INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

PORTOLA ASPHALT PLANT PROJECT
PLUMAS COUNTY, CALIFORNIA

Prepared for

TLT ENTERPRISES

Prepared by

VESTRA Resources, Inc.
5300 Aviation Drive
Redding, California 96002

April 2023

TABLE OF CONTENTS

SECTION

TABLES

FIGURES

APPENDICES

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

PORTOLA ASPHALT PLANT PROJECT

1.0 PROJECT INFORMATION

Project Title: Portola Asphalt Plant Project

Lead Agency/Contact Tim Evans
Senior Planner
Plumas County Planning Department
555 Main Street
Quincy, California 95971

Project Location: 7600 Industrial Way
Portola, Plumas County, California
APN 126-010-050

Applicant: Perry Thompson
TLT Enterprises
24339 Highway 89
Burney, California 96013

Consultant/Prepared by: VESTRA Resources, Inc.
5300 Aviation Drive
Redding, California 96002
(530) 223-2585 (office)
(530) 223-1145 (facsimile)

General Plan Designation: Industrial (I)

Zoning: Heavy Industrial (I-1)

Description of the Project: Installation and operation of a temporary asphalt plant which will operate intermittently for specific projects.

Surrounding Land Uses and Setting: The project site is located south of Highway 70 (SR-70), west of the City of Portola in Plumas County, California. The project site sits between the Middle Fork Feather River and the railroad. The Plumas County Assessor's Parcel No. (APN) is 126-010-050. The Plumas County General Plan land use designations for the project site and adjacent properties are shown on Figure 3. The Plumas County General Plan land use designations for the surrounding land uses include Mining Resource, Industrial, Timber Resource Land, Suburban Residential, Secondary Suburban Residential, Rural Residential, and Commercial. The zoning of the project site and adjacent properties is included on Figure 4.

The land west of the project site includes undeveloped secondary suburban residential and rural residential land. White Cap Ready-Mix Inc, The Delleker Transfer Station, and Plumas Sanitation, Inc. are located north of the project site, across the railroad tracks. The property east of the project on the opposite side of the Feather River is undeveloped land within city limits. The properties south of the project site across the river include a small number of suburban residences on North Iron Horse Drive and Crackerjack Creek Road.

The project site is approximately 20 acres in size. The project site was formerly used for the mining of aggregate by the previous owner, who purchased the parcel from Union Pacific Railroad in 1997. Approximately 100,000 cubic yards of material were removed from the area and the elevation was decreased by 2 to 3 feet as a result. The project site is undeveloped with the exception of several dirt roads. No structures are present onsite.

The majority of the site has been cleared of vegetation. Riparian vegetation still remains along the Middle Fork Feather River.

Other Public Agencies Whose Approval May be Required (e.g., permits, financing approval, or participation agreement:

Plumas County Planning Department
Plumas County Building Department
Central Valley Regional Water Quality Control Board
Northern Sierra Air Quality Management District

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? Pursuant to Assembly Bill 52 (AB 52), California Native American tribes traditionally and culturally affiliated with the project area were notified of the proposed project on May 10, 2023, and the 30-day period to request consultation will end on June 10, 2022. Should a California Native American tribe traditionally and culturally affiliated with the project area request consultation, the consultation plan would be documented, would state the parties shall consult in good faith, would include procedures regarding confidentiality, and would contain criteria to determine the significance of a substantial adverse change to tribal cultural resources. Consultation is deemed concluded when the parties agree to measure(s) that avoid or mitigate a substantial adverse change to tribal cultural resources when present. Moreover, if the parties cannot reach mutual agreement, the consultation would be deemed concluded. Mitigation measures agreed on during the consultation process shall be recommended for inclusion in the environmental document.

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.

☐ Aesthetics	☐ Agriculture / Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service System	☐ Wildfire	☐ Mandatory Findings of Significance

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.

Timothy Evans — Prepared by: — Date 5/9/2023

Timothy Evans — Reviewed by: — Date 5/9/2023

2.0 PROJECT DESCRIPTION

2.1 Introduction

TLT Enterprises is applying for a site development permit with Plumas County. The industrial site for the permit is located at 7600 Industrial Way, Delleker, California (see Figure 1). This 20-acre site is located on Plumas County APN 126-010-050. The property is currently zoned as Heavy Industrial (I-1) and is within the Delleker Industrial Park. TLT Enterprises would like to use this property for a temporary asphalt plant which will serve specific limited Caltrans projects on Highway 70. The proposed project is consistent with the current land use and zoning descriptions.

Operations at the site would include an asphalt plant, lime treatment plant and office trailer. It is anticipated that the site would be used on a part-time basis for a period of three years and equipment would be removed when complete.

2.2 Location and Site Plan

The asphalt plant would be located on the north side of the property (see Figure 2). According to the flood insurance map from Plumas County, portions of the site are located in a 100-year floodplain. The floodplain elevation is situated at 4821 feet above mean sea level and the proposed asphalt plant would be above that elevation. The previous owner of the site mined approximately 100,000 yards of material, thereby lowering the elevation of the parcel. In order to determine the effects of the mining operations on flood conditions and stormwater runoff, a flood plain elevation study was conducted by Pacific Hydrologic Incorporated (Appendix A). The projected grading and drainage pattern of the site will not increase surface runoff that would result in onsite or offsite flooding. A Stormwater Pollution Prevention Plan (SWPPP) would be required under the *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit, or IGP) and will be developed for this site.

Aggregate and soils will be imported and stockpiled onsite until it is mixed in the processing plant and ready to be used for paving. The aggregate imported to this site will be washed prior to its arrival at this location. Stockpiling and work onsite will not occur in the winter months; operations will be limited to between April and November.

2.3 Asphalt Facility Process

For the proposed project, the asphalt plant and lime slurry mix plant will be rated at 200 tons per hour and 2,000 tons per day. The asphalt plant will produce 40,000 tons and 80,000 tons during Years 1 and 2, respectively. The material will be metered from the hoppers onto a conveyer belt and transported into a rotary natural gas/propane fired dryer. The asphalt plant will contain a baghouse for emissions control.

The lime slurry mix plant will have a single hopper/pug mill/surge/conveyor. Based on 10 hours of operation per day, the facility would operate for 20 days during Year 1 and for 40 days during Year 2. The facility may operate for additional days, but at a lower daily production rate.

2.4 Equipment

The following equipment may be used on the project site:

- Water truck for dust control;
- Front-end loaders to feed the plant and load trucks;
- Asphalt plant;
- Lime mix plant;
- Wash plant;
- Diesel generator (may substitute line power as there is power onsite) and
- Office trailer.

Onsite off-road equipment will include one water truck (300 horsepower) and two front-end loaders (370 horsepower). The equipment will operate for ten hours per day. The proposed project will also include a 400-horsepower diesel generator to operate the facility. All equipment will be brought from an existing asphalt plant and installed onsite.

2.5 Schedule and Hours of Operation

The plant will typically operate five days a week from 6:00 a.m. to 6:00 p.m. The plant will operate only while paving occurs on specific Caltrans projects. The plant may operate during nighttime hours to support paving as required by Caltrans. Approximately ten employees will be onsite five days per week. The facility is anticipated to operate for a three-year period.

2.6 Traffic

Traffic related to the bioenergy facility will consist of asphalt trucks (belly dump and rear dump trucks) and employees. During Years 1 and 2 of operation, a maximum of 150 truck roundtrips will occur per day. This includes the import of aggregate to the site and the export of asphalt. Each roundtrip is estimated to be 40 miles. An estimated 2,000 total truck trips in Year 1 and 4,000 total truck trips during Year 2 will occur.

All traffic to and from the site must pass an at-grade railroad crossing. All previous operations used the same crossing. A private road crossing application is in progress with Union Pacific Railroad. Once traffic leaves the site and crosses the railroad on the north end of the project site, Milk Weed Drive to South Delleker Road will be used to connect with Highway 70.

2.7 Water Use and Wastewater Generation

The asphalt plant is anticipated to use approximately 25 gallons per minute (GPM) of water during operation, amounting to 14,555 gallons per day at peak operation. The primary usage is the water that must be added to the lime-treated aggregate. Approximately 6,000 gallons of water per day will be used for onsite dust suppression. Water will be supplied by the local utility district.

