ceanothus and mountain mahogany with manzanita, small oaks, small pines, junipers, rabbitbrush,	1, 2, 5
Montane Hardwood (Oregon oak woodland)	Dominated by Oregon white oak in the canopy – about 20-30 feet tall. Understory of grasses and other herbs and occasional shrubs.	2
Perennial Grassland 1 (Great Basin grassland)	Clumps of grasses with rabbitbrush and star thistle. Numerous other species including woad, tarplant, poppy, and gumplant	1
Perennial Grassland 2	Seemingly uninterrupted stands of tall perennial grasses interspersed with Apiaceae, tarplant, star thistle, chicory, and dock.	4
Annual Grassland	Various annual-herb dominated habitats with various species of brome, star thistle, woad, and tarplant typical of each site.	2, 3, 5
Montane Riparian (Riparian Forest)	Dominated by various species of willow, cottonwood, ash, maple and black locust. Understory with numerous shrubs including blackberry, willow, rose and dogwood.	1, 3, 5
Montane Riparian (Riparian scrub)	Dominated by various species of willow with blackberry, rose, teasel, and Verbascum.	1, 2, 3, 5
Wet Meadow (Freshwater marsh)	Extensive mats of <i>Juncus</i> , <i>Carex</i> , grasses and dock on wet soils. Other associates include bull thistle, poison hemlock, chicory, prickly lettuce, and unidentified mustard.	4

- Sites
- 1) Yreka Creek
 - 2) Wetzel Basin
 - 3) Humbug Basin
 - 4) Shasta Avenue Basin
 - 5) Greenhorn Creek

NARRATIVE OF FEBRUARY 13, 2007 SITE VISIT TO THE CITY OF YREKA

Commenced site visit around 11:00 AM with Tim Nosal and Greg Matuzak, biologists and Kurt Lambert and Tina Pitsenberger, archaeologists. Five sites were visited, and investigated on foot: Yreka Creek, Wetzel Basin, Humbug Basin, Shasta Avenue Basin, and Greenhorn Reservoir and Greenhorn Creek.

- 1) Accessed Yreka Creek from Foothill Drive at the northeast end of the project site. The general geography of the site was a flat, upland bench between a shrub and juniper covered slope and railroad ROW (out of project) and a narrow riparian forest along the creek. The creek was bordered on the east side by a 6' bank and by a relatively low flood plain on the west side. The upland bench was dominated by a star-thistle/perennial grass association with occasional rabbitbrush. The riparian corridor was largely a narrow 40'-50' tall maple-ash-willow-locust forest. The tall trees had an interlocking canopy, and shrubs and clumps of perennial grasses occurred in the understory. The riparian corridor is narrow, but undisturbed. The upland is apparently naturally restored vegetation on fill material.
- 2) Wetzel Basin was accessed at the western end of Terrace Drive. The site is bordered on the south and east by development and to the north and west by natural vegetation. A fire appears to have burned in

the hills above the project site. The general lay of the land is a 100' wide flat drainage area with chaparral covered slopes on either side. An oak covered knoll is found near the SW end of the project site, and a willow thicket dominates the western terminus. A clump of willows was also found at the east end of the project site near where the drainage enters a culvert. The flat drainage area was dominated by annual grasses with occasional mountain mahogany, willows, and ceanothus. Deer signs evident ranging from scrapings on willows and other shrubs, evident scat, browse patterns on shrubs, foot prints, and eventually a doe with two yearling fawns. Potential wetlands are within the willow patches noted above.

- 3) Humbug Basin was accessed south of Green Heron Drive. The site was bordered on the north and east by residential development, to the south by pine and shrub covered slopes, and to the west by a berm and associated willow thicket. The site itself was a large gravelly flat with a creek along the south side, and a seep (associated with the berm) near the center of the project. The flat gravelly area supported star thistle, cheat grass, and occasional rabbitbrush. The seep supported a willow thicket. The creek (not flowing on this date, but apparently supported by a channel from the berm) supported a riparian area with willows above and willows and mugwort below. A second berm at the east end of the gravelly area showed ponding, but no wetland vegetation.
- 4) Shasta Avenue Basin was accessed at the west end along Shasta Avenue. A road borders the west side, housing on the north, and a school and other buildings to the east. The site was +/- level with the exception of a rabbitbrush covered knoll at the SW end of the site. The site was dominated by herbs - mostly tall grasses. A culvert under Shasta road feeds the hydrology of the site. The vegetation of the site was difficult to classify at this time of the year, but clearly supported wetland vegetation along the north and west portions of the site. Signature plants in the wetland included *Carex* (unknown species - no flowering/fruiting culms found), *Juncus*, and *Rumex*. The upland areas appeared to be defined by the presence of common hedge parsley. Potential wetlands occurred along the west and south sides of the project area.
- 5) The last site visited was Greenhorn Reservoir and Greenhorn Creek. The site was accessed from the public parking area off of Greenhorn Road. The site was bordered to the east by the park and reservoir, to the south by a pine covered slope, and to the north by a road. The land was hummocky, perhaps owing to the mining history of the site. The general vegetation character of the site was of a tall (50+ feet) cottonwood (black/Fremont) with willows and other species. The ground was clearly disturbed in the past and is crossed with trails and roads.

APPENDIX B

Routine Wetland Determination Forms

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <i>Stormwater Project - Shasta Ave. Basin</i> Applicant/Owner: <i>City of Yreka</i> Investigator: <i>Greg Matrzak - Tim Nosal</i>	Date: <i>Feb-13-2007</i> County: <i>Siskiyou</i> State: <i>CA</i>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <i>wetland # 1</i> Location: <i>Shasta Ave Basin where drainage enters wetland</i>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<i>Carex sp.</i>	<i>OBL</i>	<i>30%</i>			
<i>Juncus mexicanus</i>	<i>FACW</i>	<i>30%</i>			
<i>Lygostrixisoides</i>	<i>FAC+</i>	<i>20%</i>			
<i>Rumex crispus</i>	<i>FACW-</i>	<i>10%</i>			
<i>Lactuca scariola</i>	<i>FAC</i>	<i>10%</i>			

Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). *5/5 = 100%*

Remarks: *wetland vegetation present*

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u> </u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u> 1" </u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks:	

SOILS

Map Unit Name (Series and Phase): <u>1 Pitclay</u>		Drainage Class: <u>Poas</u>															
Taxonomy (Subgroup):		Field Observations: Confirm Mapped Type? <u>Yes</u>															
Profile Description:																	
Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features												
<u>0-6"</u>	<u>A</u>	<u>7.5R2/1</u>	<u>—</u>	<u>—</u>	<u>Clay loam</u>												
<u>6-18"</u>	<u>B</u>	<u>7.5R2/1</u>	<u>2.5R2/4</u>	<u>15%</u>	<u>Clay</u>												
Hydric Soil Indicators: <table style="width:100%; border:none;"> <tr> <td><input type="checkbox"/> Histosol</td> <td><input type="checkbox"/> Concretions</td> </tr> <tr> <td><input type="checkbox"/> Histic Epipedon</td> <td><input type="checkbox"/> High Organic Content in Surface Layer in Soils</td> </tr> <tr> <td><input type="checkbox"/> Sulfidic Odor</td> <td><input type="checkbox"/> Organic Streaking in Sandy Soils</td> </tr> <tr> <td><input checked="" type="checkbox"/> Aquic Moisture Regime</td> <td><input type="checkbox"/> Listed on Local Hydric Soils List</td> </tr> <tr> <td><input checked="" type="checkbox"/> Reducing Conditions</td> <td><input type="checkbox"/> Listed on National Hydric Soils List</td> </tr> <tr> <td><input type="checkbox"/> Gleyed or Low-Chroma Colors</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> </table>						<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions	<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Soils	<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils	<input checked="" type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List	<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List	<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions																
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Soils																
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils																
<input checked="" type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List																
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List																
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)																
Remarks:																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Data Point within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soils Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks:			

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <i>Stormwater Project - Shasta Ave. Basin</i> Applicant/Owner: <i>City of Yreka</i> Investigator: <i>Greg Matuzak - Tim Nesal</i>	Date: <i>FEB - 13 - 2007</i> County: <i>Siskiyou</i> State: <i>CA</i>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <i>Upland # 1</i> Location: <i>Near culvert where water enters wet meadow</i>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<i>Bromus sp.</i>	<i>NI</i>	<i>35%</i>			
<i>Elytrigia intermedia</i>	<i>NI</i>	<i>30%</i>			
<i>Citrus vulgare</i>	<i>FACU</i>	<i>15%</i>			
<i>Lactuca serriola</i>	<i>FAC</i>	<i>10%</i>			
<i>Cardaria pubescens</i>	<i>NI</i>	<i>10%</i>			
Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). <i>YS = 20%</i>					
Remarks: <i>Upland point</i>					

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u> </u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u> </u> (in.)	
Remarks: <i>Upland point adjacent to drainage pattern of wet meadow</i>	

SOILS

Map Unit Name (Series and Phase): <u>1 Pit Clay</u>		Drainage Class: <u>Poor</u>			
Taxonomy (Subgroup):		Field Observations: Confirm Mapped Type? <u>yes</u>			
Profile Description:					
Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
<u>1-8"</u>	<u>A</u>	<u>4.5 3/2</u>	<u>—</u>	<u>—</u>	<u>loamy clay</u>
<u>8-18"</u>	<u>B</u>	<u>2.5 3/2</u>	<u>—</u>	<u>—</u>	<u>loamy clay</u>
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Gleyed or Low-Chroma Colors
<input type="checkbox"/> Concretions	<input type="checkbox"/> High Organic Content in Surface Layer in Soils	<input type="checkbox"/> Organic Streaking in Sandy Soils	<input type="checkbox"/> Listed on Local Hydric Soils List	<input type="checkbox"/> Listed on National Hydric Soils List	<input type="checkbox"/> Other (Explain in Remarks)
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Data Point within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>upland point</u>	

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Stormwater Project - Shasta Ave. Basin</u> Applicant/Owner: <u>City of Yreka</u> Investigator: <u>Greg Miodzak - Tim Noseal</u>	Date: <u>Feb-13-2007</u> County: <u>Siskiyou</u> State: <u>CA</u>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <u>wetland # 2</u> Location: <u>near point # 1</u>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<u>Legnms triticoides</u>	<u>FAC+</u>	<u>60%</u>			
<u>Carex sp.</u>	<u>OBL</u>	<u>25%</u>			
<u>Juncus mexicanus</u>	<u>FACW</u>	<u>15%</u>			
Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). <u>3/3 = 100%</u>					
Remarks:					

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>—</u> (in.) Depth to Free Water in Pit: <u>—</u> (in.) Depth to Saturated Soil: <u>6"</u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks:	

Project Site: Stormwater Project - Shasta Ave. Basis Data Point: Wetland #2

SOILS

Map Unit Name: 1 Pt Clay Drainage Class: Poor
 (Series and Phase):
 Taxonomy (Subgroup): Field Observations: Yes
 Confirm Mapped Type? Yes

Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
<u>1-8"</u>	<u>A</u>	<u>2.5YR4/1</u>	<u>—</u>	<u>—</u>	<u>Clay loam</u>
<u>8-18"</u>	<u>B</u>	<u>7.5YR3/2</u>	<u>10YR4/3</u>	<u>20%</u>	<u>Clay</u>

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No

Wetland Hydrology Present? Yes No Data Point within a Wetland? Yes No

Hydric Soils Present? Yes No

Remarks:

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <i>Stormwater Project - Shasta Ave Basin</i> Applicant/Owner: <i>City of Yreka</i> Investigator: <i>Greg Matuzak - Tim Nosal</i>	Date: <i>Feb-13-2007</i> County: <i>Siskiyou</i> State: <i>CA</i>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <i>upland # 2</i> Location: <i>adjacent to wet meadow in drainage pattern</i>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<i>Elytisia intermedia</i>	NI	25%			
<i>Panicum</i>	NI	25%			
<i>Legumin triticoide</i>	FAC+	25%			
<i>Cirsium vulgare</i>	FACU	15%			
<i>Circhorium intybus</i>	NI	10%			
Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). <i>4/5 = 20%</i>					
Remarks: <i>upland point</i>					

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u> </u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u> </u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks: <i>upland adjacent to wet meadow</i>	

Project Site: Stormwater Project - Shasta Ave Basin | Data Point: upland #2

SOILS

Map Unit Name: 1 R7 clay | Drainage Class: Poor
 (Series and Phase):
 Taxonomy (Subgroup): | Field Observations: Confirm Mapped Type? Yes

Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
1-10"	A	10R4/2	—	—	loamy clay
10-18"	B	2.5R4/2	—	—	clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No

Wetland Hydrology Present? Yes No | Data Point within a Wetland? Yes No

Hydric Soils Present? Yes No

Remarks: upland point

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Stormwater Project - Shasta Ave Basin</u> Applicant/Owner: <u>City of Yreka</u> Investigator: <u>Greg Matuzak - Tim Nosal</u>	Date: <u>Feb-13-2007</u> County: <u>Siskiyou</u> State: <u>CA</u>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <u>Wetland #3</u> Location: <u>middle of large wet meadow</u>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<u>Leymus Arctoides</u>	<u>FAC+</u>	<u>50%</u>			
<u>Conium maculatum</u>	<u>FACW</u>	<u>15%</u>			
<u>Ranunculus muricatus</u>	<u>FACW+</u>	<u>15%</u>			
<u>Poa Compressa</u>	<u>FAC</u>	<u>10%</u>			
<u>Rumex crispus</u>	<u>FACW</u>	<u>10%</u>			
Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). <u>5/5 = 100%</u>					
Remarks: <u>wetland vegetation present</u>					

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>1</u> (in.) Depth to Free Water in Pit: <u>2</u> (in.) Depth to Saturated Soil: <u>8"</u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks:	

SOILS

Map Unit Name: 1 Pitclay | Drainage Class: Poor
 (Series and Phase):
 Taxonomy (Subgroup): | Field Observations:
 Confirm Mapped Type? Yes

Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
1-10"	A	7.5YR7/1	—	—	clay loam
10-18"	B	2.5YR3/2	10YR4/3	25%	clay loam

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretions
- High Organic Content in Surface Layer in Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No

Wetland Hydrology Present? Yes No Data Point within a Wetland? Yes No

Hydric Soils Present? Yes No

Remarks:

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Stormwater Project - Shasta Ave Basin</u> Applicant/Owner: <u>City of Yreka</u> Investigator: <u>Greg Martzok</u>	Date: <u>Feb-13-2007</u> County: <u>Siskiyou</u> State: <u>CA</u>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <u>upland # 3</u> Location: <u>middle of project area</u>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<u>Legumin triflorides</u>	<u>FAC+</u>	<u>40%</u>			
<u>Bromus sp.</u>	<u>NI</u>	<u>35%</u>			
<u>Elytgin intermedia</u> <u>intermedia</u>	<u>NI</u>	<u>25%</u>			
Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). <u>1/3 = 33%</u>					
Remarks: <u>upland point</u>					

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u> </u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u> </u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks:	