While water is added in the asphalt production and lime treatment process, it is consumed in the process and will not be expelled as wastewater. Coverage under the *General Permit for Storm Water*

Discharges Associated with Industrial Activities (Order 2014-0057-DWQ as amended in 2015 and 2018) will be obtained to address stormwater runoff from the project site.

2.8 Hazardous Material and Waste Management

Hazardous materials contained onsite include liquid asphalt and hydrated lime quantities of which will depend on project demands, one 3,000-gallon tank of diesel fuel, one 55-gallon barrel of motor oil, one 55-gallon barrel of hydraulic fluid and 15-gallons of various lubricating oils. A small quantity of acetylene gas and oxygen will be retained in pressurized cylinders for welding and cutting. A Hazardous Materials Business Plan will be prepared and submitted to Plumas County Environmental Health Division via the California Electronic Reporting System (CERS) for the project site. The use and storage of hazardous materials and wastes will comply with all applicable local, state, and safety standards.

3.0 ENVIRONMENTAL CHECKLIST

I. AESTHETICS Except as provided in Public Resources Code Section 21099, Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting

The project site is currently undeveloped land; however, the site was used previously for mining operation in which material was removed. The majority of the site consists of bare soil with interconnecting dirt roads that cross the railroad, run down to the river, and run along the northern edge of the site, parallel to the railroad. There is limited vegetation along the river which consists of grasses and low shrubs.

The project site is visible from Milk Weed Drive and South Delleker Road. The site also partially visible from Highway 70, although it is mostly obscured by the intervening industrial district. The asphalt plant may also be visible from residences across the river; however, the southern bank is elevated 75 to 100 feet above the northern bank and heavily forested. An attempt was made to verify sightlines from the nearby Iron Horse neighborhood. The only road in the neighborhood from which the project site may be visible is North Iron Horse Drive. This could not be verified as the road is private and no trespassing signs are posted. A GIS Viewshed analysis was conducted and is included as Figure 12. Residences along North Iron Horse Drive are not visible from the project site.

Discussion

a) The Plumas County General Plan designates scenic resources of value to the public. The Middle Fork of the Feather River is one such scenic resource. Although the project site is visible from the river, it does not represent a change in the visual character of the area. The project site is adjacent to the Delleker Transfer Station and a concrete plant. Views of the Middle Fork Feather River will not be significantly altered by project operation. Project will have a **less-than-significant impact** related to a scenic vista.

b) The Feather River Scenic Byway crosses through the city of Portola via Highway 70. The project site is approximately 0.5 miles south of the highway. The project site will be only partially visible, as the view from the highway is obscured by the intervening commercial and industrial district. While portions of the asphalt plant may be visible from certain angles along the highway, the area overall is industrial and the visual character of the area will not be impacted. Project impacts related to a state scenic highway will have **a less-than-significant impact.**

c) The project site is located in an urbanized area. Changes to the visual character of the project site will be consistent with the heavy industrial land use designation and zoning of the project site and surrounding parcels. The project site itself as well as the adjacent parcels to the north, are all zoned Heavy Industrial (I-1). Closer to Highway 70, the majority of parcels are zoned Periphery Commercial (C-2). The project site is visible from the south, across the Feather River, from a Secondary Suburban (S-3) area that contains private residences. Occupants may be able to see the asphalt plant through the trees along the river, however this will not represent a change to the visual character of the area. The surrounding Heavy Industrial parcels are developed and contain the Delleker Transfer Station and a concrete mix supply yard. The installation and operation of the asphalt plant will represent a **less-than-significant impact** and does not conflict with the applicable zoning regulations regarding visual quality.

d) The project site may include some new sources of light during limited nighttime operations. The asphalt plant will operate on weekdays from 6 a.m. to 6 p.m. during the summer within daylight hours. Occasionally, specific Caltrans projects may require nighttime operation of the plant. In this case lighting may be required in certain areas of the project site. As required by Plumas County Code of Ordinances, all lighting facilities shall be so installed as to focus away from adjoining properties. With adherence to this requirement, lighting of buildings at the project site will not result in glare. Impacts related to light and glare will be **less than significant.**

II. AGRICULTURE AND FOREST RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining impacts to forest resources including timberland are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporation**	**Less-than-significant impact**	**No impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature that could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting

The project site is zoned Heavy Industrial (I-1) with a land use designation of Industrial (I). The project site is not used for agricultural purposes of any kind.

Discussion

a) The project site does not include Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on California Department of Conservation California Important Farmland Finder maps. **No impact.**

b) The project site is not zoned for agricultural use and the proposed asphalt plant does not

conflict with the zoning or land use designation for the site.

The project site is not under a Williamson Land Use Contract. **No impact.**

c) The project site does not include any forested area and is zoned Heavy Industrial. The project does not include the change in any zoning. **No impact.**

d) The project site does not contain any forested land and the proposed activities will not result in the loss of forest land or the conversion of forest land to non-forest use. **No impact.**

e) The project will include development of the project site for industrial use. The project does not involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or forestland to non-forest use. **No impact.**

III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Setting

This project is applying for the operation of a temporary asphalt plant.

Air Basin/District

The project site is located in the Mountain Counties Air Basin. The air basin includes the counties of Plumas, Sierra, Placer, El Dorado, Calaveras, Amador, Tuolumne, and Mariposa. Plumas County is the northernmost county in the air basin. The Northern Sierra Air Quality Management District (NSAQMD) regulates air quality conditions within the Mountain Counties Air Basin. The District has permitting authority over the proposed project.

Plumas County is in attainment or unclassified for ozone, CO, and SO2 for California and National Ambient Air Quality Standards (AAQS). The USEPA has designated the Plumas County Portola Valley as being in moderate nonattainment for $PM_{2.5}$. Plumas County is currently designated as nonattainment for PM_{10} based on state standards administered by the CARB. The CARB has designated the Plumas County Portola Valley as being in nonattainment for $PM_{2.5}$. These designations are based on annually collected data from three air quality monitoring stations located in the county. The county's largest sources of particulate matter are unpaved road dust, prescribed burning and residential woodstoves. Primary activities contributing to these pollutant emissions include wildfires, use of woodstoves, forestry management burns, residential open burning, vehicle traffic, and windblown dust. The varying topography of the Air Basin also contributes to localized air quality issues within the valley areas. Although the proposed project is located within the Greater Portola $PM_{2.5}$ Nonattainment Area, it is outside the City of Portola Sphere of Influence.

Local air districts are primarily responsible for controlling emissions from stationary and area-wide sources (with the exception of consumer products) through rules and permitting programs. For the project site, the NSAQMD is the agency primarily responsible for ensuring that federal and state ambient air quality standards are not exceeded and that air quality conditions are maintained. Responsibilities of NSAQMD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the federal CAA and the CCAA. In May 2016, the NSAQMD revised their Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects to provide guidance in evaluating air quality and GHG impacts from land use projects in the air basin and in identifying appropriate mitigations within the NSAQMD.

Air Quality Standards

National Ambient Air Quality Standards are determined by the U.S. Environmental Protection Agency (EPA). The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}), and lead.

The California Air Resources Board (CARB) also established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant. The federal and California State ambient air quality standards are summarized in Table 1 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California State standards are more stringent. This is particularly true for ozone and particulate matter between 2.5 and 10 microns in diameter.

Table 1 FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS			
Pollutant	**Averaging Time**	**Federal Primary Standard**	**State Standard**
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.075 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.05 ppm	--
	1-Hour	--	0.25 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	--	0.25 ppm
PM_{10}	Annual	--	20 ug/m3
	24-Hour	150 ug/m3	50 ug/mg
$PM_{2.5}$	Annual	15 ug/m3	12 ug/m3
	24-Hour	35 ug/m3	--
Lead	30-Day Avg.	--	1.5 ug/m3
	3-Month Avg	1.5 ug/m3	--

In accordance with the California Clean Air Act (CCAA), CARB is required to designate areas of the state as "attainment," "nonattainment," or "unclassified" with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status.

The U.S. EPA designates areas for ozone (O3), carbon monoxide (CO), and nitrogen dioxide (NO2) as "does not meet the primary standards," "cannot be classified," or "better than national Standards." For sulfur dioxide (SO2), areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The subcategories for nonattainment status (serious, severe, and extreme) are also used by U.S. EPA. In 1991, new nonattainment designations were assigned to areas that had previously been classified as Group I, II, or III for PM_{10} based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified." Federal and state air quality laws require identification of areas not meeting the ambient air quality standards. These areas must develop regional air quality plans to eventually attain the standards.