Project Site: Starmanter Road - Shuster Ave Basin

Data Point: upland # 3

SOILS

Map Unit Name (Series and Phase): 1 Pit clay

Drainage Class: poor

Taxonomy (Subgroup):

Field Observations:
Confirm Mapped Type? yes

Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
0-8"	A	7.5YR 3/2	—	—	loam clay
8-18"	B	10YR 3/2	—	—	clay loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks: non-hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Data Point within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks: upland point

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <i>Stormwater Project - Humbug Basin</i> Applicant/Owner: <i>City of Yreka</i> Investigator: <i>Greg Matzack - Tim Nosal</i>	Date: <i>Feb-13-2007</i> County: <i>Siskiyou</i> State: <i>CA</i>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <i>middle Riparian Area</i> Location: <i>Humbug Basin</i>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<i>Salix laevigata</i>	FACW	40%			
<i>Salix exigua</i>	OBL	30%			
<i>Salix lutea</i>	OBL	20%			
<i>Artemisia douglasii</i>	FACW	10%			

Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-). $4/4 = 100\%$

Remarks: *riparian wetland point*

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u> </u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u>12"</u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks:	

Project Site: Stormwater Project

Data Point: Humbly Basin - Middle Riparian Area

SOILS

Map Unit Name (Series and Phase): 1 Stoner Gravelly Sandy loam 2-5% slopes Drainage Class: MW
 Taxonomy (Subgroup): Field Observations: Confirm Mapped Type? yes

Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
0-10"	A	10YR 3/2	—	—	sandy loam
10-18"	B	2.5YR 2/2	—	—	loamy sand

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
 Wetland Hydrology Present? Yes No Data Point within a Wetland? Yes No
 Hydric Soils Present? Yes No

Remarks: Riparian wetland

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: <u>Stormwater Project - Humbug Basin</u> Applicant/Owner: <u>City of Yreka</u> Investigator: <u>Greg Mertzak - Tim Nosal</u>	Date: <u>Feb-13-2007</u> County: <u>Siskiyou</u> State: <u>CA</u>
Do normal circumstances exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the site significantly disturbed (atypical situation)? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Explain in Remarks where appropriate.	Data Point: <u>SW corner project site</u> Location: <u>Humbug Basin</u>

VEGETATION

Plant Species	Indic.	Cover	Plant Species	Indic.	Cover
<u>Salix laevigata</u>	<u>FACW</u>	<u>30%</u>			
<u>Salix exigua</u>	<u>OBL</u>	<u>30%</u>			
<u>Salix lutea</u>	<u>OBL</u>	<u>10%</u>			
<u>Artemisia douglasii</u>	<u>FACW</u>	<u>10%</u>			
<u>Rubus pensilvanicus</u>	<u>FACW</u>	<u>10%</u>			

Percent of dominant species (*) that are OBL, FACW or FAC (excluding FAC-).

Remarks: Riparian woodland

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u> </u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u>16"</u> (in.)	Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks:	

Project Site: Stormwater Project

Data Point: Humbug Basin SW corner

SOILS

Map Unit Name: 1) Stover Gravelly Sandy Loam 2-5% slopes
 Drainage Class: m1w
 (Series and Phase):
 Taxonomy (Subgroup):
 Field Observations:
 Confirm Mapped Type? yes

Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle colors	Mottle %/Contrast	Texture And Features
1-8"	A	5YR 3/2	—	—	sandy loam
8-18"	B	10YR 3/2	—	—	sandy loam

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretions
- High Organic Content in Surface Layer in Soils
- Organic Streaking in Sandy Soils
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No

Wetland Hydrology Present? Yes No Data Point within a Wetland? Yes No

Hydric Soils Present? Yes No

Remarks:

EXHIBIT D
FLORENTINE DRAIN
WETLAND DELINEATION REPORT

CITY OF YREKA
FLORENTINE STREET DRAIN
REPLACEMENT PROJECT
DELINEATION OF WETLANDS AND
OTHER WATERS OF THE UNITED STATES



Prepared by:



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Prepared for:

City of Yreka, Siskiyou County, California
701 Fourth Street
City of Yreka, CA 96097

January 2009

CITY OF YREKA
FLORENTINE DRAIN REPLACEMENT PROJECT
DELINEATION OF WETLANDS AND
OTHER WATERS OF THE UNITED STATES

Prepared for:

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701 FOURTH STREET
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January 2009

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APPENDICES

Appendix A Routine Wetland Determination Forms

FLORENTINE STREET DRAIN REPLACEMENT PROJECT

DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES

1.0 SUMMARY

On behalf of the City of Yreka, a PMC biologist conducted a delineation of waters of the United States (U.S.) occurring within the ±1.3-acre Florentine Drain Replacement project study area (PSA) proposed in Yreka, California (**Figures 1** and **2**). Due to the developed nature of the area, the PSA consists of the site itself. This project is a component of the City of Yreka Stormwater Attenuation and Floodplain Restoration project.

The delineation was conducted on January 26, 2009. This report presents the results of a review of available literature, soil survey (**Figure 3**), and fieldwork within the PSA. One type or class of waters of the U.S., perennial stream, was identified and mapped within the PSA. Yreka Creek occupies a total of **0.17** acre within the PSA (**Figure 4**).

Jurisdictional waters of the U.S. were identified and delineated following the technical guidelines provided in the *Corps of Engineers Wetlands Delineation Manual* (Corps Manual) (Environmental Laboratory 1987) and the U.S. Army Corps of Engineers (USACOE) Arid West Regional Supplement (Supplement) (USACOE 2006). The Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. The jurisdictional boundaries for other waters of the U.S. were identified based on the presence of an ordinary high water mark (OHWM) as defined in 33 Code of Federal Regulations (C.F.R.) 328.3(e).

This delineation of waters of the U.S. is subject to verification by the USACOE. PMC advises all parties to treat the information contained herein as preliminary until the USACOE provides written verification of the boundaries of their jurisdiction.

FLORENTINE STREET DRAIN REPLACEMENT PROJECT
DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES

2.0 REGULATORY BACKGROUND

The USACOE regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes; and subaqueous utility lines [33 C.F.R. §328.2(f)].

Section 404 of the CWA requires approval prior to discharging dredged or fill material into the waters of the U.S. Typical activities requiring Section 404 permits include the following: depositing of fill or dredged material in waters of the U.S. or adjacent wetlands; site development fill for residential, commercial, or recreational developments; construction of revetments, groins, breakwaters, levees, dams, dikes, and weirs; and placement of riprap and road fills.

Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Section 10 of the Rivers and Harbors Act of 1899 requires approval prior to the accomplishment of any work in or over navigable waters of the United States, or which affects the course, location, condition, or capacity of such waters. Typical activities requiring Section 10 permits include: construction of piers, wharves, bulkheads, dolphins, marinas, ramps, floats intake structures, and cable or pipeline crossings; and dredging and excavation.

Any person, firm, or agency (including Federal, state, and local government agencies) planning to work in navigable waters of the U.S., or dump or place dredged or fill material in waters of the U.S., must first obtain a permit from the USACOE. Permits, licenses, variances, or similar authorization may also be required by other Federal, state, and local statutes.

2.1 DEFINITION OF WATERS OF THE UNITED STATES

Waters of the U.S. includes essentially all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters. Navigable waters of the U.S. are defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation. Section 10 and/or Section 404 permits are required for construction activities in these waters. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of water is present. Methods for delineating wetlands and non-tidal waters are described further below.

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit positive indicators of three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.

**FLORENTINE STREET DRAIN REPLACEMENT PROJECT
DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES**

The lateral regulatory extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the USACOE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

2.2 SWANCC

In the 2001 U.S. Supreme Court case *Solid Waste Agency of Northern Cook County v. Corps* (referred to as *SWANCC*) the Supreme Court held that isolated, intrastate, non-navigable waters could not be regulated under the CWA based solely on the presence of migratory birds. The Supreme Court also concluded that the USACOE had exceeded its authority in asserting CWA jurisdiction pursuant to § 404(a) over the waters at issue based on their use as habitat for migratory birds, pursuant to preamble language, commonly referred to as the Migratory Bird Rule [51 Federal Register (FR) 41217 (1986)]. Following *SWANCC*, waters of the U.S., including wetlands, were subject to CWA jurisdiction if the water body was part of the U.S. territorial seas, a traditional navigable water, any tributary to a traditional navigable water, or a wetland adjacent to any of these water bodies. Furthermore, isolated wetlands and other waters might be considered jurisdictional where they were linked to either navigable waters or interstate commerce.

2.3 RAPANOS

In 2006, the Supreme Court cases *Rapanos v. U.S.* and *Carabell v. U.S.* (together referred to as *Rapanos*) again addressed the jurisdictional scope of Section 404 of the CWA. The Justices issued five separate opinions with no single opinion commanding a majority of the Court. The original judgments have been vacated and remanded to the 6th Circuit for further proceedings consistent with the *Rapanos* decision. The decision allows the USACOE and EPA to establish CWA jurisdiction under one of two standards for determining whether water bodies that are not traditional navigable waters (TNWs), including wetlands adjacent to those non-TNWs, are subject to CWA jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike, or similar feature) a relatively permanent water body (RPW), or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs. The *Rapanos* decision did not affect CWA jurisdiction over traditional navigable waters and their adjacent wetlands.

As a consequence of the U.S. Supreme Court decision in *Rapanos*, the EPA and the USACOE, in coordination with the Office of Management and Budget (OMB) and the President's Council on Environmental Quality (CEQ), developed a memorandum titled *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* (June 5, 2007). This guidance memorandum requires the application of the two new standards described above, as well as a greater level of documentation, to support the USACOE's jurisdictional determination (JD) for a particular water body. This guidance also required the Corps and EPA to develop a revised JD form to be used by field staff for documenting the applicability of CWA jurisdiction.

In summary, the guidance memorandum states that agencies will assert jurisdiction over the following categories of water bodies: TNWs; all wetlands adjacent to TNWs; non-navigable tributaries of TNWs that are relatively permanent (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally); and wetlands that directly abut such tributaries. In

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addition, the agencies will assert jurisdiction over every water body that is not a relatively permanent water (RPW) if that water body is determined (on the basis of a fact-specific analysis) to have a significant nexus with a TNW. The classes of water body that are subject to CWA jurisdiction only if such a significant nexus is demonstrated include: non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally; wetlands adjacent to such tributaries; and wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable tributary. A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological, integrity of a TNW.

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3.0 METHODS

This delineation was conducted in accordance with the USACOE Manual (Environmental Laboratory 1987) (Manual). This included a preliminary review of information from the project area to characterize vegetation, hydrology, and soils of the area. Where differences in the two documents occur, the Supplement takes precedence over the USACOE Manual. This delineation was also conducted in compliance with the Sacramento District of the USACOE *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (USACOE 2001).

The Arid West Region consists of all or significant portions of 11 states, including California (USACOE 2006). This region is differentiated from other surrounding areas by having a predominantly dry climate and long summer dry season. Vegetation characteristics of the Arid West Region include little to no forest cover consisting of mainly annual grasslands, shrublands, hardwood savannas, deciduous woodlands, and pinyon/juniper woodlands. The Arid West Supplement was applied for this site as it is located within the Mediterranean California Land Resource Region (LRR D), and it met the basic criteria described within the Supplement.

The Western Mountains, Valleys, and Coast Region (USACOE 2008) is located just west of the City Yreka; this region generally surrounds and is interspersed with the Arid West Region (USACOE 2006) but generally receives more abundant rainfall and/or snow, has lower average temperatures, higher humidity, and lower evapotranspiration rates.

The three-parameter methodology requires the collection of data on soils, vegetation, and hydrology at several locations to establish the jurisdictional boundary of wetlands. Additional methods to identify and delineate other waters of the U.S. (e.g., streams, drainages, lakes) were used as applicable. The method typically used for delineation of non-wetland waters of the U.S. is the delineation of the OHWM.

Prior to delineating the PSA on January 26, 2009, available information pertaining to the natural resources of the region was reviewed including recent aerial photographs, topographic maps, and soils survey data. A full list of references is included in Section 6.0. Site-specific reports and general references utilized for the delineation include, but are not limited to, the following:

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. U.S. Army Corps of Engineers Waterways Experiment Station. Vicksburg, MS;
- GretagMacbeth. 2000. *Munsell Soil Color Charts*. New Windsor, NY;
- Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley, CA;
- Reed, P.B., Jr. 1988. *National List of Plant Species That Occur in Wetlands: California (Region O)*; U.S. Fish & Wildlife Service;
- U.S. Army Corps of Engineers (USACOE). 2006. *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. S. Wakeley, R. W. Lichvar, and C. V. Noble (eds.). ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center; and

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- U.S. Department of Agriculture (USDA). 2006. *Field Indicators of Hydric Soils in the United States*, Version 6.0. G.W. Hurt and L.M. Vasilas (eds.). USDA, NRCS, in cooperation with the National Committee for Hydric Soils.

A qualified biologist visually inspected the entire PSA and collected representative data at points within potential wetland areas. Prior to field investigations, soil types within the PSA were identified using the *Soil Survey Geographic (SSURGO) database for Siskiyou County, California, Central Part* (USDA, NRCS 2009). The location of each data point is depicted in **Figure 4** and corresponding routine wetland determination data forms are provided in **Appendix A**. Correlations were developed between the three parameters (vegetation, hydrology, and soils) to make wetland determinations. Specifically, plots at data point locations were evaluated to determine the composition and identification of dominant plant species. The indicator status of all dominant plant species [as determined by the U.S. Fish and Wildlife Service *National List of Plant Species that Occur in Wetlands: 1988 California (Region 0)*] (Reed 1988) was applied and evaluated as part of the vegetation assessment portion of the wetland determination process. The plant indicator status includes the following categories:

- Obligate wetland plants: Occur almost always under natural wetland conditions (estimated probability > 99%).
- Facultative wetland plants: Usually occur in wetlands, but occasionally found in non-wetlands (67-99%).
- Facultative plants: Equally likely to occur in wetlands and non-wetlands (34-66%).
- Facultative upland plants: Usually occur in non-wetlands, but occasionally found in wetlands (1-33%).
- Upland: Occur almost always under natural conditions in non-wetlands (>99%); may occur in wetlands in other regions.

The absolute cover was estimated for each vegetation stratum; these strata include tree, sapling/shrub, herb, and woody vine. Species that are dominant in more than one stratum were counted multiple times. Some wetland plant communities may fail a test based only on dominant species. Where indicators of hydric soils and hydrology are present and vegetation is not dominated by hydrophytes, the vegetation was re-evaluated with the prevalence index, which takes into consideration all plant species in the community, not just a few dominants.

The soils within the PSA were examined for hydric indicators. Hydric soil indicators are described in the *Field Indicators of Hydric Soils in the U.S.*, Version 6.0 (USDA 2006). If one or more of these indicators are present, then the soil is hydric. Nearly all hydric soils exhibit characteristic morphologies that are caused by anaerobic, reduced soil conditions due to prolonged soil saturation. The most commonly observed indicators are related to iron (Fe) and manganese (Mn) redox concentrations or depletions. Less commonly observed indicators include gleyed matrix and black histic (low amounts of Fe-Mn and accumulations of organic carbon).

Observations were made and recorded for both primary and secondary wetland hydrology indicators, if present. Without monitoring or direct observation of inundation/saturation, indirect indicators of wetland hydrology are typically used and include primary indicators such as water marks, drift lines, and sediment deposits, or secondary indicators such as crayfish burrows or the FAC-neutral test.

3.1 MAPPING TECHNIQUE

The boundaries of each delineated feature and the location of three-parameter data points were mapped using a handheld Trimble Global Positioning System (GPS) capable of sub-meter accuracy. 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 for exportation to Geographic Information System (GIS) software. 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, the results of which are presented in **Figure 4**.

4.0 RESULTS

4.1 PSA LOCATION

The PSA is located within the City of Yreka, along Interstate 5 in northern California, about 20 miles south of the Oregon border (**Figure 1**). This location corresponds to Section 27, Township 45 North, Range 7 West of the *Yreka, California* US Geological Survey (USGS 1984) 7.5-minute series topographic quadrangle (**Figure 2**). The PSA is bounded by Interstate 5 to the east, and commercial development to the west and south. The narrow riparian corridor surrounding Yreka Creek continues to the north of the PSA.

4.2 ENVIRONMENTAL SETTING

4.2.1 Existing Land Uses

The PSA does not appear to serve any land use; however, the southern portion of the PSA has been leveled and filled in the past. A small amount of rubbish dumping is evident within the PSA. Existing land uses surrounding the PSA and in the immediate vicinity include residential and commercial.

4.2.2 Elevation/Topography

The PSA is located along the gently sloping floodplain of Yreka Creek. General topography of the PSA and immediate vicinity is characterized as gently sloping to flat. The elevation of the PSA is about 2,650 feet above mean sea level (MSL).

4.2.3 Climate

According to the Western Regional Climate Center (WRCC 2009), the climate of the City of Yreka is considered to be that of high desert. The climate is temperate and semi-arid to subhumid. The mean annual precipitation ranges from approximately 8 to 18 inches and much of it is in the form of snow (USDA 1997). The mean annual temperature ranges from about 50 degrees Fahrenheit (°F) to 52°F (USDA 1997). According to the WRCC (2009), the average annual maximum temperature is 66.7° F and the average annual minimum temperature is 36.7°F. Temperature reaches an average maximum in July at 91.3°F and an average minimum in January of 23.9°F (WRCC 2009). The mean freeze-free period is about 125 to 150 days (USDA 1997).

4.2.4 Regional and Site-specific Hydrology

City of Yreka is located within USGS Hydrological Map Unit Number 18010207 (Shasta River watershed) (U.S. Environmental Protection Agency 2009). Streams in the vicinity of Yreka flow into Yreka Creek. Yreka Creek flows north into the Shasta River, and then eventually to the Klamath River. Yreka Creek is approximately 12 miles in length and the watershed drains approximately 52 square miles surrounding the City of Yreka. Through the City of Yreka the creek has been altered and partially channelized. Downstream of Yreka, the creek's floodplain was dredged mined prior to the 1940s (Shasta Valley Resource Conservation District [SVRCD] 2005). In the 1950s the dredge tailings were leveled and Yreka Creek was relocated to a newly constructed channel at the base of the hills bordering the eastern edge of the historic floodplain (SVRCD 2005). Irrigation diversions, such as the Greenhorn Reservoir, capture available water ion the headwater reaches of Yreka Creek (SCRD 2005). Surface flows are maintained in Yreka

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Creek through the summer as a result from releases from Greenhorn Reservoir, and from sub-surface inflows below the Yreka Wastewater Treatment Plant (Klamath Resource Information System 2009).

Drainage of the PSA occurs primarily through surface runoff or is conveyed via Yreka Creek. Most of the surface runoff is in the form of sheet flow; however, a narrow swale-like feature that travels along the eastern PSA boundary does convey some of this runoff from surrounding areas. A small drain pipe located at the south end of the PSA discharges surface runoff into the swale-like feature. This pipe originates from the parking lot south of the PSA. The swale-like feature does not have a discernible bed and bank, and did not meet the three parameters (Environmental Laboratory 1987) to qualify it as a wetland feature. A data point was taken at each end of the swale-like feature where it was located within the PSA (**Figure 4** and **Appendix A**).

The existing Florentine Street drain outlet crosses beneath I-5 and exits into an existing open bioswale which filters the drain flow before it eventually enters Yreka Creek. However, the existing Florentine Street drain is undersized and does not have sufficient capacity to convey the full storm flow. As a result, the area experiences flooding and the excess storm runoff will sheet flow north on Main Street/Highway 3 before it is conveyed to Yreka Creek at various locations.

4.2.5 Soils

The National Cooperative Soil Survey for the Yreka Area, California (USDA 2009) identifies one mapped soils unit within the PSA: Dumps. This soil unit is described below and is depicted in **Figure 3**. Most of the soils of the Yreka region are derived from sedimentary rocks and metasedimentary rocks including chert, conglomerate, limestone, schist, and wacke.

- **145 Dumps:** The Dumps series consist of smoothed or uneven accumulations or piles of waste rock and general refuse, typified at this site by surface areas covered with stones and boulders.

4.2.6 Vegetation Communities

The City of Yreka is within the Klamath Range (KR) subregion of the Northwestern California geographic subdivision of California (Hickman 1993) and contains several distinct habitat types containing several plant communities. The plant communities within the PSA were characterized using the California Wildlife Habitat Relationships (WHR) system (Mayer and Laudenslayer 1988). The ±1.3-acre PSA consists of two vegetation communities, montane riparian and urban/ruderal. These communities are described below.

Montane Riparian

The montane riparian vegetation community in the PSA occurs as a narrow to wide, open to dense stand of broadleaved deciduous trees interspersed with shorter shrubs along Yreka Creek. The montane riparian community is diverse, and its species composition varies. Trees often form a complete canopy over the creek and dominate the montane riparian habitat, including several species of willow (*Salix* spp.), Oregon ash (*Fraxinus latifolia*), white alder (*Alnus rhombifolia*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), and Fremont cottonwood (*P. fremontii*). The understory was similarly diverse and included numerous shrubs and vines including rose (*Rosa* spp.), American dogwood (*Cornus sericea*), western chokecherry (*Prunus virginiana* var. *demissa*), poison hemlock (*Conium maculatum*), and Himalayan

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blackberry (*Rubus discolor*). A variety of herbaceous species were also encountered including wild teasel (*Dipsacus fullonum*), field hedge parsley (*Torilis arvensis*), and blue wild rye (*Elymus glaucus* ssp. *glaucus*).

Urban/Ruderal

The urban land community is distinguished by the presence of both native and exotic species maintained in a relatively static composition within a downtown, residential, or suburbia setting. Species richness in these areas depends greatly upon community design (i.e., open space considerations) and proximity to the natural environment. Typical vegetation in these areas consists primarily of introduced ornamental trees and shrubs and manicured lawns as well as invasive weeds in disturbed areas. The urban community within the PSA includes ruderal or disturbed habitat adjacent to commercial development. Ruderal (roadside) communities occur in areas of disturbances such as along roadsides, trails, parking lots, etc. These communities are subjected to ongoing or past disturbances (e.g., vehicle activities, mountain bikes, mowing). Ruderal habitat in these disturbed areas supports a diverse weedy flora. Vascular plant species associated with ruderal habitat typically include Johnson grass (*Sorghum halepense*), Canadian horseweed (*Conyza canadensis*), milk thistle (*Silybum marianum*), star thistle (*Centaurea solstitialis*), Mediterranean hoary-mustard (*Hirschfeldia incana*), curly dock (*Rumex crispus*), and mustards (*Brassica* spp.).

4.2.7 Delineated Waters of the U.S.

As described in Section 2.1, the USACOE defines waters of the U.S. as both wetland and nonwetland waters. Nonwetland waters are commonly referred to as "other waters". Other waters of the U.S. delineated within the PSA include a perennial drainage, Yreka Creek. No wetland types were observed within the PSA. A description of the feature delineated within the PSA is provided below.

Perennial Drainage

A total of **0.17** acre of perennial drainage (Yreka Creek) has been delineated within the PSA. Perennial drainages are features that may not meet the three-parameter criteria for vegetation, hydrology, and soils but do convey water and exhibit an OHWM. 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. Yreka Creek does maintain flow year around; however, this flow is minimal. As mentioned above, surface flows are maintained in Yreka Creek through the summer as a result from releases from Greenhorn Reservoir, and from sub-surface inflows below the Yreka Wastewater Treatment Plant (Klamath Resource Information System 2009).

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5.0 CONCLUSIONS

Other waters of the U.S. delineated within the PSA include one perennial drainage, Yreka Creek. While this feature typically has very low flows during the summer months, it was classified as a perennial stream due to the presence to water year around. Yreka Creek occupies a total of **0.17** acre within the PSA (**Table 1**). No wetland features were observed or mapped within the PSA.

This delineation of wetlands and other waters of the U.S. is subject to verification by the USACOE. All parties are cautioned to treat the information contained herein as preliminary until the USACOE provides written verification of the boundaries of their jurisdiction. No discharge of dredged or fill material into waters of the U.S. is permitted unless authorized under a Department of the Army Nationwide Permit.

**TABLE 1
WATERS OF THE U.S. ACREAGE SUMMARY**

Waters of the U.S. Type	Acreage
Yreka Creek	
Perennial Stream Channel	0.17 acres
TOTAL	0.17 acres

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6.0 REFERENCES

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1. US Army Engineer Waterways Experiment Station. Vicksburg, MS.
- GretagMacbeth. 2000. *Munsell Soil Color Charts*. New Windsor, NY.
- Hickman, J., ed. 1993. *The Jepson manual: Higher Plants of California*. University of California Press. Berkeley, CA.
- Klamath Resource Information System (KRIS). 2007. Background, Geology, and River Overviews: Shasta River, Shasta River Basin Geology and Shasta River Hydrology. Accessible online at: <http://www.krisweb.com/backintr.htm>
- Mayer, Kenneth E. and William F. Laudenslayer, Jr. 1988. *A Guide to Wildlife Habitats of California*. State of California, Resources Agency, Department of Fish and Game. Sacramento, CA. 166 pp.
- Reed, P.B., Jr. 1988. *National List of Plant Species That Occur in Wetlands: California (Region O)*; U.S. Fish & Wildlife Service.
- Shasta Valley Resource Conservation District (SVRCD). 2005. *Incidental Take Permit Application for Coho Salmon*. Submitted to CDFG March 29, 2005.
- U.S. Army Corps of Engineers (USACOE). 2008. *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-13. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Army Corps of Engineers (USACOE). 2006. *Interim regional supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region*. S. Wakeley, R. W. Lichvar, and C. V. Noble (eds.). ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture (USDA). 1997. *Ecological Subregions of California*. Prepared by US Forest Service, Pacific Southwest Region. Accessed online at: <http://www.fs.fed.us/r5/projects/ecoregions/m261db.htm>
- U.S. Department of Agriculture (USDA). 2006. *Field Indicators of Hydric Soils in the United States*, Version 6.0. G.W. Hurt and L.M. Vasilas (eds.). USDA, NRCS, in cooperation with the National Committee for Hydric Soils.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2009. *Soil Survey Geographic (SSURGO) database for Siskiyou County, California, Central Part*. NRCS Soil Data Mart. January 26. Fort Worth, TX. Accessed online at: <http://soildatamart.nrcs.usda.gov/Metadata.aspx?Survey=CA602&UseState=CA>
- U.S. Environmental Protection Agency (USEPA). 2009. *Sacramento-Lower Cow-Lower Clear Watershed – 18020101, Watershed Profile*. Locate Your Watershed. Accessed online at: http://cfpub.epa.gov/surf/huc.cfm?huc_code=18010207

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Western Regional Climate Center (WRCC). 2008. Current and historical climate data for the City of Yreka. Accessed online at: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9866>

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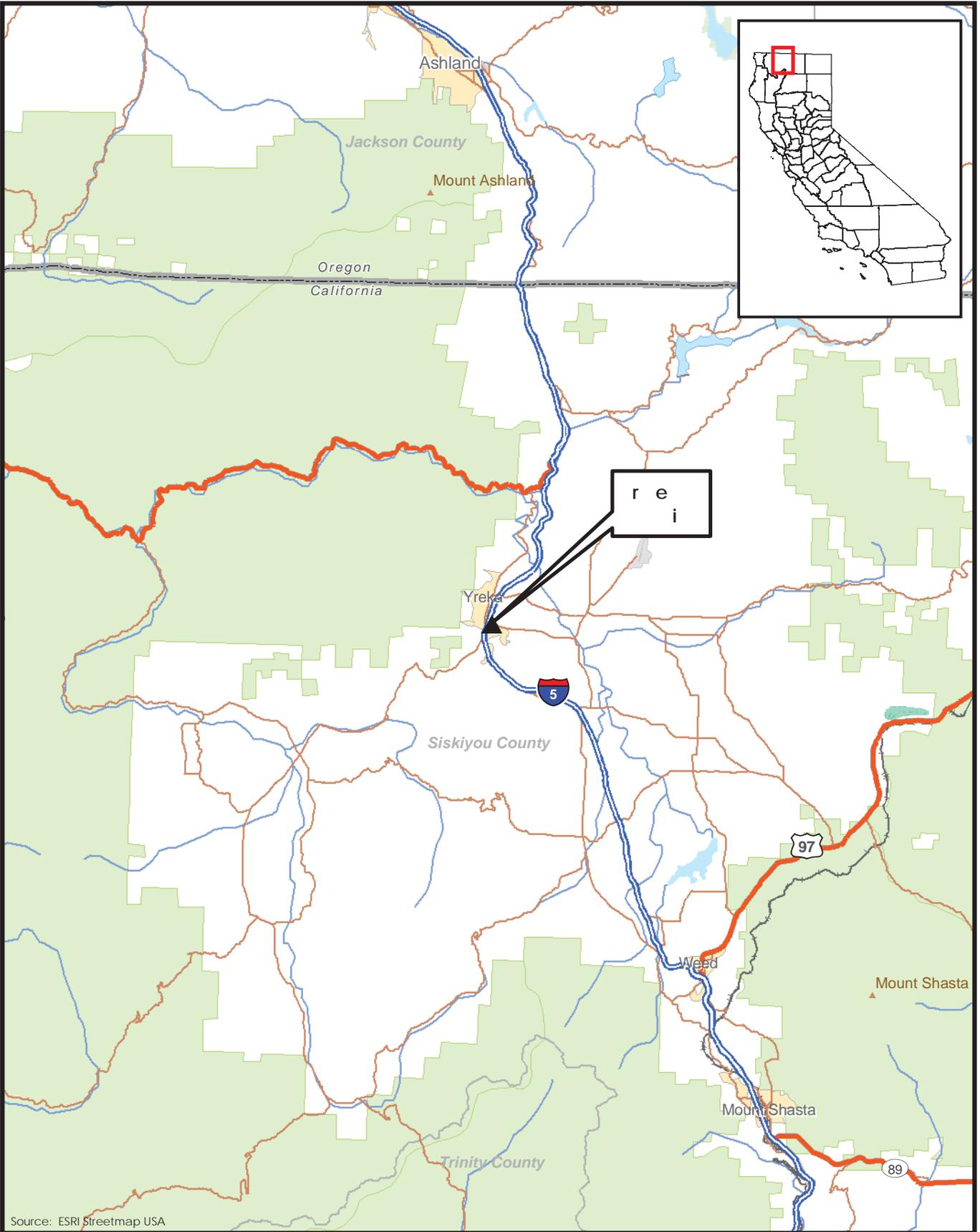