Toxic Air Contaminants (TACs)

TACs are pollutants that may be expected to result in an increase in mortality or serious illness or that may pose a present or potential hazard to human health. Health effects include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death. Although ambient air quality standards exist for criteria pollutants, no such standards exist for TACs. Many pollutants are identified as TACs because of their potential to increase the

risk of developing cancer or because of their acute or chronic health risks. For TACs that are known or suspected carcinogens, the California Air Resources Board (ARB) has consistently found that there are no levels or thresholds below which exposure is free of risk. Individual TACs vary greatly in the risk they present. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. For certain TACs, a unit risk factor can be developed to evaluate cancer risk. For acute and chronic health risks, a similar factor called a Hazard Index is used to evaluate risk. In the early 1980s, ARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Toxic Air Contaminant Identification and Control Act (Assembly Bill 1807) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory and notification of people exposed to a significant health risk and sensitive receptors.

Portola Fine Particulate Matter ($PM_{2.5}$) Attainment Plan
The Portola Valley is unclassified or in attainment for all NAAQS with the exception of $PM_{2.5}$. The Portola Valley is Unclassified or in attainment for all State air quality standards with the exception of $PM_{2.5}$ and PM_{10}.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires, and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO2 and VOCs are also considered particulate matter. Based on studies of human populations exposed to high concentrations of particles and laboratory studies of animals and humans, there can be effects on human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis, and premature death.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation, or in combination with other gases. Particulate matter in the county is caused by many sources, including but not limited to, dust from grading and excavation activities, from agricultural uses, road dust, wildfires, residential fuel combustion, and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of small particles which are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities, such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease and cause lung damage and cancer. In 1997, the EPA created new federal air quality standards for $PM_{2.5}$. The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly, and children. Particulate matter also soils and damages materials and is a major cause of visibility impairment.

The Portola Fine Particulate Matter ($PM_{2.5}$) Attainment Plan (Plan) was completed in 2017 to address the nonattainment of $PM_{2.5}$. The plan addresses the U.S. EPA-identified Plumas County $PM_{2.5}$ nonattainment areas. The areas include the city of Portola and nearby communities of Iron Horse, Delleker, C-Roads, Mohawk Vista, Plumas-Eureka, Blarisden, Graeagle, Gold Mountain, Whitehawk, Clio, Johnsnville, and portions of Lake Davis.

$PM_{2.5}$ is the primary pollutant affecting the Mountain Counties Air Basin. CARB maintains a network of monitoring stations within the Air Basin that monitor air quality and compliance with applicable ambient standards. The monitoring stations closest to the project site is located at 420 Gulling Street in Portola and 267 North Church Street in Quincy. In Portola, the 24-hour and annual $PM_{2.5}$ standards were exceeded in 2018, 2019, and 2020 and may have been adversely affected by wildfires, usage of woodstoves, and meteorological/geographical conditions. Ambient concentrations of $PM_{2.5}$ tend to be lower at the Quincy monitoring station.

Air Analysis

The RCH Group was retained to conduct the air quality analysis. The Air Quality Technical Report is included in Appendix B. The air quality analysis is consistent with the methods described in the Northern Sierra Air Quality Management District's (NSAQMD) *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*. Mitigation measures are presented to reduce impacts to **less than significant.**

The air quality analysis includes a review of criteria pollutant emissions such as carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO_2), volatile organic compounds (VOC) as reactive organic gases (ROG), particulate matter less than 10 micrometers (coarse or PM_{10}), and particulate matter less than 2.5 micrometers (fine or $PM_{2.5}$).

Regulatory models used to estimate air quality impacts include:

- California Air Resources Board's (CARB) EMFAC emissions inventory model. EMFAC is the latest emission inventory model that calculates emission inventories and emission rates for motor vehicles operating on roads in California. This model reflects CARB's current understanding of how vehicles travel and how much they emit. EMFAC can be used to show how California motor vehicle emissions have changed over time and are projected to change in the future.
- CARB OFFROAD emissions inventory model. OFFROAD is the latest emissions inventory model that calculates emission inventories and emission rates for off-road equipment such as loaders, excavators, and off-road haul trucks operating in California. This model reflects CARB's current understanding of how equipment operates and how much they emit. OFFROAD can be used to show how California off-road equipment emissions have changed over time and are projected to change in the future.
- United States Environmental Protection Agency (USEPA) AP-42, Compilation of Air Pollutant Emission Factors, has been published since 1972 as the primary compilation of USEPA's emission factor information. It contains emission factors and process information for more than 200 air pollution source categories. A source category is a

specific industry sector or group of similar emitting sources. The emission factors have been developed and compiled from source test data, material balance studies, and engineering estimates.

NSAQMD rules and regulations applicable to the proposed project include, but are not necessarily limited to, the following:

- Rule 205, Nuisance. This rule prohibits the discharge of air contaminants or other material from any source which cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or to the public, or which endangers the comfort, repose, health, or safety of any such persons, or the public or which cause to have a natural tendency to cause injury or damage to business or property.
- Rule 226, Dust Control. This rule requires the submittal of a Dust Control Plan to the NSAQMD for approval prior to any surface disturbance, including clearing of vegetation.
- Rule 302, Prohibited Open Burning. In accordance with this rule, no person (except as otherwise authorized in Sections 41801–41805.6, 41807–41809, and 41811–41815 of the Health and Safety Code) shall use open outdoor fires for the purpose of disposal, processing, or burning of any flammable or combustible material as defined in Section 39020 of the Health and Safety Code; or unless issued a permit by NSAQMD and in accordance with other applicable NSAQMD rules and regulations, including, but not limited to, Rule 308, Land Development Clearing, and Rule 312, Burning Permits.

Threshold of Significance

The significance of potential impacts was determined based on State California Environmental Quality Act (CEQA) Guidelines, Appendix G, and the NSAQMD's *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*. Using Appendix G evaluation thresholds, the proposed project would be considered to have significant air quality impacts if it were to:

A. Conflict with or obstruct implementation of the applicable air quality plan;

B. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;

C. Expose sensitive receptors to substantial pollutant concentrations; or

D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The thresholds and methodologies from the NSAQMD *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects* were used to evaluate the potential impacts of operation of the proposed project. The thresholds of significance applied to assess project-level air quality impacts are:

- Daily emissions of 24 pounds per day of ROG and NOx and 79 pounds per day of PM_{10} (Level A)
- Daily emissions of 24 to 136 pounds per day of ROG and Nox and 79 to 136 pounds per

day of PM_{10} (Level B)

- Daily emissions of greater than 136 pounds per day of ROG, Nox, and PM_{10} (Level C)

The NSAQMD has developed a tiered approach to significance levels; a project with emissions qualifying it for Level A thresholds (i.e., all projects with emissions greater than zero) should require the most basic mitigation. Projects that qualify for Level B should require more extensive mitigation, and projects that qualify for Level C should require the most extensive application of mitigation. The tiered thresholds include Levels A, B, and C for a project's estimated emissions of criteria pollutants in pounds per day.

If unmitigated emissions of ROG, Nox, and/or PM_{10} exceed 136 pounds per day (Level C), then there is a potentially significant impact; if mitigated emissions of ROG, Nox, and/or PM_{10} still exceed 136 pounds per day (Level C), then there is a significant and unavoidable impact. Unmitigated emissions below Level C would result in an impact that is potentially significant, and mitigation is required; following implementation of mitigation (as specified separately for Level A and Level B), emissions would be less than significant. The NSAQMD guidelines recommend that projects with higher emissions (Level C Thresholds) should automatically mitigate more emissions than a lower-impact project (Level A). According to the NSAQMD guidelines, if a new project is unable to provide adequate on-site mitigation of its long-term air quality impacts, an off-site mitigation program may be necessary.

Air Emission Estimates

Tables 2 and 3 present the maximum daily emissions for the proposed project operations during Years 1 and 2, respectively. The supporting information, methodology, assumptions, and results used in the air quality analysis are provided in Appendix B: Air Quality Technical Report.

Table 2
MAXIMUM DAILY EMISSIONS (pounds) – YEAR 1

Emission Source	ROG	CO	Nox	SO_2	PM_{10}	$PM_{2.5}$
Onsite Equipment	1.15	6.73	11.7	0.01	0.52	0.48
Employee Vehicles	0.01	0.79	0.07	<0.01	0.01	<0.01
Haul Trucks	0.10	0.63	10.9	0.14	1.16	0.45
`Asphalt Plant	64.0	260	52.0	6.80	46.0	44.6
Asphalt Silo	30.8	5.06	-	-	12.0	3.90
Lime Slurry Mix	-	-	-	-	7.00	1.05
Wash Plant	-	-	-	-	2.74	0.41
Diesel Generator	0.44	8.11	54.4	8.20	0.93	0.93
Material Handling	-	-	-	-	12.5	1.88
Grand Total	**96.5**	**281**	**129**	**15.2**	**82.9**	**53.7**
Significance Threshold	**136**	**-**	**136**	**-**	**136**	**-**
Exceeds Threshold?	**No**	**-**	**No**	**-**	**No**	**-**

Source: RCH Group, 2022.

Table 3 MAXIMUM DAILY EMISSIONS (pounds) – YEAR 2						
Emission Source	**ROG**	**CO**	**NO_x**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Onsite Equipment	1.29	9.14	13.4	0.01	0.59	0.54
Employee Vehicles	0.01	0.72	0.06	<0.01	0.01	<0.01
Haul Trucks	0.09	0.59	10.5	0.14	1.16	0.45
Asphalt Plant	64.0	260	52.0	6.8	46.0	44.6
Asphalt Silo	30.8	5.06	-	-	12.0	3.90
Lime Slurry Mix	-	-	-	-	7.00	1.05
Wash Plant	-	-	-	-	2.74	0.41
Diesel Generator	0.44	8.11	54.4	8.20	0.93	0.93
Material Handling	-	-	-	-	12.5	1.88
Grand Total	**96.6**	**284**	**130**	**15.2**	**83.0**	**53.8**
Significance Threshold	**136**	**-**	**136**	**-**	**136**	**-**
Exceeds Threshold?	**No**	**-**	**No**	**-**	**No**	**-**
Source: RCH Group, 2022.						

According to NSAQMD's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects, if a new project is unable to provide adequate onsite mitigation of their long-term air quality impacts, an offsite mitigation program may be necessary. Projects emitting high levels of pollutants (as determined by the Air District) may be required to implement all feasible on-site mitigation measures and participate in an offsite mitigation program to reduce emissions.

Project design features would reduce the air emissions to below the Level B significance thresholds. Although required to implement Level A and B mitigation measures from the Air District's Handbook, none of the operational Level A or B mitigation measures are applicable to the proposed project.

Odor Impacts

Though offensive odors from stationary and mobile sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress, generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Potential localized odor sources associated with proposed project operation-related activities could originate from fumes from the asphalt batch plant, asphalt silo, diesel exhaust from off-road haul equipment, and diesel exhaust from incoming and out-going diesel-fueled heavy-duty transport vehicles.

Asphalt batch plants are considered to have potentially significant impacts on receptors located within one mile. The site is located in a generally rural area surrounded by open space; the nearest residential receptors are located approximately 1,600 feet (0.30 mile) to the southwest of the asphalt plant. Notably, the primary wind direction is from the southwest. Therefore, the primary wind direction is from the residences towards the project site.

Odor emissions are highly dispersive, especially in areas with higher average wind speeds. However, odors disperse less quickly during inversions or during calm conditions, which hamper vertical mixing and dispersion. Inversion conditions may also result in elevated particulate matter concentrations and odor impacts due to air stagnation. The proposed project would operate for

20-40 days in April through November, which is not typically the season associated with inversion conditions (i.e., occur during wintertime). Given that the proposed project would not operate during the months when inversion condition is more common, the likelihood of elevated particulate matter concentrations and odor impacts due to the proposed project would be reduced.

Generally, an odor source with five or more confirmed complaints per year averaged over three years could be considered to have a significant impact. The project applicant has an existing facility in Ward Lake in Lassen County which has similar equipment (including asphalt plant and off-road equipment and haul trucks) with higher daily and annual throughput levels. The Ward Lake facility also has residences nearby and with predominate wind direction which blows from the nearby residence towards the facility (which is also similar to the proposed project). Based on information obtained from the Lassen County Air Pollution Control District in which the Ward Lake facility is located, no complaints were filed related to odor issues in the past five years.

Discussion

a) The asphalt production will generate additional particulate emissions. The facility plans to operate the project site between April and November on an as needed basis. This operation schedule would avoid the winter when $PM_{2.5}$ emissions are the greatest in the area. Water will be used for dust control onsite and the emissions from equipment will be permitted. The District has permitting authority over the proposed project. An "Authority to Construct" (ATC) from the District followed by a "Permit to Operate" (PTO) will be obtained.

With the inclusion of dust-controlling Best Management Practices (BMPs), Mitigation Measure AQ-1, Mitigation Measure AQ-2, summer operations, and emissions limitations imposed by the District, it is assumed any impact to the existing Air Quality Plan for $PM_{2.5}$ would be **less than significant with mitigation incorporation.**

b) The Portola Valley is unclassified or in attainment for all NAAQS with the exception of $PM_{2.5}$ and as unclassified or in attainment for all State air quality standards with the exception of $PM_{2.5}$ and PM_{10}. The activities of asphalt production will generate additional particulate emissions. The facility plans to operate the project site between April and November on an as needed basis. Generally, construction projects are undertaken in the summer months, not in the winter when $PM_{2.5}$ emissions are the greatest in the area. Water will be used for dust control onsite and the emissions from equipment will be permitted. The District has permitting authority over the proposed project. An "Authority to Construct" (ATC) from the District followed by a "Permit to Operate" (PTO) will be obtained.

The proposed project would have less-than-significant impacts (Level B) for ROG, NOx, and PM_{10}. The proposed project may operate at lower than 2,000 tons per day production levels; in which case, the daily emissions would be even lower. Project design features would reduce the air emissions to below the Level B significance thresholds.

With the inclusion of dust-controlling BMPs, Mitigation Measure AQ-1, Mitigation Measure AQ-2, generally summer operations, and limited-period operations as well as emissions limitations imposed by the District, impact to any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard will be **less than significant with mitigation incorporation.**

c) The asphalt production will generate additional particulate emissions. The facility plans to operate the project site would operate between April and November on an as needed basis. This operations schedule would avoid the winter when $PM_{2.5}$ emissions are the greatest in the area. Water will be used for dust control onsite and the emissions from equipment will be permitted. The District has permitting authority over the proposed project. An "Authority to Construct" (ATC) from the District followed by a "Permit to Operate" (PTO) will be obtained.

The proposed project would have less-than-significant impacts (Level B) for ROG, NOx, and PM_{10}. The proposed project may operate at lower than 2,000 tons per day production levels; in which case, the daily emissions would be even lower. Project design features would reduce the air emissions to below the Level B significance thresholds. Although required to implement Level A and B mitigation measures from the Air District's Handbook, none of the operational Level A or B mitigation measures are applicable to the proposed project.

With the inclusion of dust-controlling BMPs, Mitigation Measure AQ-1, Mitigation Measure AQ-2, generally summer operations, and limited-period operations as well as emissions limitations imposed by the District, it is assumed any impact air quality standards or to existing air quality violations would be **less than significant with mitigation incorporation.**

d) Emissions to be generated include diesel particulate matter (DPM) or exhaust of the mobile and processing equipment and material haul trucks. Sensitive receptors (e.g., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes.

According to the NSAQMD, impacts of hazardous air pollutants, such as diesel exhaust, may require evaluation. In addition, projects must be modeled and analyzed if located within 1,000 feet of sensitive receptors. The project site is surrounded by open space, light industrial, and a few residences. No schools, daycare facilities, hospitals, or residences are within 1,000 feet of the project site. Since neither the proposed project diesel exhaust producing activities or asphalt plant are within 1,000 feet of sensitive receptors and the project is expected to be temporary (60 days of operations), no health risk assessment was conducted. Lastly, wind directions are predominately from the southwest, which is from the nearby residences towards the project site, which reduce the opportunity for project emissions to impact nearby residences.