Figure
Regional Location



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Figure 2
Project Location Map



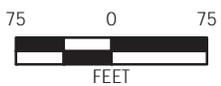
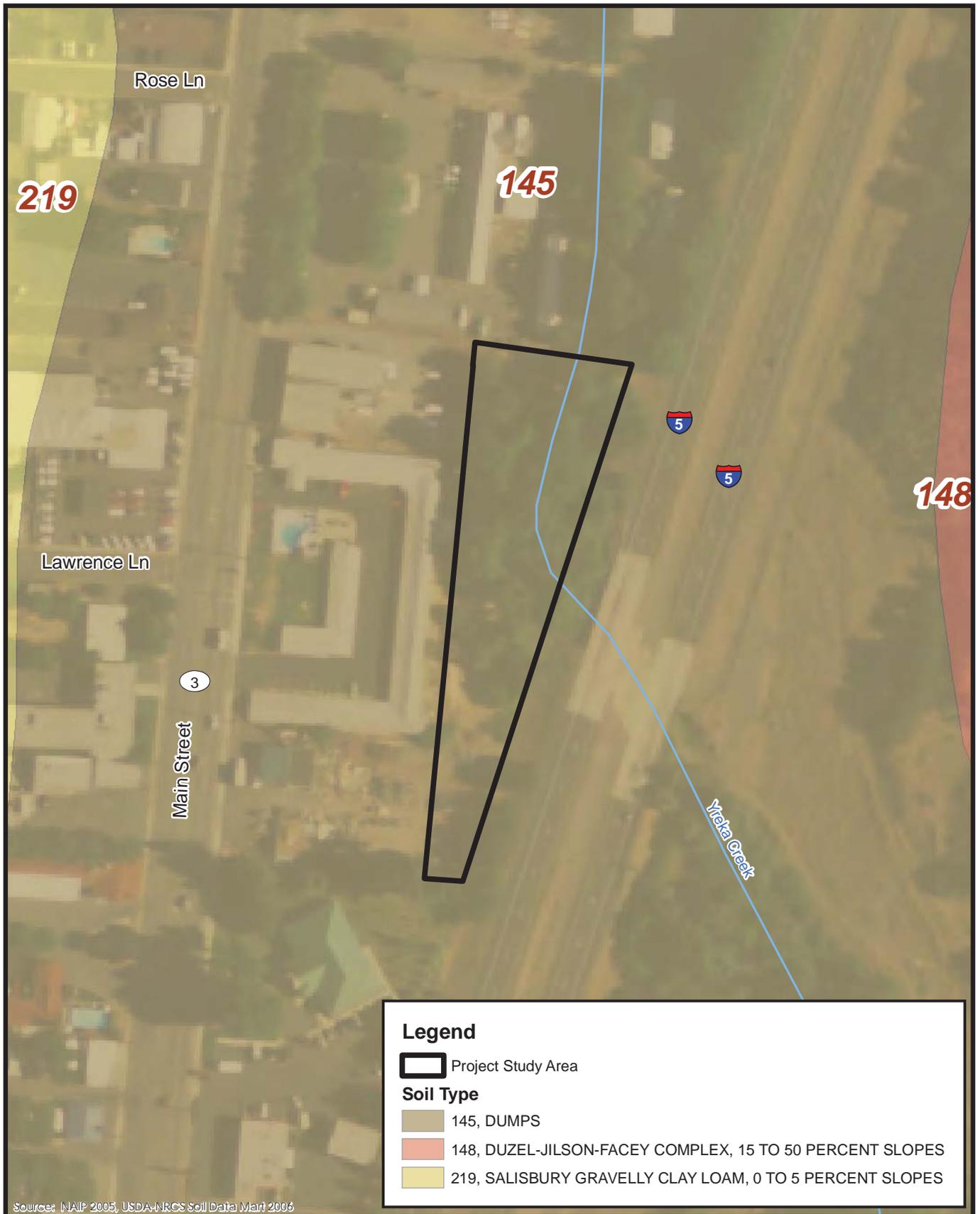


Figure 3
Soils Map
PMC[®]

**APPENDIX A – ROUTINE WETLAND
DETERMINATION FORMS**

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yreka Stormwater - Florentine Drain City/County: Yreka/Siskiyou Sampling Date: 1/26/09
 Applicant/Owner: City of Yreka State: CA Sampling Point: DP 1
 Investigator(s): Elaine Flock Section, Township, Range: S27, T45N, R7W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): LRR D Lat: 41 deg 43' 15" Long: -122 deg 38' 17" Datum: NAD 83
 Soil Map Unit Name: Dumps NWI classification: PFOC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Does not meet all three wetland parameters; upland. Portions of site previously disturbed.	

VEGETATION

<u>Tree Stratum</u> (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Fraxinus latifolia</u>	<u>2</u>	<u>N</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40</u> (A/B)																																
2. <u>Prunus virginiana</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>																																	
3. _____																																				
4. _____																																				
Total Cover: <u>12</u>				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>4</u></td> <td>x 1 =</td> <td align="center"><u>4</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>10</u></td> <td>x 2 =</td> <td align="center"><u>20</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>40</u></td> <td>x 3 =</td> <td align="center"><u>120</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>50</u></td> <td>x 4 =</td> <td align="center"><u>200</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>2</u></td> <td>x 5 =</td> <td align="center"><u>10</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>104</u></td> <td>(A)</td> <td align="center"><u>448</u></td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>4.3</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>4</u>	x 1 =	<u>4</u>	FACW species	<u>10</u>	x 2 =	<u>20</u>	FAC species	<u>40</u>	x 3 =	<u>120</u>	FACU species	<u>50</u>	x 4 =	<u>200</u>	UPL species	<u>2</u>	x 5 =	<u>10</u>	Column Totals:	<u>104</u>	(A)	<u>448</u>	Prevalence Index = B/A = <u>4.3</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>4</u>	x 1 =	<u>4</u>																																	
FACW species	<u>10</u>	x 2 =	<u>20</u>																																	
FAC species	<u>40</u>	x 3 =	<u>120</u>																																	
FACU species	<u>50</u>	x 4 =	<u>200</u>																																	
UPL species	<u>2</u>	x 5 =	<u>10</u>																																	
Column Totals:	<u>104</u>	(A)	<u>448</u>																																	
Prevalence Index = B/A = <u>4.3</u>																																				
<u>Sapling/Shrub Stratum</u>																																				
1. _____																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
Total Cover: <u>0</u>																																				
<u>Herb Stratum</u>																																				
1. <u>Elymus glaucus</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																																
2. <u>Unknown herb.</u>	<u>20</u>	<u>Y</u>	<u>--</u>																																	
3. <u>Torilis arvensis</u>	<u>30</u>	<u>Y</u>	<u>UPL</u>																																	
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
Total Cover: <u>90</u>																																				
<u>Woody Vine Stratum</u>																																				
1. <u>Rubus discolor</u>	<u>2</u>	<u>Y</u>	<u>FACW</u>																																	
2. _____																																				
Total Cover: <u>2</u>																																				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____																																				
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input type="checkbox"/>																																				

Remarks:
 Assuming unknown herbaceous plant to be FACU or UPL based upon surrounding veg., lack of hydric soils, and weak hydrology indicator.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yreka Stormwater - Florentine Drain City/County: Yreka/Siskiyou Sampling Date: 01/26/2009
 Applicant/Owner: City of Yreka State: CA Sampling Point: DP 2
 Investigator(s): Elaine Flock Section, Township, Range: S27, T45N, R7W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): LRR D Lat: 41 deg 43' 15" Long: -122 deg 38' 17" Datum: NAD 83
 Soil Map Unit Name: Dumps NWI classification: --

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Does not meet all three wetland parameters; upland. Portions of site previously disturbed.	

VEGETATION

<u>Tree Stratum</u> (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Fraxinus latifolia</u>	<u>1</u>	<u>Y</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
2. _____				
3. _____				
4. _____				
Total Cover: <u>1</u>				
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>95</u> x 2 = <u>190</u> FAC species _____ x 3 = _____ FACU species <u>5</u> x 4 = <u>20</u> UPL species _____ x 5 = _____ Column Totals: <u>100</u> (A) <u>210</u> (B) Prevalence Index = B/A = <u>2.1</u>
1. _____				
2. _____				
3. _____				
4. _____				
Total Cover: <u>0</u>				
<u>Herb Stratum</u>				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> 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.
1. <u>Elymus glaucus</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
Total Cover: <u>5</u>				
<u>Woody Vine Stratum</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>Rubus discolor</u>	<u>94</u>	<u>Y</u>	<u>FACW</u>	
2. _____				
Total Cover: <u>94</u>				
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____			

Remarks:

**APPENDIX B ARCHAEOLOGICAL AND
HISTORICAL RESOURCE REPORT FOR THE YREKA
CREEK TRAIL DEVELOPMENT PROJECT. RESOURCE
MANAGEMENT, SEPTEMBER 2012.**

**ARCHAEOLOGICAL AND HISTORICAL
RESOURCE REPORT
for the
CITY of YREKA'S
YREKA CREEK TRAILS / OBERLIN ROAD PROJECT**



**Report prepared by Resource Management
Ft. Jones, California:
for
Pacific Municipal Consultants, Inc.
Chico, California
November 2012**

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Report prepared by:

Jeff LaLande, Ph.D., RPA (Archaeologist/Principle Investigator)

Candice Cook-Slette (Archaeologist)

Kathleen Tyler (Archaeologist)

SUMMARY

This Archaeological and Historical Resource Report deals with Yreka Creek Trails / Oberlin Road Project, located within the incorporated limits of the City of Yreka, Siskiyou County, California.

The City of Yreka's proposed project consists of the development of public access trails along Yreka Creek and within the Yreka Creek Greenway, as well as the installation of recreation facilities which includes fixed and break-away bridges, picnic tables, and a trailhead parking facility, removal of floodplain constrictions, removal of noxious weeds, and planting of native riparian and upland vegetation.

This report was prepared by Resource Management, an environmental consulting firm located in Fort Jones, California, with Jeff LaLande, RPA/Ph.D. as Principle Investigator, Candice Cook-Slette, B.A., Archaeologist, and Kathleen Tyler Postgraduate Certificate, Archaeologist

The scope of this archaeological investigation consists of pre-field literature search, Native American consultation, field survey of the affected areas, and report preparation.

The fieldwork on the majority of the project-area acres was conducted on October 19, 2012 by principal investigator Jeff LaLande. An intensive survey was performed. Field work was also performed on November 19 and 23, 2012 on the remaining, northwesterly portion of the project by Kathy Tyler and Jeff LaLande. No prehistoric or historic sites were located during this survey.

However, a trash scatter -- one dominated (<95% of the items) by post-1960s-70s objects -- was found along the fenced property line between the northwestern-most part of the project area (i.e., the portion west of Interstate 5 and Yreka Creek) and the adjacent rear side of a "budget" motel that is located immediately to the west. A small number of fragmented milk bottles and other pre-1960s artifacts were found in the northern part of the scatter; these are most likely the result of secondary or tertiary deposition from the level area where the motel is now located, removed and re-deposited during construction of that facility.

Pre-field research indicated a low likelihood for the affected areas to contain potentially significant pre-Contact or historic-period archaeological resources; this low likelihood is due to the fact that the entire area has been subjected to a number of major ground-disturbing impacts over the years, from placer mining and major flood events to use as the site of a post-World War II lumber mill.

The report of this investigation is on file with Resource Management, the author, and The Northeast California Information Center (NEIC), Chico State University, on behalf of Resource Management.

INTRODUCTION AND PROJECT DESCRIPTION

The study was undertaken to be in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Policy Act (CEQA) (Public Resources Code 21000 et seq.) 1970, as amended. The project constitutes an undertaking which has the potential to adversely affect resources within the project's Area of Potential Effect (APE). Therefore, studies must conform to federal guidelines, specifically Section 106 of the National Historic Preservation Act, as amended and implementing regulations of 36 CFR 800 as well as any other pertinent regulations.

The following information and project description is taken, in part, from the Yreka Creek Trail Development Project dated September, 2012. (See Appendix IV for project description in its entirety.)

The project area, which totals approximately 20.5 acres, is accessed via Oberlin Road just east of Interstate 5. The proposed trail project is another phase of the recent successful completion of the restored floodplain which encompasses 700 feet of the Yreka Creek Floodplain, as well as five acres within the current project. This project is also part of the Yreka Creek Master Plan, in which a continuous Greenway along Yreka Creek and Greenhorn Creek, within Yreka city limits is envisioned

The City of Yreka is continuing to follow the *Yreka Creek Master Plan*, organized and created by the Yreka Creek Greenway Committee (a citizens' advisory group). *The Master Plan* has been updated and revised over the years. Currently and most recent is the plan of 2005, which the City of Yreka adopted. *The Master Plan* presents the methods of implementation of goals and objectives, envisioned for the Yreka Creek Greenway. In keeping with the *Yreka Creek Master Plan*. The City of Yreka is now proposing several developments to the Yreka Creek Greenway as follows:

1. Construction of approximately 6,000 square feet of asphalt parking lot at the Oberlin Road trailhead.
2. Installation of a drinking fountain at the Oberlin Road trailhead.
3. Asphalt surfacing of approximately 1,850 linear feet of existing gravel trail to make ADA-accessible.

4. Construction of approximately 1,900 linear feet of gravel-surface trail.
5. Installation of approximately 75 linear feet of free-span bridge, including abutments and armoring.
6. Installation of three “float aside”, seasonal water crossings and four upland-channel Crossings, including abutments and armoring.
7. Installation of five concrete, handicapped-accessible picnic tables, and four trash receptacles.
8. Creation of an approximately 600-foot-long drainage swale that provides vegetative filtration of stormwater.
9. Restoration of approximately one acre of floodplain by re-contouring flood constrictions; planting approximately 600 native plants and trees, and implementing erosion-control measures.
10. Development and installation of a City-bond acknowledgement sign, a trail and site identification map/sign, and three trailside interpretive signs.

LOCATION

The Yreka Creek Trails / Oberlin Road Project area is mapped within the Yreka U.S.G.S. 7.5' topographic quadrangle. It is located within: Township 45N, R7W, MDM, within a portion of Section 27 of the incorporated limits of the City of Yreka, Siskiyou County, California. (The approximate center of the Oberlin Road trailhead parking area is located at GPS-ed UTM: NAD 83 Zone 10 / 0530228 n / 4618317e .) Most of the project is located on the east side of Interstate 5 freeway, but with a small portion situated on the west side of the freeway.