Given the limited duration, seasonality, and location of the project it is expected that there will be a **less-than-significant impact** on the exposure of sensitive receptors to substantial concertation's of toxic air contaminates or other pollution sources.

Odors are not generally regarded as a physical health risk attributed to the chemical composition causing an odor. However, manifestations of a person's reaction to strong odors can range from psychological (e.g., irritation, anger, anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, headache).

Potential localized odor sources associated with proposed project operation-related activities could originate from fumes from the asphalt batch plant, asphalt silo, diesel exhaust from off-road

haul equipment, and diesel exhaust from incoming and out-going diesel-fueled heavy-duty transport vehicles.

Odor emissions are highly dispersive, especially in areas with higher average wind speeds. However, odors disperse less quickly during inversions or during calm conditions, which hamper vertical mixing and dispersion. Inversion conditions may also result in elevated particulate matter concentrations and odor impacts due to air stagnation. The proposed project would operate from April through November, which is not typically the season associated with inversion conditions (i.e., occur during wintertime). Given that the proposed project would not operate during the months when inversion condition is more common, the likelihood of elevated particulate matter concentrations and odor impacts due to the proposed project would be reduced. Generally, an odor source with five or more confirmed complaints per year averaged over three years could be considered to have a significant impact.

The project applicant has an existing facility in Ward Lake in Lassen County which has similar equipment (including an asphalt plant, off-road equipment, and haul trucks) with higher daily and annual throughput levels. The Ward Lake facility also has residences nearby and with predominate wind direction which blows from the nearby residence towards the facility (which is also similar to the proposed project).

Based on information obtained from the Lassen County Air Pollution Control District in which the Ward Lake facility is located, no complaints were filed related to odor issues in the past five years.

Plumas County has not set an odor threshold for significance. Other counties commonly use a comparison of complaints from similar facilities. Plumas County noted no additional facilities that are similar. The Delleker Transfer Station is located adjacent to the site and operated for many years during site operations. The transfer station would have produced strong, distinct odors from putrescible refuse. The asphalt plant will be located at least 1,600 feet from the nearest residence. It will not operate on a daily basis, but only associated with project demand. It is anticipated that the impact will be **less than significant.**

Mitigation Measures

Mitigation Measure AQ-1: Implement Project Design Element AQ-1 through AQ-5 to reduce air quality and fugitive dust impacts as outlined in Attachment A: Plumas County Delleker Plant Air Quality Technical Report:

- **Project Design Element AQ-1:** All diesel-powered equipment greater than 50 horsepower (hp) shall be equipped with engines that meet or exceed CARB Tier 4 off-road emission standards. If 50 hp or greater engines that comply with Tier 4 emission standards are not commercially available, then that diesel powered equipment shall meet CARB Tier 3 with the most efficient Verified Diesel Emissions Control Strategies available for the engine type, such as Level 3 Diesel Particulate Filters.
- **Project Design Element AQ-2:** Haul trucks shall be 2011 model year trucks, which meet or exceed CARB's 2010 engine emissions standards at 0.01 grams per horsepower-hour (g/hp-hour) of particulate matter and 0.20 g/hp-hour of NOx emissions, or newer trucks. Applicant shall maintain records of all haul trucks associated with project operations to

document that each truck used meets these emission standards and make the records available for inspection.

- **Project Design Element AQ-3:** The facility access road shall be paved. Any remaining length of the unpaved road shall be treated with dust palliatives and watered for dust control and soil stabilization.
- **Project Design Element AQ-4:** The asphalt plant shall include a baghouse system consisting of a primary dust collector, an enclosed fabric filter structure (baghouse), and a draft package which includes the fan, variable frequency drive and ductwork.
- **Project Design Element AQ-5:** Pole power shall be utilized at the earliest feasible point in time and shall be used to the maximum extent feasible in lieu of diesel generators. If stationary equipment, such as diesel-powered generators, must be operated continuously, such equipment shall be certified Tier 4 equipment and located at least 100 feet from air quality sensitive land uses (e.g., residences, schools, childcare centers, hospitals, parks, or similar uses), whenever possible.

Mitigation Measure AQ-2: Implement Regulatory Measures AQ-1 through AQ-10 to reduce air quality and fugitive dust impacts as outlined in Attachment A: Air Quality Technical Report:

- **Regulatory AQ-1:** Preparation of a Dust Control Plan Pursuant to District Rule 226: District Rule 226 (Dust Control) states, "A dust control plan must be submitted to and approved by the Air Pollution Control Officer before topsoil is disturbed on any project where more than one acre of natural surface area is to be altered or where the natural ground cover is removed." This applies to clearing as well as grading. For smaller projects, "reasonable precautions" (such as watering as necessary) must be taken to prevent dust emissions. Accordingly, the applicant shall reduce fugitive dust by implementing the following basic control measures:
    - All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and/or causing a public nuisance. Watering during summer months should occur at least twice daily, with complete coverage of disturbed areas.
    - All areas with vehicle traffic shall be watered or have dust palliative applied as necessary to minimize dust emissions.
    - All on-site vehicle traffic shall be limited to a speed of 15 miles per hour (mph) on unpaved roads.
    - All land clearing, grading, earth moving, or excavation activities on a project shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
    - All inactive portions of the development site shall be covered, seeded, or watered or otherwise stabilized until a suitable cover is established.
    - All material transported off-site shall be either sufficiently watered or securely covered to prevent it being entrained in the air, and there must be a minimum of six inches of freeboard in the bed of the transport vehicle.
    - Utilize wheel washers, rumble grate, and paving of internal roads or use of dust palliatives on roads to eliminate track out.

- Paved streets adjacent to the project shall be swept or washed at the end of each day, or more frequently, if necessary, to remove excessive accumulations or visibly raised areas of soil which may have resulted from activities at the project site.
- Prior to final occupancy, the applicant shall re-establish ground cover on the site through seeding and watering.

- **Regulatory Measure AQ-2:** The applicant shall implement the following measures to reduce exhaust emissions:
  - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for workers at all access points.
  - All equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- **Regulatory Measure AQ-3:** A publicly visible sign shall be posted with the telephone number and person to contact regarding fugitive dust and/or odor complaints. This person shall respond and take corrective action with 24 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
- **Regulatory Measure AQ-4:** Install PM_{10} and $PM_{2.5}$ abatement equipment on processing equipment, as needed (including spray bars, nozzles, foggers, or misters) to reduce project PM_{10} and $PM_{2.5}$ emissions from asphalt plant and associated operations. Conveyors shall be placed to reduce material free fall distance for all transfer points.
- **Regulatory Measure AQ-5:** Require construction of three-sided enclosures with 50 percent porosity for storage piles, and/or plant tree windbreaks on the windward (southwest) perimeter of project site, and/or water the storage piles or apply cover when wind events exceed 25 mph.
- **Regulatory Measure AQ-6:** The applicant shall comply with Regulations IV and V (Authority to Construct and Permit to Operate) which require that owners of applicable construction or operation equipment obtain air quality permits from the NSAQMD prior to construction and operation.
- **Regulatory Measure AQ-7:** The applicant shall use alternative methods to open burning for vegetation disposal. Open burning of site-cleared vegetation shall be prohibited. Among suitable alternatives to be used shall be chipping, grinding, hauling to an approved disposal site, cutting for firewood, and conversion to biomass fuel.
- **Regulatory Measure AQ-8:** Install and maintain track out control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (e.g., install wheel shakers, wheel washers, and limit site access).
- **Regulatory Measure AQ-9:** When materials are transported offsite, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

- **Regulatory Measure AQ-10:** All streets located within the project site area shall be swept at least once a day using air district certified street sweepers if visible soil materials are carried to adjacent streets. Require the use of electric or alternatively fueled (e.g., natural gas) street sweeper with HEPA filters.

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

Setting

A general biological survey and review of the project site was completed by VESTRA. The site visit was conducted by a qualified VESTRA Biologist in April of 2021. The findings of the biological review are incorporated herein. A Biological Resources Assessment completed for the project is included as Appendix C.

Regulatory Setting

Biological resources in California are protected and regulated by a variety of laws, regulations, plans, and policies administered by federal, state, and local agencies. This section summarizes the biological resource-related agencies, regulations, and policies relevant to the project.