NATURAL SETTING

The project's Area of Potential Effect (APE) is located within the city limits of Yreka, California. The major soil units include a series of gravelly clays/loams of alluvial origins. With the Yreka Creek drainage originating within the intrusive igneous and metamorphic geology of the Klamath Mountains to the southwest (and not within the volcanic terrain of most of the remainder of the Shasta River drainage), the alluvium includes meta-sediments, granitic rocks, and ultra-mafic rocks. The ground surface of most of the entire project area on the east side of Interstate 5 has been heavily impacted; the surface includes numerous scattered, fragmented remnants of concrete and asphalt, artificial deposits of gravel, and especially extensive exposures of very rocky, heavily compacted (and often imported) soil. The small section of the project that is situated west of Interstate 5 has been heavily impacted by erosive floods (most of the area is recently inundated flood plain) and by ca. 1960s construction of a motel on the adjacent lot and the subsequent unauthorized dumping on City land.

Yreka Creek, a tributary of the northward-flowing Shasta River, is a perennial stream that originates about 6.6 miles to the southwest of the city, at Forest Mountain Summit on the south slope of the Soap Creek Ridge watershed divide between the Shasta River drainage on the east and the Scott River drainage on the west. Yreka Creek flows east and north into the south edge of the city limits; in the project area it follows a northward course, eventually joining the Shasta River north of the city.

Vegetation within the project area environment is characterized by a mix of native and non-native species. Native white alder, box elder, arroyo willow, black cottonwood Oregon white ash, and Western shiny-leaf willow predominate, but with non-native honey locust scattered in a few clumps as well as English ivy at the base of three willows on the westerly portion of the project. Three +/- 40-year old Ponderosa pines are growing in a moist area situated well away from the stream course. Native shrubs include Klamath plum, wild clematis, wild rose, and Cascara buckthorn. Native ground cover vegetation (some of it probably planted as part of recent flood-plain restoration efforts) includes fescue and other bunchgrasses, wild buckwheat, mint, yarrow, lupine, milkweed, and rabbitbrush. Himalayan blackberry occurs, as do other such non-native species characteristic of heavily disturbed soils as mullein, cheatgrass, star thistle, Marlahan mustard, and Russian thistle.

Black tail deer and occasional mountain lion have an obvious and associated presence within the city limits. The riparian zone and adjacent open areas include a wide variety of smaller birds, raccoons, skunks, beavers, squirrels, possum, fish, and reptiles that coexist within the natural environment.

PRE-CONTACT CULTURAL SETTING

The project area lies within the ethnographic territory of the Shasta Indians. The traditional territory of the Shastan peoples extended from a short distance north of Ashland, Oregon, to Mt. Shasta, the most southern extent. The western boundary included Seiad Valley on the Klamath River, southwest to the New River area, and east to the area of Beswick, California.

(The section below is excerpted from the report for the Bogus Creek Coho Restoration Project [2010], by James T. Rock, Archaeologist).

Many of the resources significant to the Shasta to support their lifeways were found in streams, lakes, meadows, oak woodlands, and swamps. High-elevation areas were a significant element in their spiritual world. The Shastan people developed a subsistence economy based on seasonal hunting, fishing, and gathering patterns. Base camps were located at key resource areas and were visited once a year depending on the availability of the targeted subsistence resource. After the food-gathering cycle was over they would return to their permanent villages (largely along many rivers) with their food

stores to spend the winters. Structures in winter villages might include rectangular multi-family dwellings, assembly houses, communal men's sweathouses, smaller communal sweathouses, and menstrual huts.

The Shasta utilized a large array of animal food sources, such as deer, elk, antelope, big horn sheep, bear, rodents, turtles, crayfish, insects, mussels, eels, salmon, other fish, small mammals, and various birds. The Shasta similarly had a wide variety of plants, which occupied a substantial part of their subsistence resources. In general, the seasons dictated their food-procurement activities. For instance, starting in February they would fish; in early spring (March) they would gather a variety of plants for greens; April and May would be key times to gather geophytes (root and bulb plants); in June they would fish, and July would be the time to gather seeds. In August, the huckleberries in the mountains were ready, and September and October were the time to harvest acorns. They would fish again in November. December was normally a time to stay in the winter village. Deer were hunted primarily in January; however, game was hunted year round. It should be noted that even though they had many choices, their staples were acorns, deer, and salmon; in some areas they depended heavily on the fleshy root crops. Over hundreds of years of co-existence with the local flora and fauna the Shasta developed a sophisticated knowledge of their environment that would sustain them until contact with the Euroamericans. The project-area vicinity could have been utilized seasonally as they followed their long-term pattern of hunting and gathering. Some Shasta cultural-use plants located in the project vicinity were oaks, pines, elderberries, gooseberries, currants, manzanita, and deerbrush.

Some pipe tips used in smoking Indian tobacco were sometimes carved out of serpentine. Rock art in the form of cupules was used for rain-making ceremonies and female fertility. The most renowned Shasta cupules rock, now located in front of the Fort Jones museum, is named the "Rain Rock". House pits, middens, fire rings, hearths, and burial locations (the Shasta sometimes buried their dead by placing rocks over them) were features typical of Shasta sites. Sometimes food was stored by piling rocks over baskets or placing them in talus pits, otherwise food was stored in baskets or caches near the shelters. Other artifacts found in the later period (Pacific) were Gunther-barbed projectile points made out of obsidian or jasper and other cryptocrystalline silicates (CCS). Grinding stones (metates) were used for the processing of roots and other plants. Hopper/mortars were used for processing acorns.

The Shasta used the local minerals, flora, and fauna as raw-material sources for manufacturing an immense array of primary and secondary tools and implements. The collection and processing of the various food resources were accompanied with use of a wide variety of wood, bone, and stone artifacts. Only fragmentary evidence of their material culture remains. This is due in part to how perishable their belongings were, and in part to the impacts to prehistoric archaeological sites resulting from later historic land-use practices such as farming, mining, and logging.

POST-CONTACT HISTORICAL SETTING

In the mid-1820s, the first Euroamericans to pass through the vicinity of Yreka were the early explorers and the Hudson's Bay trappers. Among these early notables was Peter Skene Ogden. Euroamericans did not begin to dominate the local population until 1851, when gold was discovered by Abraham Thompson at Thompson's Dry Diggings, just north of present-day Yreka. After discovery, the initial incursion of Euroamerican miners and lumbermen soon led to the arrival of Chinese and Kanaka (Hawaiian) laborers, as well as ranchers, and businessmen to supply goods and materials to the mines.

The Chinese population developed their own "Chinatown" and Chinese cemetery. The Chinese district was located at/near the present-day central Yreka exit from Interstate 5, close to Yreka Creek, but well north of the project area. The site was virtually obliterated during the construction of the interstate during the 1970s. However, the Chinese cemetery is still present east of Yreka, along Highway 3.

Much of the area encompassing both sides of Yreka Creek was initially dredged in 1899 by the Yreka Creek Gold Dredging Company owned by Mr. Edgar T. Wallace; dredging may or may not have extended as far south as the project area, but other forms of placer mining definitely occurred there.

Early transportation routes to the area include the north/south Oregon-to-California Trail, as well as the Applegate Trail, which brought an influx of gold seekers. This route was also part of the Hudson's Bay Trail. In 1853, the Yreka Trail was formally declared a public highway by the Court of Sessions of Siskiyou County. This trail was used during skirmishes with raiding parties of Modoc Indians and by 1852 Yreka Volunteers brought emigrants over nearly the same route. (The route of the Yreka trail apparently passed along or close to present Oberlin Road, on the south edge of the project area; however, no visible or likely remnants of that route remain.)

By the late 1880s, construction of the Southern Pacific Railroad through the Shasta Valley north to Oregon facilitated the increased movement of people and commodities into the area, thereby increasing regional economic development. Yreka, which had begun as a miners' mercantile outpost during the 1850s-1870s gold-mining heyday had long since become the county seat of Siskiyou County; when the town linked itself to the the Southern Pacific RR to the east by building the Yreka and Western RR from Yreka to the mainline at Montague, its fortunes as the commercial center of the northern-most tier of California were assured. During the twentieth century (especially with construction of the Pacific Highway/US Highway 99 during the 1910s, followed by Interstate 5 in the 1960s), Yreka prospered. After World War II, wood-products mills proliferated in/near the town and in the nearby Shasta Valley; one such mill (Pine Mountain Lumber Company's sawmill, long-since dismantled) was located within the southwestern portion of the project area, just north of Oberlin Road. In addition to such industrial operations, subsequent residential and commercial development spread south from the older parts of Yreka to the Oberlin Road/Fairlane Road vicinity.

Yreka promotes its historic downtown, with buildings dating to the gold-rush period, as a tourist attraction; other forms of recreation have become important to the community as well, and the Yreka Creek Greenway system is one such amenity for residents.

Past Impacts to the Project Area: The entire project area has experienced a post-1850s history of severe, ongoing disturbance. Among the impacts have been a number of major erosive floods (e.g., 1861, 1890, 1927, 1955, 1964, 1974, and 1997) that scoured and re-scoured Yreka Creek's wide flood-plain within the project area, particularly the lower, more level ground situated to the west of the streamcourse. Other impacts have included repeated sequences of placer mining of the creek's riparian zone during the nineteenth century. During the twentieth century, industrial uses (i.e., Pine Mountain Lumber Co's ca. 1950s-1970s sawmill) resulted first in the leveling, grading, and importing of non-native fill material; later, with the dismantling and leveling of this abandoned site around 1990, further displacement by excavation occurred. To the east of Yreka Creek, rock fill for another industrial-use site, located on the bluff above the creek, caused further change. Post-2000 flood-plain restoration involved major ground disturbance closer to the creek, including development of meandering floor-water channels.

In short, the entire project area is a landscape that has been very heavily affected by both natural and human-caused disturbances.

PREVIOUS SURVEYS

The Northeast Center of the California Historical Resources Information System (CHRIS) was contacted on October 17, 2012, regarding the proposed actions outlined in the vicinity of the Yreka Creek Trails /Oberlin Road Project. Copy of their response is in the appendix of consultation letters.

Previously documented archaeological investigations in the vicinity of the project area are:

Gray, Dennis J.

1994 *Cultural Resource Inventory, Rogue Valley Manor Residential Housing Project, Siskiyou County, California*. IC Report 7646

Jensen, Peter M. (Jensen & Associates)

1977 *Archaeological Reconnaissance of 14 Acres Near the Junction of Interstate 5 and State Route 3, Near Yreka, California*. IC Report 501

1991 *Archaeological Inventory Survey for the Proposed North View Estates*

Subdivision Project Involving c. 110 Acres Located North of Yreka, Siskiyou County, California. IC Report SI-L-264

1994 *Archaeological Inventory Survey: Siskiyou Hospital's Proposed Relocation Site Project Area, c. 10 Acres in South Yreka, Siskiyou County, California. IC Report SI-L-399*

2003 *Archaeological Inventory Survey: City of Yreka Sewer Improvement Project, Yreka, Siskiyou County, California. Prepared for Pacific Municipal Consultants, Inc., Mt. Shasta, California. IC Report 5755*

Jensen, Sean M. (Genesis Society)

2009 *Archaeological Inventory Survey Proposed Yreka Creek Greenway Development Project, c. 8 Acres, City of Yreka, Siskiyou County, California. IC Report 10584*

Nadolski, John A. (Pacific Municipal Consultants)

2007 *Archaeological and Historical Investigations for the City of Yreka Storm Water Detention Basin and Flood Plain Restoration Project. IC Report 8944.*

Rock, James T.

2005 *Archaeological Resource Management Report for the City of Yreka Creek R.V. Park Project, Siskiyou County, California. IC Report 8670*

Rock, James T. and Candice Cook-Slette

2009 *Archaeological Investigations Report for the Yreka Barnham Storm-drain Project. Prepared for Pacific Municipal Consultants, Mt. Shasta, California.*

Vann, David (Vann Cultural Resource Management)

2010 *Siskiyou County Fire Safe Fuels Reduction (I.C. File #D10-37). IC Report 11324*

The above referenced reports reflect that no prehistoric or historic resources were located during archaeological and historical investigations within or immediately adjacent to these previous project areas.

Additionally, the city's Miner Street Historic District, which includes numerous 19th and early 20th-century commercial, civic, and residential structures, is situated well away from the project's A.P.E.

SURVEY STRATEGY AND FIELD WORK

The APE for this project consists of approximately 20.5 acres, an area largely easterly adjacent to Interstate 5, north of Oberlin Road, and west of the now abandoned Y&W railroad spur; areas excluded from the survey are the privately owned business properties (whether fenced or un-fenced) that are adjacent to the project.

All of the project area is well outside of the historic (1850s-1920s) core of Yreka. The Yreka Creek Greenway project is situated in an area that was once part of the 19th-century mined-stretch of Yreka Creek.

Based on previous documentation and the fact that Yreka Creek and the project area have been heavily disturbed by erosive floods and a variety of human activities over the past 150 years, the project area would indicate a low level of probability for containing intact prehistoric and historic sites and features with sufficient integrity to be potentially eligible to the National Register of Historic Places (NRHP). A field survey was conducted to identify any previously unidentified sites that might be impacted by the project. The pedestrian survey of most of the project area was conducted on October 19, 2012 by P.I. Jeff LaLande. The survey was completed on November 19 and 23. Survey work involved slow-paced pedestrian coverage of the entire project area while searching for prehistoric or historic features or artifacts on the ground surface. Although grass/forb ground cover was often dense in places, mineral soil was exposed in substantial-sized areas situated throughout the project APE.

This investigation incorporated an intensive-level pedestrian survey of exposed soil within the entire acreage of the project. A cursory level of survey was limited to wet, densely vegetated areas and to places where blackberry bushes limited visual inspection.

Because this was solely a surface survey, it is possible, although unlikely, that prehistoric or historic material may be discovered in the course of project implementation/excavation; if so, work at the site should be suspended until the finds are evaluated by a qualified archaeologist and, in the case of prehistoric material, the appropriate Native American tribes are consulted.

RESULTS of SURVEY

Results of the October-November 2012 survey were negative in that no pre-Contact or historic-period artifacts or features were found within the project area. Aside from a few items found within the recent trash scatter located adjacent to the property line behind the motel (discussed below), the only items observed dated to within the last 30-40 years. These included abundant chunks (and piles) of fragmented concrete, asphalt, and ceramic drain pipe; lengths of rusted wire-rope cable; nails, bolts, and other ferrous-

metal connectors; sections of galvanized pipe; plastic-coated electrical wire; miscellaneous automotive parts; and numerous shards of bottle glass and window glass.

One small fragment of dark-brown glazed ceramic (found within the site of the former Pine Mountain sawmill) appeared, from a distance, to possibly be from nineteenth-century Chinese utility ware; however, it proved to be a piece of twentieth-century drain-tile pipe.

In 2010, one of this report's authors was doing an archaeological survey along Yreka Creek within the present project area, preparatory to a willow-planting project along the stream banks. She found a single obsidian percussion flake, located on the ground surface less than a meter from the edge of the creek's flow level on that day. Given the massive flooding of past decades, as well as the substantial displacement of rocks and soil from past mining and flood-plain restoration, this item definitely was not *in situ*. This item would have originated from some unknown location well upstream, quite possibly from an archaeological site situated on an alluvial terrace above the flood plain.

Situated in the northwestern-most portion of the project area, west of Interstate 5 and immediately west of Yreka Creek is a recent (post-1970) scatter of miscellaneous construction debris and trash. This area was burned in a relatively low-intensity brush fire in about 2010. Much of the scatter consists of broken concrete blocks (including decorative blocks), bricks, and fragments of asphalt. Other items include pieces of carpeting, baseboard heaters, plastic and glass objects (many of them melted from the fire).

This trash scatter occupies the "riparian" edge of the flood-free terrace upon which the motel was built in about 1960-65, but is concentrated on the low (approx. 3-4' high), north/south-oriented slope that connects the terrace edge with the creek's flood plain immediately below. (The scatter begins on the south at approximately NAD 83, UTM 10 / 0530078 / 4618816 and terminates on the north at about UTM 10 / 0530078 / 4618816.)

Prior to construction of the Relax Inn motel, the area west of the property line was evidently a medium-density, modest-income residential neighborhood, with most of the houses likely built in the 1920s-40s and situated along Highway 99 in what would then have been the southern edge of Yreka.

At the northern-most extent of the scatter, the survey found a small (approx. 3 meters in diameter) "concentration" of pre-1960s items. These few objects (which co-occurred with what were numerous, badly rusted, likely post-1960 round-headed nails and plastic items) included a single machine-cut square nail; fragments of a minimum of 3 round-body milk bottles (pre-1955, by which time "rounded-square" milk bottles had become standard); fragments of a single screw-top 1-pint "flask-type" liquor bottle; the embossed base of a bottle of unknown contents; and two pieces of thick-bodied ironstone whiteware (one piece apparently from a bowl and one from a cup/mug). In

addition, two unidentifiable heavily rusted ferrous-metal items were present. (See photographs.) This small accumulation of pre-1960s items within the recent trash scatter almost certainly originated from within the former yards of the residential neighborhood, and were displaced to their present location by the use of heavy equipment for leveling and grading the surface of the area of the to-be-built Relax Inn motel. The P.I. believes that this occurrence does not warrant documentation/recordation as an “archaeological site”; it certainly is not a potentially significant archaeological resource.

Based on both the negative results of the survey and on the area’s history of heavy disturbance, the proposed project’s A.P.E. contains no known, potentially significant cultural resources. **The project is a “no historic properties” undertaking for the purposes of Section 106 of the National Historic Preservation Act.**

NATIVE AMERICAN CONSULTATION

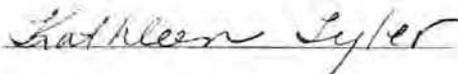
A letter of consultation dated October 27, 2012 was sent to the tribally designated contact person of the Quartz Valley Indian Reservation, in Fort Jones, California (a federally recognized tribe); no response has been received. A non-mandatory consultation letter was also sent on the same date to the Shasta Nation (which is not a federally recognized tribe) as a courtesy; no response has been received. These two entities are the only two Native American groups listed by the Native American Heritage Commission that have specified that they either have or may have interest in archaeological, cultural, or traditional issues within the Yreka vicinity. A letter was also written to the Karuk Tribe Housing Authority, in Yreka, no response was received.

A search of its files by the California Native American Heritage Commission for this project found no "Sacred Land" areas or issues, nor any other known areas or issues of cultural, archaeological, or traditional interest

The Northeast Center of the California Historical Resources Information System (CHRIS) was contacted on October 17, 2012, regarding the proposed actions outlined in the vicinity of the Yreka Creek Trails /Oberlin Road Project. The report should be back in the month of November.

Report Prepared by: 

Candice Cook-Slette, B.A.
Archaeologist

Report Prepared by: 

Kathleen Tyler, Post Graduate Certificate
Archaeologist

Report Reviewed and edited by: 

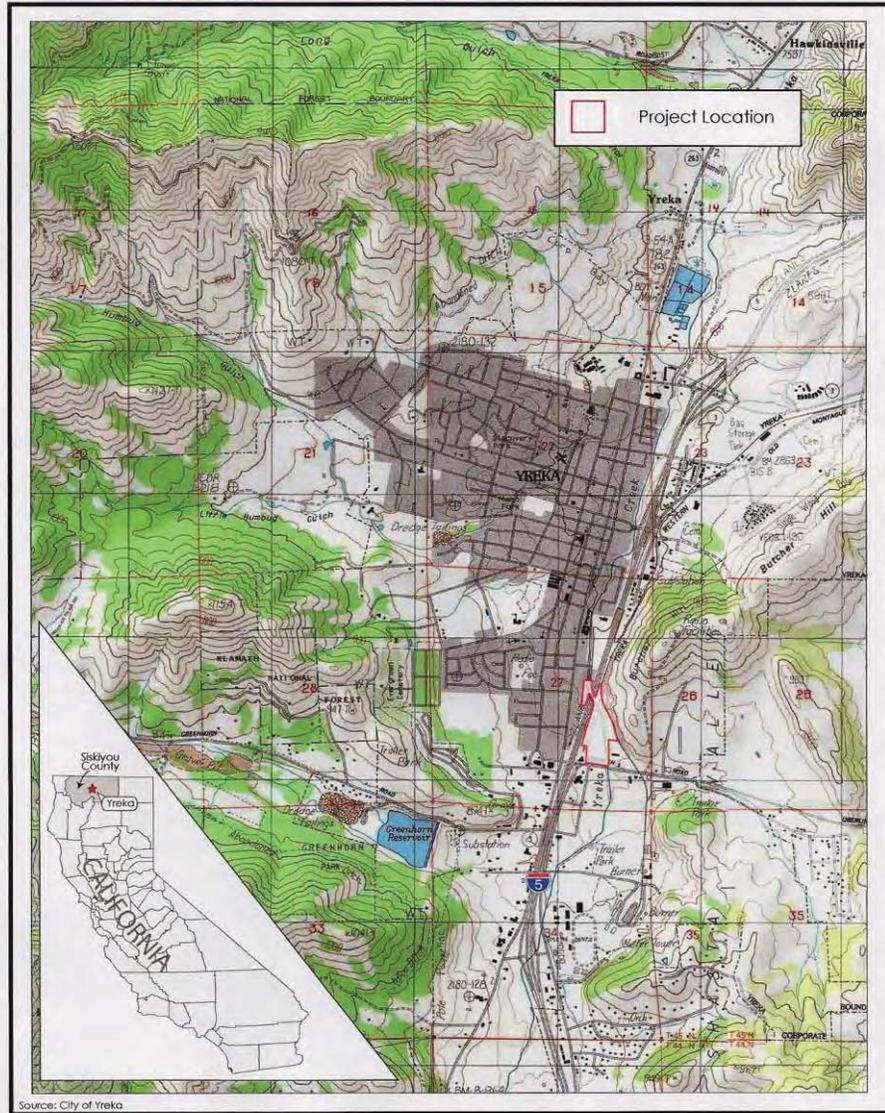
Jeff A. Lande, R.P.A.

REFERENCES CITED AND/OR UTILIZED

- Carpelan, Mary, and Betty Hall
2000 *The Shasta History*. Quartz Valley Indian Reservation, Quartz Valley, California.
- Debo, Angie
1979 *A History of the Indians of the United States*. In: *The Civilization of the American Indian Series*, Volume 106, Sixth Printing. University of Oklahoma Press, Oklahoma.
- Fiorini-Jenner, Gail L. and Monica Jae Hall
2002 *Western Siskiyou County Gold and Dreams*. Arcadia Publishing, Charleston, South Carolina.
- Gudde, Erwin G.
1975 *California Gold Camps*, University of California Press, Berkeley California.
- Hardesty, Donald L., and Eugene M. Hattori
1984 *Rural Chinese on the Nevada Mining Frontier Archaeological and Historical Perspective*, paper presented at Society of Historic Archaeology, Annual Meeting, Williamsburg, Virginia.
- Hendryx, Michael, and James T. Rock
2003 *Photographic History of Siskiyou County*. *The Siskiyou Pioneer*, Volume 8, Number 2. Siskiyou County Historical Society, Yreka, California.
- Hickman, James C., Editor
1993 *The Jepson Manual Higher Plants of California*. University of California Press, Berkeley, California
- Jones, J.Roy
1980 *Saddle Bags in Siskiyou*. Naturegraph Publishers, Inc. Happy Camp, California. Reprint from 1953.
- Luecke, Mary
1982 *Siskiyou County Place Names*. In: *The Siskiyou Pioneer*, Volume 5, Number 4. Yreka, California.
- Kroeber, A. L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D. C.

- Nelson, Winnie
1975 *Memories From the Land of Siskiyou Past Lives and Times in Siskiyou County*. Edited by Gilbert W. Davies and Florice M. Frank, History Ink Books, Hat Creek, California
- Renfro, Elizabeth
1992 *The Shasta Indians of California and their Neighbors*. Naturegraph Publishers, Happy Camp, California.
- Rock, James T.
2005 *Yreka Creek R.V. Park Project for RV-Group Partnership*. Report on File at the Northeast Information Center, California State University, Chico, California.
- Rodman, W. Paul
1938 *The Origin of the Chinese Issue in California*. The Mississippi Valley Historical Review, No. XXV.
- Silva, Richard
2001 *Atlas of Siskiyou County Mines*. Siskiyou County Historical Society, Yreka, California.
- Silva, Richard and Keith Arnold
1999 *The Yreka Trail and other Routes to Siskiyou County*. The Siskiyou Pioneer and Yearbook Vol. 7, No. 2 published by the Siskiyou County Historical Society, Yreka, California.
- Silver, Shirley
1978 *Shasta Peoples*. In: *The Handbook of North American Indians*, Volume 8. William Sturtevant, Editor. The Smithsonian Institution, Washington, D.C.
- Stumpf, Gary D.
1998 *Gold Mining in Siskiyou County 1850-1900*. Occasional Paper Number 2. The Siskiyou County Historical Society, Yreka, California.
- Wells, Harry L.
1881 *History of Siskiyou County, California*. D.J. Stewart and Co., Oakland, California.
- Winthrop, Robert H.
1986 *Survival and Adaptation Among the Shasta Indians*. Prepared for the U.S. Forest Service, Klamath National Forest. Winthrop Associates, Ashland, Oregon.

APPENDIX I – Project Areas Map



Project Location Map

PMC

Map Created by
PMC for the City of Yreka



Map Created by
PMC for the City of Yreka

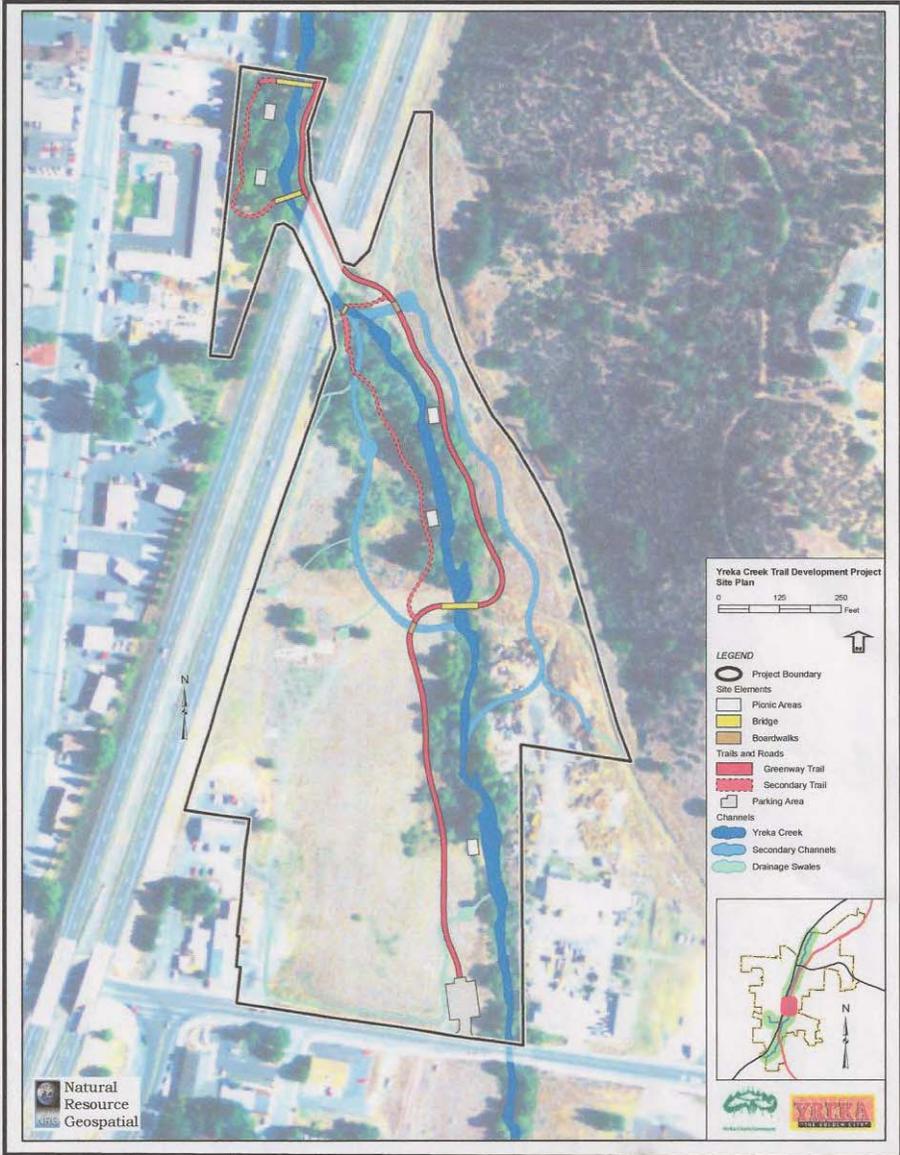


Figure 3.0-2
Site Plan
PMC

APPENDIX II – Photographs



Photo 1: View north from Oberlin Road of trailhead parking lot and surveyed parcel beyond.



Photo 2: View east of Oberlin Road, with trailhead parking lot on left.



Photo 3: View north of project area on west side of Yreka Creek.



Photo 4: View north of mound of dirt and concrete fragments located on west side of Yreka Creek (apparently created during flood-plain restoration of a few years ago).



Photo 5: View east from within project area; line of trees marks course of Yreka Creek.



Photo 6: View north from within project area, chain link fence on left marks eastern right-of-way of Interstate Highway 5.



Photo 7: View northeast from within project area across the restored flood plain towards Yreka Creek; note "line of stones, dead limbs, and other debris from the most recent high-water event.



Photo 8: View west of graveled trail's footbridge across Yreka Creek (will be replaced by wider bridge as part of the project.



Photo 9: View south of Yreka Creek's largely dry streambed in October 2012.



Photo 10: View east from near Yreka Creek of project area's east portion; grade of Yreka & Western RR visible in upper left.



Photo 11: View north along embankment of abandoned Yreka & Western RR grade, which forms east boundary of project area (embankment soil closely examined, with no pre-1960s artifacts observed).