Federal

Federal Endangered Species Act

Section 9 of the Federal Endangered Species Act of 1973 (FESA) prohibits actions that result in the "take" of threatened or endangered species. As defined by the FESA, "endangered" refers to any species that is in danger of extinction throughout all or a significant portion of its current range. The term "threatened" is applied to any species likely to become endangered within the foreseeable future throughout all or a significant portion of its current range. "Take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Sections 7 and 10 of the FESA provide methods for permitting otherwise lawful actions that may result in "incidental take" of a federally listed species. Incidental take" refers to take of a listed species that is incidental to, but not the primary purpose of, an otherwise lawful activity. Incidental take is permitted under Section 7 for projects on Federal land or involving a Federal action; Section 10 provides a process for non-federal actions. The act is administered by the U.S. Fish and Wildlife Service (USFWS) for terrestrial species.

Migratory Birds

California Fish and Game Code Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. Project features will be implemented to protect nesting migratory birds and birds of prey to comply with this code.

Migratory birds are protected under the MBTA of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products except as allowed by implementing regulations (50 CFR 21). Mitigation measures can be identified to avoid or minimize adverse effects on migratory birds. Nesting habitat is present throughout the study area in trees, shrubs, ground, and other structures.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) makes it illegal to trade in any bald eagle or golden eagle or parts thereof. The Act provides criminal penalties for person who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causes injury, death or nest abandonment.

Clean Water Act

The objective of the Clean Water Act (1977, as amended) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Discharge of dredged or fill material into waters of the United States, including jurisdictional wetlands, is regulated by the Corps under Section 404 of the Clean Water Act (33 USC 1251-1376) under a permitting process. Applicants for Section 404 permits are also required to obtain water quality certification or waiver through

the local Regional Water Quality Control Board under Section 401 of the Clean Water Act (33 USC 1341).

Corps regulations implementing Section 404 define waters of the United States to include intrastate waters, including lakes, rivers, streams, wetlands, and natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce. Wetlands are defined for regulatory purposes as "areas that are inundated or saturated by surface 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" (33 CFR 328.3; 40 CFR 230.3). To comply with the Corps policy of "no net loss" of wetlands, discharge into wetlands must be avoided and minimized to the extent practicable. For unavoidable impacts, compensatory mitigation is typically required to replace the loss of wetland functions in the watershed.

State

California Endangered Species Act

The California Endangered Species Act (CESA) lists species of plants and animals as threatened or endangered. Projects that may have adverse effects on state-listed species require formal consultation with CDFW. "Take" of protected species incidental to otherwise lawful activities may be authorized under Section 2081 of the California Fish and Game Code. Authorization from the CDFW is in the form of an incidental take permit and measures can be identified to minimize take. CDFW Species of Special Concern (SSC) are considered under the California Endangered Species Act.

Birds of Prey

Under Section 3503.5 of the California Fish and Game Code, it is "unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird, except as otherwise provided by this code or any regulation adopted pursuant thereto." Project features will be implemented to protect nesting migratory birds and birds of prey to comply with this code.

Migratory Birds

California Fish and Game Code, Section 3513, states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Fully Protected Species & Species of Special Concern

California statutes also accord "fully protected" status to several specifically identified birds, mammals, reptiles, amphibians, and fish. These species cannot be "taken," even with an incidental take permit (California Fish and Game Code, Sections 3505, 3511, 4700, 5050, and 5515).

California SSC are animals not listed under the FESA or CESA but are nonetheless of concern because they are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to existence currently exist. This designation is intended to result in special consideration for these animals by CDFW, land managers, consulting biologists, and others and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation is also intended to stimulate collection of additional information on the biology,

distribution, and status of poorly known at-risk species and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration in the CEQA process and are analyzed along with listed species in the CEQA Appendix G checklist.

Protection for rare plant species under CESA is afforded by the California Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code 1900-1913), which prohibits the importation of rare and endangered plants into California, take of rare and endangered plants, and sales of rare and endangered plants. The California Native Plant Society (CNPS) also identifies rare or endangered plants and ranks their rarity as 1A, 1B, 2, 3, and 4 species. Plant species with a California Rare Plant Rank 1A, 1B, or 2 are considered to meet CEQA significance criteria and Fish and Game Code Sections 1901, 2062, and 2067 criteria as rare or endangered species.

Local

The Plumas County General Plan Section 7 outlines the county's goals and policies regarding resource conservation and preservation of open spaces.

Policy COS 7.2.2 **Species and Habitat Avoidance** requires new development projects to avoid or minimize adverse impacts to threatened, rare, or endangered species and critical, sensitive habitat, as defined by appropriate local, state, and federal agencies, through proper project location and design. In the event that avoidance is not feasible, the County shall require a "no-net-loss" of these sensitive natural plant or habitat communities. Wildlife habitat will be preserved and managed in a manner that will not lead to the listing of additional species as threatened and endangered or negatively impact listed threatened or endangered species.

Policy 7.2.7 **Wetland and riparian Habitat Buffers** requires that new development that is subject to review under the California Environmental Quality Act to identify wetlands and riparian habitat areas and designate a buffer zone around each area sufficient to protect these habitats from degradation, encroachment, or loss. As appropriate, criteria for the development of buffer width standards shall be developed in coordination with all appropriate resource agencies and the County will continue to identify areas as Open Space and Significant Wetlands under the General Plan.

Policy 7.2.13 **Biological Resource Maps** requires that any development project that could potentially impact a special status species or sensitive natural community shall be required to conduct a biological survey of the site. If special-status species or sensitive natural communities are found on the site, the project biologist shall recommend measures necessary to avoid, minimize, and/or compensate for identified impacts to specials tatus and sensitive natural communities.

Environmental Setting

Vegetation Communities & Habitat Types

The habitat onsite was determined through consultation with the California Wildlife Habitat Relationships (CWHR) database as well as observations made during the site survey. No updated VegCAMP mapping is available for this survey area. The following CWHR vegetation types were identified onsite (Figure 9):

Urban-Barren
Although CWHR recognizes this designated area as an annual grassland, after the reconnaissance survey conducted in July of 2019, it is evident that there have been long-term historical impacts that has caused a shift from a grassland habitat to an urban/barren landscape. This landscape is poor in supporting annual grasses due to the compaction from frequent vehicle access, which retards the repopulation of plant species present.

Montane Riparian- Montane Wetland Shrub
Montane riparian habitats can occur as alder or willow stringers along streams or seeps. In other situations, an overstory of Fremont cottonwood, black cottonwood and/or white alder may be present. Fringe habitat can consist of various ceanothus species and sagebrush seeing that the montane wetland scrub has a high occurrence in the Great Basin and Modoc plateau areas. In the Sierra Nevada and its transitionary areas, characteristic species include thinleaf alder, aspen, black cottonwood, dogwood, wild azalea, willow, and water birch (southern Sierra east of the crest), white alder and dogwood (north Sierra).

Sagebrush-Silver Sage Wet Shrubland
Typically, sagebrush habitat is composed of pure stands of big sagebrush, but many stands include other species of sagebrush, rabbitbrush, horse brush, gooseberry, western chokecherry, curl leaf mountain mahogany, and bitterbrush. (Munz 1959). Sagebrush habitats are usually almost solely populated with sagebrush species, with annual grasses and forbs to fill in the gaps in the canopy. In the Silver Sage Wet Shrubland habitat, Silver Sage is the dominant species that occupies a relatively small percentage of the area, while annual grasses and forbs fill in the rest of the groundcover. This herbaceous layer is sparse to continuous and is usually grassy. Silver sage is recognized as a facultative wetland specie that is not usually found in wetland areas; however this species in particular has known associations to wet meadows and riparian corridors.

Hydrology
There is no known surface water on the site. Middle Fork Feather River is located adjacent to the site. One small stream (Humbug Creek) is found outside the project area, on the far western end of the property.