Photo 12: View north along abandoned railroad grade, showing ties after removal of steel track; project area is on the left, largely out of view due to the intervening rise (private land)



Photo 13: View west-southwest of project area from its eastern edge, showing full width to edge of Interstate 5 in the distance; Yreka Creek marked by line of trees on left and right.



Photo 14: View north from within the east portion of project area; Yreka Creek on the left.



Photo 15: View west of edge of Yreka Creek; "homeless camp" on creek's terrace.



Photo 16: View north of high-water streambed of Yreka Creek, adjacent to west side of creek; Interstate 5 is located just beyond the trees.



Photo 17: Hydraulic-line 4-way connector; site of Pine Mountain Lumber Co.'s sawmill.



Photo 18: View southwest of Pine Mountain mill site, which occupies much of the project area on the west side of the creek.



Photo 19: View to northwest, from top of bank of Yreka Creek, showing rear of Relax Inn motel and the trash scatter along the slope of the intervening terrain. Low-energy water flows from extreme floods can occasionally over-top the edge of the motel's terrace; however, the "flat" ground in the center of the view is more commonly subjected to periodic flooding.



Photo 20: View east from approx. south end of trash scatter, showing riparian vegetation of Yreka Creek and the west embankment slope of Interstate 5; note large mortared-rock "chunk" (possibly from a ca. 1960s feature originally built at the adjacent motel [which is out of sight, immediately to the rear of the viewpoint]).



Photo 21: Crown-cap Coors beer bottle (ca. 1960s-1970s), exposed within the trash scatter.



Photo 22: Screw-cap 1-quart beer bottle (ca. 1980s-90s), exposed within the trash scatter.



Photo 23: View north from southern portion of trash scatter; although most items are exposed on the terrace-edge slope, some items are found on the terrace surface above (on left) or on the “100-year” flood-plain below (on right). The pre-1960s items exposed in the northern part of the scatter are situated just beyond the clump of box elder visible in center of this view.



Photo 24: Cluster of metal and plastic items in southern portion of trash scatter; the iron “ore crusher”-handle mechanism is in center, supported by a recent metal item (baseboard-heater part?).



Photo 25: Close-up view of “J. B. Lowe Ore Crusher Patented Oct. 1886 No. [????????]” .



Photo 26: View south-southwest from within main flood-plain of Yreka Creek, showing main part of trash scatter along terrace edge (rear of motel visible beyond); northern-most portion of scatter is situated out of view to the right.



Photo 27: Cluster of pre-1960s artifacts exposed in northern-most portion of trash scatter: milk bottles = 1 mouth, 2 bases, wall fragments; screw-top 1-pint liquor bottle (lower left); crown-cap (from beer or soda bottle); and unidentifiable glass fragments.



Photo 28: Closer view of artifacts in photo #27, showing two circular milk-bottle bases and milk-bottle mouth.



Photo 29: Pre-1960s glass artifacts with ca. 2000 plastic-cap mayonnaise jar.



Photo 30: Sample of pre-1960s artifacts (= approx. 40% of all of the exposed pre-1960s fragmented items, not including abundant round nails). L. to r.: milk-bottle base; bottle base embossed "DeLAVAL"; milk-bottle mouth fragment; unknown ferrous item; milk-bottle wall fragment embossed "[J]ACKSONS"; tinned-can lid (baking soda?); square nail; four milk-bottle fragments; fragment of ironstone whiteware ceramic cup/mug.



Photo 31: Fragment of ironstone whiteware bowl (?).

APPENDIX III – Letters of Consultation



November 16, 2012

Native American Heritage Commission
ATTN: Debbie Pitas-Treadway
Environmental Specialist III
915 Capitol Mall, Room 364
Sacramento, CA 95814

Dear Ms. Pitas-Treadway

This letter is in reference to the proposed City of Yreka (Recreational) Trails/Oberlin Road Project. The project area is located within Township 45 North, Range 7 West, Sections 27, Mt. Diablo Meridian. The 7.5' Yreka Quadrangle (1984) is referenced for this project in Siskiyou County, California.

The proposed project includes the development of public access trails along Yreka Creek and within the Yreka Creek Greenway, as well as the installation of recreation facilities to include both fixed and break-away bridges, picnic tables, a trailhead parking facility, removal of floodplain constrictions, removal of noxious weeds, and planting of native riparian and upland vegetation. In particular, the Yreka Creek Trail Development Project proposes the following improvements:

- Construction of approximately 6,000 square feet of asphalt parking lot at the Oberlin Road trailhead;
- Installation of a drinking fountain at the Oberlin Road trailhead;
- Surfacing of approximately 1,850 linear feet of existing trail to make it ADA-accessible;
- Construction of approximately 1,900 linear feet of gravel trail;
- Installation of approximately 75 linear feet of free span bridge including abutments and armoring;
- Installation of three "float aside", seasonal water crossings and four upland channel crossings including abutments and armoring;
- Installation of five concrete, handicapped-accessible picnic tables, and four trash receptacles;
- Creation of an approximately 600-foot drainage swale that provides vegetative filtration of stormwater;

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P.O. Box 146 Fort Jones, California 96032
Phone: 530-468-2888 Fax: 530-468-4426
www.landusecoaching.com



Page 2

- Restoration of approximately one acre of floodplain by re-contouring flood constrictions, planting approximately 600 native plants and trees, and implementing erosion control measures; and
-
- Development and installation of a bond acknowledgement sign, a trail and site identification map/sign, and three trailside interpretive signs.

The proposed project serves to build upon the successes of the recently completed Yreka Stormwater Attenuation and Floodplain Restoration Project.

This letter is a request for information regarding any unrecorded traditional cultural properties, archaeological, or other cultural concerns within or adjacent to the project area. If there are any issues or concerns, they will be included within the final Archaeological Survey Report.

Sincerely,

Kathleen Tyler
Archaeologist

Enclosure: Project Area Map

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www.landusecoaching.com

STATE OF CALIFORNIA

Edward G. Brown, Jr. Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 284
SACRAMENTO, CA 95834
(916) 658-2381
Fax: (916) 657-8380



November 15, 2012

Candice Cook-Sletta
Resource Management
P.O. Box 148
Fort Jones, CA 96032

Sent by Fax: 530-468-4426
Number of Pages: 2

Re: Proposed Trails/Oberlin Road Project, City of Yreka, Siskiyou County

Dear Ms. Cook-Sletta:

A search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American traditional cultural places or cultural landscapes in any APE. While in this case, a search of the NAHC *Sacred Lands File* did not indicate the presence of any sites within the APE you provided, a Native American tribe or individual may be the only source for the presence of traditional cultural places. For that reason, enclosed is a list of Native American individuals/organizations who may have knowledge of traditional cultural places in your project area. This list should provide a starting place in locating any areas of potential adverse impact.

The NAHC makes no recommendation or preference of any single individual, or group over another. All of those on the list should be contacted, 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 NAHC 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 my email address: rw_nahc@pacbell.net.

Sincerely,

Rob Wood
Associate Government Program Analyst

**Native American Contact List
Siskiyou County
November 9, 2012**

Quartz Valley Indian Community
Jaron Peters, Chairperson
3601 Quartz Valley Road
Fort Jones, CA 96032
jbalchair@qvir.com
530) 468-5907
530) 468-5908 Fax

Karuk
Shasta
Upper Klamath

Shasta Nation
Roy V. Hall, Jr, Chairperson
P.O. Box 1054
Yreka, CA 96097
(530) 488-2314

Shasta

Shasta Indian Nation
Thana Calico, Vice Chairperson
P.O. Box 528
Lorrie, CA 96023
90-397-3065
41-281-6539 - cell

Quartz Valley Indian Community
Ivette Lewis, Cultural Resources Coordinator
3601 Quartz Valley Road
Fort Jones, CA 96032
ivirmichelle@yahoo.com
530) 468-5907
530) 468-5908 Fax

Karuk
Shasta
Upper Klamath

Quartz Valley Indian Community
Tebekah Siuas, Environmental Coordinator
3601 Quartz Valley Road
Fort Jones, CA 96032
ivirmichelle@yahoo.com
530) 468-5907
530) 468-5908 Fax

Karuk
Shasta
Upper Klamath

Shasta Nation
Mary Carpelan, Cultural & Archaeological Res.
P.O. Box 1054
Yreka, CA 96097
530) 842-5654

Shasta

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 7090.5 of the Health and Safety Code, Section 807.94 of the Public Resources Code and Section 8087.89 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed (Recreational) Trails/Oberlin Road Project, Yreka, Siskiyou County



October 27, 2012

Quartz Valley Indian Reservation
ATTN: Crystal Bowman,
Environmental Specialist
13601 Quartz Valley Road
Fort Jones, CA 96032

Dear Ms. Bowman:

This letter is in reference to the proposed City of Yreka (Recreational) Trails/Oberlin Road Project. The project area is located within Township 45 North, Range 7 West, Sections 27, Mt. Diablo Meridian. The 7.5⁺ Yreka Quadrangle (1984) is referenced for this project in Siskiyou County, California.

The proposed project includes the development of public access trails along Yreka Creek and within the Yreka Creek Greenway, as well as the installation of recreation facilities to include fixed and break-away bridges, picnic tables, a trailhead parking facility, removal of floodplain constrictions, removal of noxious weeds, and planting of native riparian and upland vegetation. In particular, the Yreka Creek Trail Development Project proposes the following improvements:

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- Restoration of approximately one acre of floodplain by re-contouring flood constrictions, planting approximately 600 native plants and trees, and implementing erosion control measures; and
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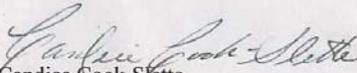
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Phone: 530-468-2888 Fax: 530-468-4426
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Page 2

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Sincerely,


Candice Cook-Slette
Archaeologist

Enclosure: Project Area Map

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P.O. Box 146 Fort Jones, California 96032
Phone: 530-468-2888 Fax: 530-468-4426
www.landusecoaching.com



October 27, 2012

Roy Hall, Jr.
Chairman
Shasta Nation
P.O. Box 1054
Yreka, CA 96097

Dear Chairman Hall:

This letter is in reference to the proposed City of Yreka (Recreational) Trails/Oberlin Road Project. The project area is located within Township 45 North, Range 7 West, Sections 27, Mt. Diablo Meridian. The 7.5' Yreka Quadrangle (1984) is referenced for this project in Siskiyou County, California.

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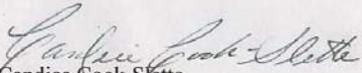
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Sincerely,


Candice Cook-Slette
Archaeologist

Enclosure: Project Area Map

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www.landusecoaching.com



November 16, 2012
Mr. Jim Berry
Karuk Housing Director
1320 Yellowhammer
PO Box 282
Yreka, California 96097

Yreka, CA 96097

Dear Mr. Berry,

This letter is in reference to the proposed City of Yreka (Recreational) Trails/Oberlin Road Project. The project area is located within Township 45 North, Range 7 West, Sections 27, Mt. Diablo Meridian. The 7.5' Yreka Quadrangle (1984) is referenced for this project in Siskiyou County, California.

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Page 2

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The proposed project serves to build upon the successes of the recently completed Yreka Stormwater Attenuation and Floodplain Restoration Project.

This letter is a request for information regarding any unrecorded traditional cultural properties, archaeological, or other cultural concerns within or adjacent to the project area. If there are any issues or concerns, they will be included within the final Archaeological Survey Report.

Sincerely,

Kathleen Tyler
Archaeologist

Enclosure: Project Area Map

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TRINITY

123 West 6th Street, Suite 100
Chico CA 95928
Phone (530) 898-6256
neinfocntr@csuchico.edu

November 26, 2012

Mail to:
Dr. Jeff LaLande
P.O. Box 146
Fort Jones, CA 96032

Bill to:
Northern California Resource Center
PO Box 146
Fort Jones CA 96032
ATTN: Mr. Larry Alexander

I.C. File # D12-90
Records Search

RE: Yreka (Recreational) Trails/Oberlin Road Project
T45N, R7W, Section 27
USGS Yreka 7.5' and 15' quads
Approximately 50 acres (Siskiyou County)

Dear Dr. LaLande,

In response to your request, a records search for the project cited above was conducted by examining the official maps and records for archaeological sites in Siskiyou County. Please note that this record search includes the 1/8-mile project radius.

RESULTS:

Prehistoric Resources: According to our records, no prehistoric sites have been recorded in the project area or its 1/8-mile vicinity. The project is located in a region utilized by Shasta populations. The City of Yreka was originally the Shasta village of Kusta. Unrecorded prehistoric cultural resources may be located in the project area.

Historic Resources: According to our records, one historic site has been recorded within the project area, consisting of the Yreka Road/South Immigrant Trail to Yreka (CA-SIS-1728H). The location of this site is plotted in red on the enclosed project map and a copy of the site record is included with this letter.

The West Miner Street-Third Street Historic District in downtown Yreka is listed on the National Register of Historic Places, the California Register, and as a State Landmark. A copy of the current Historic Property Directory for Yreka is enclosed. Also attached is a copy of the Oregon-California Trails Association (OCTA) map of the Yreka Emigrant Trail. Historic cultural resources may be located in the project area.

The project is located in the historic Yreka Gold District. Yreka Trail was utilized by immigrants to reach the gold fields of Siskiyou County in the 1850s and early 1860s and to reach California and Oregon for settlement. The Morrison wagon train in 1852 was one of the earliest. Gold was discovered by Abraham Thompson just north of the current town of Yreka in 1851. Originally called Thompson's Dry Diggins, then Shasta Plains and Shasta Butte City, by 1854 Yreka was incorporated as the county seat. Yreka and the surrounding areas were mined for gold from 1851 through the 1940s. Yreka Creek was dredged beginning in 1899. The Yreka Western Railroad was opened in 1889.

The USGS Yreka 7.5 and (1949) 15' quad maps indicate that Oberlin Road, Interstate 5, Yreka Creek, Yreka-Western Pacific Railroad, City of Yreka, and old Highway 99 are located in the project area; roads, structures, and Butcher Hill are located within the 1/8-mile project radius; and Shasta Valley, Klamath National Forest, abandoned ditch, Greenhorn Park, Greenhorn Reservoir, Greenhorn School, graves, drive-in theatre, tailings, roads, and structures are located in the project vicinity.

Previous Archaeological Investigations: According to our records, neither the project area nor the 1/8-mile project radius have been previously surveyed for cultural resources.

Literature Search: The official records and maps for archaeological sites and surveys in Siskiyou County were reviewed. Also reviewed: **National Register of Historic Places - Listed properties and Determined Eligible Properties** (2012); **California Register of Historical Resources** (2012); **California Points of Historical Interest** (2012); **California Inventory of Historic Resources** (1976); **California Historical Landmarks** (2012); **Directory of Properties in the Historic Property Data Files for Siskiyou County** (2012); **Handbook of North American Indians, Vol. 8, California** (1970); **Historic Spots in California** (2002).

RECOMMENDATIONS:

We recommend that you contact the appropriate local Native American representatives for information regarding traditional cultural properties that may be located within project boundaries for which we have no records. Additionally, you may want to consult historic GLO plat maps in order to aid in the identification of unrecorded historic sites, which may be located within project boundaries.