Discussion
Special-Status Wildlife (CNDDB)
Special-status wildlife and habitats that have potential to occur within the project site were determined, in part, by sources such as agency databases, relevant literature, and the following:

- Portola, California, USGS 7.5-minute quadrangle;
- Aerial imagery of the project area and vicinity;
- The U.S. Fish and Wildlife Service (USFWS) official list of endangered and threatened species that may occur, or be affected by projects, as provided by the information for Planning and Consultation (iPAC) database;
- The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife 2023a) records for the Portola, California, USGS 7.5-minute quadrangle and the eight surrounding quadrangles;

- The California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants (California Native Plant Society 2023) records for the Portola, California, USGS 7.5-minute quadrangle and the eight surrounding quadrangles;
- California Wildlife Habitat Relationships (CWHR) System (California Department of Fish and Game 2023);
- GIS shapefiles of designated critical habitat from the USFWS Critical Habitat Portal website;
- CDFW publications including State and Federally Listed Endangered, Threatened and Rare Plants of California (California Department of Fish and Wildlife 2023b); State and Federally Listed and Threatened Animals of California (California Department of Fish and Wildlife 2023d); and Special Animals List (California Department of Fish and Wildlife 2023e);
- Pertinent biological literature including Bird Species of Special Concern in California (Shuford and Gardali 2008).

The USFWS Information for Planning and Consultation (IPAC) database for the project site and CNDDB were conducted for this site. CNDDB occurrences within one- and five-mile radius of the project site are included on Figure 10. Special-status species with potential to occur at the project site are included in Table 4.

An assessment was completed onsite following the pre-survey review to determine potential project impacts to special-status plant and animal species as well as other sensitive natural resources. The findings of the assessment are shown in Table 4 and are incorporated into the responses below.

Table 4
POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES

Scientific Name	Common Name	Fed Status	State Status	CRPR Status	Habitat	Habitat Present? (Y/N)
Birds						
Empidonax traillii	willow flycatcher	--	E	--	Almost exclusively in willow thickets. Most often found within meadow "islands" surrounded by riparian forest or late-seral forest.	Yes
Falco mexicanus	prairie falcon	USFW S BCC	CDFW WL	--	Nests on cliff ledges overlooking open meadows in grasslands and forests. This species will not be discussed further in this report.	No

Table 4 POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES						
Scientific Name	**Common Name**	**Fed Status**	**State Status**	**CRPR Status**	**Habitat**	**Habitat Present? (Y/N)**
Strix nebulosa	great gray owl	--	E	--	Old growth forest with dense stands and meadows; require large snags >3 feet DBH. Surrounding stand not adequate age or density for suitable habitat for nesting. No adequate meadows in vicinity to provide sustainable hunting resources.	No
Coccyzus americanus	western yellow-billed cuckoo	T	E	--	Dense riparian forest, no habitat presents north of Red Bluff. This species will not be discussed further in this report.	No
Mammals						
Vulpes necator	Sierra Nevada red fox	C	T	--	Forests interspersed with meadows or alpine fell-fields. This species is found above 7000 feet elevation; therefore the project is outside the range of the species. This species will not be discussed further in this report.	No
Invertebrates						
Bombus occidentalis	western bumble bee	--	CE	--	Nest in underground cavities such as squirrel burrow	Yes
Danae plexippus	monarch butterfly	C	--	--	Requires presence of milkweed as a food source and reproduction. No milkweed or habitat for milkweed present. This species will not be discussed further in this report.	No
Amphibians						
Rana sierrae	Sierra Nevada yellow-legged frog	E	T	--	Slow moving streams, ponds and lakes, devoid of predatory fish, rarely found farther than 3 feet from water.	Yes
Ambystoma macrodactylum sigillatum	southern long-toed salamander	--	CDFW SSC	--	Slow moving streams, devoid of predatory fish. Breeds in stagnant or slow-moving water. Adults are terrestrial and gravitate to moist cover such as under logs and layers of duff.	No
Plants						
Pyrrocoma lucida	sticky pyrrocoma	--	--	1B.2	Alkaline flats with clay soils; FL July-October	No
Carex sheldonii	Sheldon's sedge	--	--	2B.2	Riparian, wetland	Yes
Astragalus lentiformis	lens-pod milk-vetch	--	--	1B.2	Sandy or rocky soils in pine or sagebrush communities; FL May-July	Yes
Ivesia sericoleuca	Plumas ivesia	--	--	1B.2	Wet meadows; FL May-October	Yes

Table 4 POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES						
Scientific Name	**Common Name**	**Fed Status**	**State Status**	**CRPR Status**	**Habitat**	**Habitat Present? (Y/N)**
Juncus luciensis	Santa Lucia dwarf rush	--	--	1B.2	Riparian, wetland	Yes
Botrychium minganense	mingan moonwort	--	--	2B.2	Riparian area with dense shade, associated with late seral Red Cedar and substantial duff layers. This species will not be discussed further in this report.	No

Fed T: federally listed as threatened; **Fed E**: federally listed as endangered; **Fed C**: Candidate for listing; **State T**: state listed as threatened **State E**: state listed as endangered; **CDFW SSC**: Species of Special Concern; **CDFW FP**: CDFW fully protected; **CDFW WL**: CDFW watch list; **1B**: Plants rare, threatened, or endangered in California and elsewhere; **2B**: Plants rare, threatened, or endangered in California but more common elsewhere.

The CNDDB query for the one- and five-mile buffer found that nine animal species and six plant species occur in the general project area. Of the fifteen special-status species evaluated, several were determined to have a potential to occur, while the rest were determined to have no potential to occur. Impacts to special-status species determined to have potential to occur within the project area are discussed below, while species that were determined to be absent are not discussed further.

Special-status species that are known to occur, or have the potential to occur, within the project area include:

- Willow flycatcher (*Empidonax traillii*)
- Sierra Nevada yellow-legged frog (*Rana sierrae*)
- Western bumble bee (*Bombus occidentalis*)
- Sheldon's sedge (*Carax sheldonii*)
- lens-pod milk-vetch (*Astragalus lentiformis*)
- Plumas ivesia (*Ivesia sericoleuca*)
- Santa Lucia dwarf rush (*Juncus luciensis*)

The presence of a few sparse willow thickets onsite could provide low-quality foraging habitat. Willow flycatcher breeding habitat requires adequate meadow size, moisture, shrub coverage and foliar density. Their nesting and reproductive territories have been strongly associated with standing or slow-flowing water in large meadows surrounded by late seral forest. More than 95 percent of positive willow flycatcher reproductive observations have occurred in continuous wet meadows that are more than ten acres in size. There has been historical documentation of willow flycatcher occupying meadows approximately one acre or less in size. The site lacks meadow habitat, but the willow thicket is characterized as low-quality nesting habitat. The potential for this species to occur is addressed by BIO-MM-1. Prior to project related ground disturbance that occurs within 50 meters of the willow thicket habitat at the southeastern end of the project area, surveys would be completed for willow flycatchers. Therefore, there will be **a less-than-significant impact** to the willow flycatcher.

The proposed project design includes avoidance of the riparian area, such that there will be no loss of habitat for breeding or hunting. It is unlikely the SNYLF would occur due to the speed of the water, homogeneity of bank structure, and lack of slow-moving reliefs in the Middle Fork Feather River bordering the project site. It is unlikely that the SNYLF would be impacted by noise produced by the implementation of this project due to the surrounding current industrial activities. The proposed location of the asphalt plant is situated well over three meters from the Middle Fork Feather River and from Humbug Creek. Individual frogs that may occur are unlikely to venture far enough from a watercourse to be directly impacted by the project activities. Therefore, there will be a **less-than-significant impact** to the Sierra Nevada yellow-legged frog.

The Western bumble bee habitat residence requirements are not anticipated to be significantly impacted by the project construction activities. Nesting areas and overwintering sites are not expected to be impacted due to the scarcity of friable soils able to be made into burrows by native rodents. Burrowing rodents commonly adapt to inhabiting areas with high human disturbance, however the soil is far too compacted to be of use to rodents. Therefore, nesting sites or queen overwintering burrows will likely not occur within the footprint of the project area. The second requirement, proximity to nectar and pollen resources, will not be impacted by the proposed project activities due to the lack of nectar-bearing vegetation within the project area. Construction will take place within the current barren landscape with no vegetation removal, minimizing the total disturbed area. In subsequent growing seasons, flowering plants in the impacted areas have the potential to reoccupy disturbed areas. However, it is unlikely that the western bumble bee will inhabit the project are or use it as an alternative habitat due to lack of current and historical resources. Therefore, there will be No impact to the western bumble bee.