The charge for this record search is \$153.00 (1 hour of Information Center time at \$150 per hour plus 20 copies at \$0.15/page). An invoice will follow from the CSUC Research Foundation for billing purposes. Thank you for your concern in preserving California's cultural heritage, and please feel free to contact us if you have any questions or need any further information or assistance.

Sincerely,

Amy Huberland, M.A.
Assistant Coordinator

**APPENDIX IV – City of Yreka Project Description
YREKA CREEK TRAILS / OBERLIN ROAD PROJECT**

PROJECT DESCRIPTION OF THE YREKA CREEK TRAILS / OBERLIN ROAD PROJECT

3.1 PROJECT LOCATION

The proposed project is located in the City of Yreka in Siskiyou County, California. The City of Yreka is located approximately 21 miles south of the California-Oregon border. Interstate 5, State Route 3, and State Route 263 pass through and provide regional access to the City. The project area, which totals approximately 20.5 acres, is accessed via Oberlin Road east of Interstate 5 and is situated on Siskiyou County Assessor Parcel Numbers (APNs) 061-301-050, 061-301-070, 061-301-080, 061-301-420, and 061-301-460. This corresponds with Section 27 of Township 45 North, Range 7 West of the Mount Diablo Meridian (Latitude: 41°43'4.82"N Longitude: 122°38'13.76"W). (See Figures 3.0-1, Project Location.)

3.2 PROJECT OVERVIEW

The proposed project includes the development of public access trails along Yreka Creek and within the Yreka Creek Greenway, as well as the installation of recreation facilities to include both fixed and break-away bridges, picnic tables, a trailhead parking facility, removal of floodplain constrictions, removal of noxious weeds, and planting of native riparian and upland vegetation. (See Figure 3.0-2, Site Plan.) In particular, the Yreka Creek Trail Development Project proposes the following improvements:

1. Construction of approximately 6,000 square feet of asphalt parking lot at the Oberlin Road trailhead;
2. Installation of a drinking fountain at the Oberlin Road trailhead;
3. Surfacing of approximately 1,850 linear feet of existing trail to make it ADA-accessible;
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9. Restoration of approximately one acre of floodplain by re-contouring flood constrictions, planting approximately 600 native plants and trees, and implementing erosion control measures; and
10. Development and installation of a bond acknowledgement sign, a trail and site identification map/sign, and three trailside interpretive signs.

The proposed project serves to build upon the successes of the recently completed Yreka Stormwater Attenuation and Floodplain Restoration project, a Proposition 40 bond-funded project that restored 700 feet of Yreka Creek floodplain and approximately five acres of City of weed property within the current 20.5-acre project site. The proposed project also serves to implement a portion of the Yreka Creek Greenway Master Plan, a plan which calls for 4.5 miles of continuous Greenway along Yreka and Greenhorn Creeks within Yreka city limits.

3.3 PROJECT CONSTRUCTION

CONSTRUCTION TIMING

It is anticipated that construction will begin during the 2013 construction year and, per grant conditions, be completed by May 2014; however, construction may be accelerated or delayed based on design progress, environmental conditions, available funding, or other factors. Construction timing may also be affected by mitigation for sensitive environmental species.

CONSTRUCTION METHODS

Construction will occur between 7:00 am and 7:00 pm Monday through Saturday, excluding holidays. Traffic controls will be provided adjacent to the project site along Oberlin Road, and South Main Street, as necessary, to maintain the flow of traffic at all times. Construction of bridges and restoration of the floodplain along Yreka Creek may require temporary stream crossings. All required permits will be obtained from responsible agencies prior to construction of any stream crossings and/or impacts to sensitive natural habitats.

3.4 PROJECT APPROVALS

The City of Yreka is the Lead Agency for this project. In addition, permits and/or approvals would be required from the following agencies:

U.S. Army Corps of Engineers (USACE)

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into Waters of the United States, including wetlands, under Section 404 of the Clean Water Act. Modifications to wetland areas on the project site that have been delineated under USACE criteria are subject to the Section 404 permitting process.

The USACE regulations describe two categories of permits: individual and general. A general permit means that the USACE authorization is issued on a nationwide or regional basis for activities with minimal or cumulative environmental effects. The most well-known of the general permits are the nationwide permits (NWP). Such permits can be issued in a shorter length of time than an individual permit.

It is anticipated that implementation of the project would require 404 permitting under Nationwide Permits 27, 33, and 42a.

Regional Water Quality Control Board (RWQCB), North Coast Region

The RWQCB typically requires a Construction General Permit be obtained for projects that disturb more than one acre of soil. Typical conditions issued with such a permit include the submittal of and adherence to a stormwater pollution and prevention plan (SWPPP), as well as prohibitions on the release of oils, grease or other hazardous materials.

The RWQCB also issues a Water Quality Certification under authority of Section 401 of the Clean Water Act. After submittal of a Pre-Construction Notification Package to the USACE, the City of Yreka would need to submit a copy of the Section 404 Notification and appropriate fees directly to the RWQCB to obtain the Section 401 certification or waiver.

State Water Resources Control Board (SWRCB)

The State Water Resources Control Board has the joint authority of water allocation and water quality protection. The SWRCB works to protect water quality in California through watershed management principals, including targeting both point and nonpoint source pollution. The SWRCB also issues permits for water rights specifying amounts, conditions, and construction timetables for water diversions and storage. The City may need to obtain a Section 401 permit from the SWRCB for work adjacent to Yreka Creek.

California Department of Transportation (Caltrans)

A portion of the proposed project would be located within a California Department of Transportation (Caltrans) right-of-way for Interstate 5. The City will be required to obtain an encroachment permit from Caltrans prior to any work within the Caltrans right-of-way.

California Department of Fish and Game (CDFG)

The Department of Fish and Game is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. As such, prior to taking any action that may substantially modify a river, stream, or lake, the Department must be notified and a Streambed Alteration Agreement issued.

For any work within the stream channel of Yreka Creek, the project will require a 1602 Streambed Alteration Agreement from the California Department of Fish and Game.

National Oceanic and Atmospheric Administration (NOAA)

NOAA's National Marine Fisheries Service (NMFS) is the federal agency responsible for the stewardship of the nation's living marine resources and their habitat. NOAA's National Marine

Fisheries Service is responsible for the management, conservation and protection of living marine resources within the United States. Because of the potential for Coho salmon to exist within the project area (i.e., Yreka Creek), the proposed project will be required to obtain a Biological Opinion from NMFS.

U.S. Fish and Wildlife Service (USFWS)

The Endangered Species Act, with some exceptions, prohibits activities affecting federally-listed species unless authorized by a permit from the U.S. Fish and Wildlife Service (USFWS) and NOAA NMFS. The proposed project will require a Biological Opinion from USFWS.

3.5 RELATIONSHIP OF PROJECT TO OTHER PLANS

City of Yreka General Plan

The proposed project will be located entirely within the City of Yreka. The City of Yreka General Plan was updated in 2002–2003 and adopted by the City Council on December 18, 2003. The City of Yreka General Plan is the fundamental document governing land use development in the incorporated areas of the city. The General Plan includes numerous goals and policies pertaining to land use, circulation, housing, conservation, open space, parks and recreation, noise, public health and safety, and public facilities. The proposed project will be required to abide by all applicable goals and policies included in the adopted General Plan.

Yreka Creek Greenway Master Plan

The Yreka Creek Greenway Master Plan was prepared by the Yreka Creek Greenway Committee, a citizen’s advisory group, in 1989 and has since been revised and updated. The Master Plan was most recently updated and adopted by the City in 2005. The purpose of the Master Plan is to support the goals and objectives developed by the Yreka Creek Greenway Committee and to develop recommendations to guide the development and prioritization of greenway projects along Yreka Creek.

The Master Plan includes an introduction and background to the Yreka Creek Greenway, the existing conditions, methods for implementation of goals and objectives identified in the plan, identification of issues and needs, trail segment value and gap analysis, trail system design, trail infrastructure cost analysis as well as recommendations.

City of Yreka Flood Damage Prevention Ordinance

The project will be subject to the City’s Flood Damage Prevention Ordinance (Chapter 11.34 of the City of Yreka Municipal Code), which regulates improvements in flood zones. Portions of the proposed project are located in Flood Zones X, AO, and AE, and the design of the project will need to comply with the requirements of the ordinance (Figure 3.0-4).

Basin Plan for the North Coast Regional Water Quality Control Board

The City of Yreka and the project site are located within the Klamath River Basin, which is under the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB). One of the duties of the RWQCB is development of "basin plans" for the hydrologic area over which it has jurisdiction. The Basin Plan sets forth water quality objectives for both surface water and groundwater for the region, and it describes implementation programs to achieve these objectives. The Basin Plan provides the foundation for regulations and enforcement actions of the North Coast RWQCB.

In May 2011, the North Coast RWQCB adopted the most recent version of the Water Quality Control Plan for the North Coast Region (Basin Plan). The Basin Plan defines existing and potential beneficial uses of surface water and groundwater in the Klamath River Basin and sets forth water quality objectives for these waters.

The proposed project is located within the Klamath River watershed. Existing or potential beneficial uses of the Klamath 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 (North Coast RWQCB 2011).

Shasta River Watershed Plan

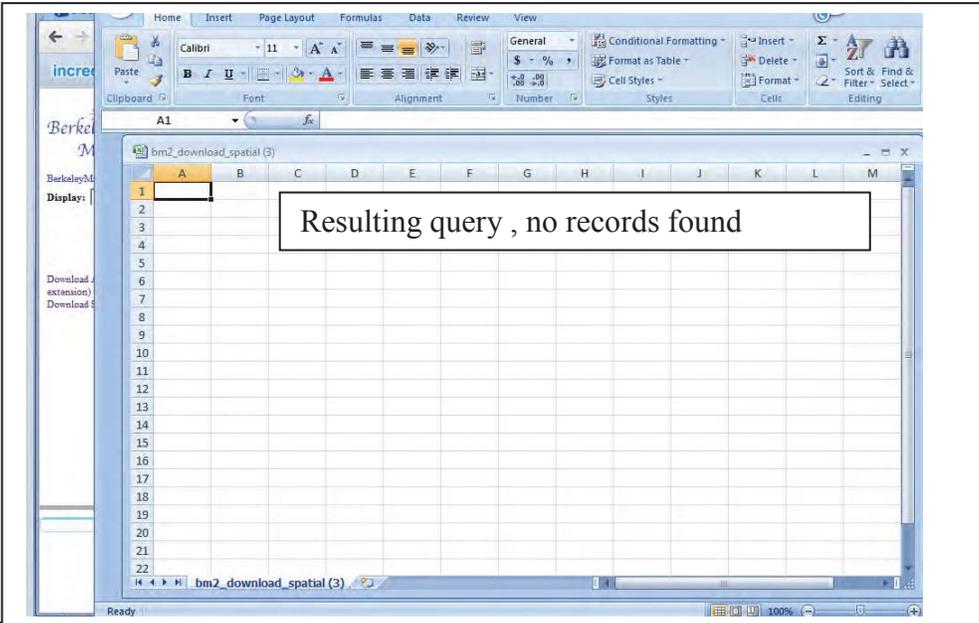
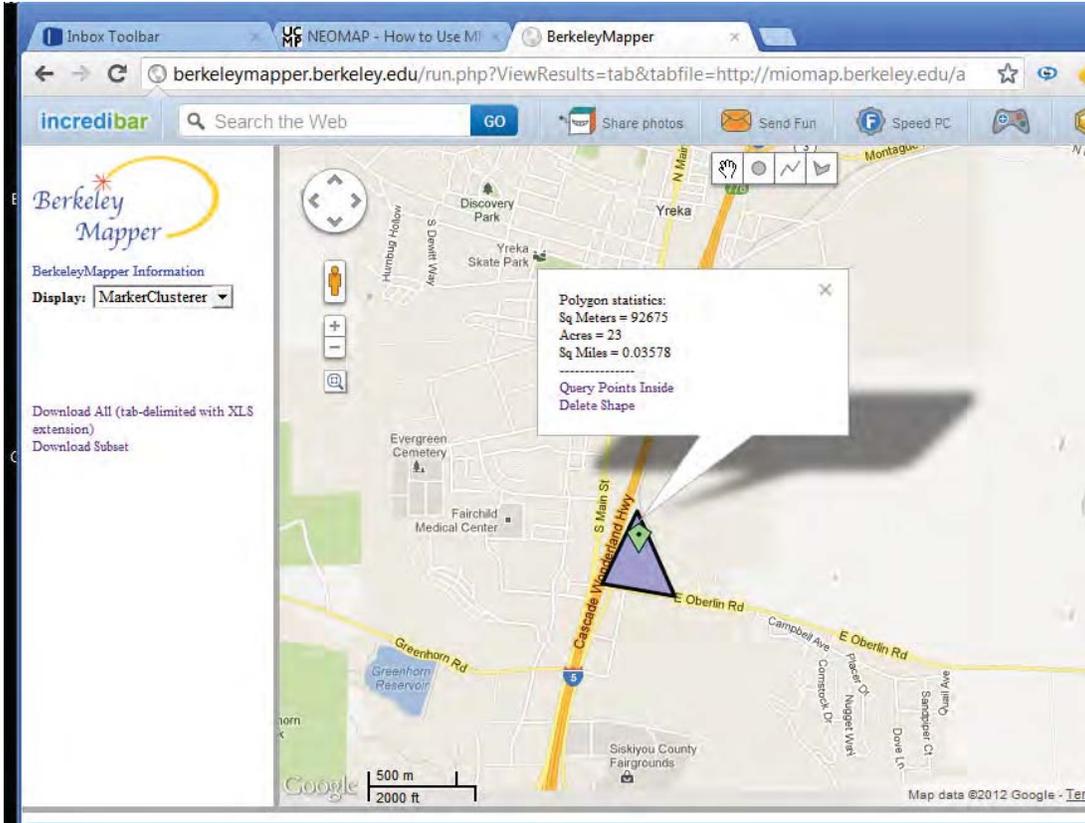
The Shasta River Watershed Plan was prepared by the Shasta River Coordinated Resource Management and Planning Committee (CRMP) and is implemented by the Shasta Valley Resource Conservation District. The plan includes the Shasta CRMP Riparian Zone and Anadromous Fish Action Plan, California Department of Fish and Game Anadromous Fish Biological Needs Assessment, Shasta CRMP Uplands Plan/RMAC Plan, Yreka Creek Greenway Master Plan, CRMP mid-term goals, work plan, original CRMP plan, Shasta River Remote

Monitoring Station, Sport, Tribal and Commercial Salmon Harvest Information and a discussion of the unique Shasta Valley geology.

The Shasta CRMP Riparian Zone and Anadromous Fish Action Plan was developed to identify adverse impacts to water quality in the Shasta River and identify methods of reducing them. The plan identifies problems as well as recommended action to alleviate problems associated with water, erosion, fish needs, fishery harvest and the Klamath River. The proposed project supports a number of the identified actions identified in the Shasta River Watershed Plan to address identified impacts to water quality.

APPENDIX V – Paleontology Search Results

Search Results from the University of California Museum of Paleontology database (no records found at the project location)





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