Potentially occurring special-status plant species within the project area include Sheldon's sedge (*Carax sheldonii*), lens-pod milk-vetch (*Astragalus lentiformis*), Plumas ivesia (*Ivesia sericoleuca*), and Santa Lucia dwarf rush (*Juncus luciensis*). No impact will occur to Sheldon's sedge (*Carax sheldonii*), lens-pod milk-vetch (*Astragalus lentiformis*), Plumas ivesia (*Ivesia sericoleuca*), and Santa Lucia dwarf rush (*Juncus luciensis*) due to the implementation of a wetland/ riparian buffer. The proposed asphalt plant will be constructed in an area previously compacted and devoid of plants due to previous vehicle traffic and industrial activity. If any sensitive plant habitat is located within an area where disturbance is proposed, then BIO-MM-2 will be implemented to reduce the project impacts to special-status species to **less than significant.**

Impacts to migratory birds and raptors are not expected because there will be no vegetation removal activities, and noise impacts are **less than significant** due to current ambient noise levels from the nearby Southern Pacific Railroad, cement plant, and the Delleker Transfer Station.

Biological Resource Mitigation Measures

The following mitigation measures are required to reduce the impacts of the project to special-status species to be less than significant.

Mitigation Measure Bio-1: Willow Flycatcher
Prior to any ground-disturbing activities, special attention will be given to the riparian shrub zone on the south end of the property to survey for willow flycatchers. Individuals are likely to remain within the protection of willow shrubs and thickets; the survey area will be within fifty meters of the edge of the willow flycatcher potential habitat. Because this area already contains noise pollution, attempting to conduct auditory surveys at the 100-meter option for willow flycatchers would be redundant. CDFW recommends two separate surveys in one year per site. One survey required during Survey Period 2 (June 15-25), and the other occurring during Survey Period 1 or 3(see Table 3 for survey period outline). To be considered separate surveys, must be spaced at least five days apart. Performing surveys within this period increases the chances of detecting individuals during the early nesting period while individuals are displaying auditory calls for establishing territories. Auditory and visual pedestrian surveys will be conducted within the recommended survey periods, from first light until approximately 10:00 a.m.

Table 5
PROPOSED SURVEYS

Survey Period	Survey Timing	Life History Phase
1	June 1 to June 14	Establishing territories
2	June 15 to June 25*	Courtship, early nesting
3	June 26 to July 15	Nesting, incubation

Notes: * = Required visit

Mitigation Measure Bio-2: Special-Status Plant Species
Potentially occurring special-status plant species include Sheldon's sedge (*Carax sheldonii*), lens-pod milk-vetch (*Astragalus lentiformis*), Plumas ivesia (*Ivesia sericoleuca*), and Santa Lucia dwarf rush (*Juncus luciensis*). Prior to any disturbance within the sagebrush or riparian areas, protocol-level surveys will be completed. Surveys will be completed by a qualified botanist and will take place at time of year when identification is possible (typically during the Spring flowering period). If a rare plant is located within an area where project activities are proposed, then avoidance or mitigation measures should be implemented to reduce the project impacts to the species.

Mitigation Measure Bio-3: Nesting Migratory Birds
No vegetation removal activities will occur within riparian corridor to avoid impacts to nesting birds.

b-c.) The California Sensitive Natural Communities list was reviewed for natural communities that are listed as S1, S2, and S3, and would warrant consideration under CEQA review. Silver Sage Wet Shrubland is S3 designated. This plant community and all riparian habitats will be avoided due to the wetland/riparian buffer. No impacts to Waters of the United States (WOTUS) will occur due to the wetland/riparian buffer. The Middle Fork Feather River runs adjacent to the site boundary but does not occur within the project boundary. The tributary onsite would be avoided due to the wetland/riparian buffer. No US Fish and Wildlife Service or NOAA critical habitats occur within the project site. **No impact.**

d). The project will avoid disturbance to the Feather River and surrounding riparian and wetland vegetation so **no impact** to fish passage or migration would occur. The Sloat Deer Herd ranges over an area of approximately 1,240 square miles that includes five California counties (Lassen, Plumas, Sierra, Nevada, and Placer) and one Nevada county (Washoe) (DFG 1982). Two distinct sub-units were described in the 1982 DFG Deer Herd Management Plan: the Sierra Valley sub-unit (SVSU) representing the X7a premium deer zone and the Verdi sub-unit (VSU) or X7b. The herd range is bounded on the north by Highway 70 and extends southwest from Portola over Beckwourth Pass, along the crest of the Sierra Nevada south over Donner Pass to the Placer-El Dorado County line near Miller Lake then along McKinney Creek to the west shore of Lake Tahoe. The deer herd migrates between summer ranges primarily in California and winter ranges primarily in Nevada. The proposed project area is located north of the deer herd migration corridor. **No impacts** to nursery sites or migration corridors will result from the proposed construction activities.

e-f). The project does not conflict with and local policies, ordinances, or Habitat Conservation Plan. The property is zoned within Plumas County as "Industrial" land use. According to the Plumas County General Plan, the purpose of the Industrial designation is "to provide for industrial uses where access is available to transportation routes, transportation facilities, and public service facilities and where surrounding land use and the environmental setting will permit most uses without major adverse impacts." **No impact.**

V. CULTURAL RESOURCES Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

Setting

California Register of Historical Resources (CRHR)
According to Section 15064.5 of CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Lead agencies are required to identify any historic resources that may be affected by any undertaking involving state or county lands, funds, or permitting. Furthermore, the significance of such resources that may be affected by the undertaking must be evaluated using the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852).

Public Resources Code Section 5024
As set forth in Section 5024.1 (C) of the Public Resources Code, for a cultural resource to be deemed "important" under CEQA and thus eligible for listing on the CRHR, it must meet at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The eligibility of archaeological sites is usually evaluated under Criterion (4) – its potential to yield information important to prehistory or history. Whether a site is considered important is determined by the capacity of the site to address pertinent local and regional research themes. Prehistoric sites can be eligible under any of the four criteria in addition to built-environment eligibility if multi-component in nature.

Discussion

A request for a Non-confidential Records Search was filed with the California Historical Resources Information System (CHRIS) Northeast Information Center (NEIC) for APN 126-010-050 (Appendix D). The resulting records search determined that no archeological resources or historic properties are present within the project site. While there are no known occurrences within the project area, the NEIC recommended that a professional archeologist be contacted prior to ground disturbance as there is a potential for the discovery of additional resources. At this time, snow cover is such that an archeological survey is not possible. However, a pedestrian survey will be conducted by a professional archeologist prior to the initiation of project activities.

a-c) As discussed above, no known historical or archaeological resources are located within APN 126-010-050. The site has been previously used to mine aggregate and approximately 100,000 cubic yards of material were removed. It is likely that significant cultural resources would have been more likely to be uncovered by the past excavation than by the proposed project activities which include relatively little ground disturbance. Prior to any ground disturbance, the site will be surveyed by a professional archeologist for historically significant resources. **No impact.**

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

Setting

Electricity onsite will be provided by Plumas-Sierra Rural Electric Cooperative ~~via~~and suplmented diesel generators. Plumas County does not currently have an Energy Plan, but the General Plan includes several goals related to energy. Goal 5.7 of the General Plan includes the development of a countywide Strategic Energy Plan, including an effective energy strategy based on self-sufficiency, conservation and development of renewable energy resources that is actively implemented countywide and through Specific and Community Plans and through cooperation with utilities, State and Federal agencies, and private interests. Goal 5.7, Develop a Strategic Energy Plan, is further clarified under Policy 5.7.1, Strategic Energy Plan, to develop a "business friendly" Strategic Energy Plan that balances the Energy Policies with Economic viability in order to protect, stimulate and create economic development and jobs.

Discussion

a) Operation of the project will result in short-term energy consumption including the use of electricity provided by Plumas-Sierra Rural Electric Cooperative and fuel for generators and heavy equipment onsite during the two-year operating period for the project. The project will also generate an increase in truck trips amounting in a maximum of 150 roundtrips per day while the plant is in operation. While truck trips will be generated by the plant's operations, the purpose of the temporary asphalt plant is to meet the needs of upcoming road work projects in Plumas County. The work will generate truck trips to supply the asphalt regardless of the Portola Asphalt plant's operation. Without a local asphalt provider, trucks will likely come from Reno, thereby resulting in longer trips and more fuel expenditure. Compliance with state, federal, and local regulations (limiting engine idling times, etc.) will reduce and/or minimize energy demand during the project to the extent feasible and will not result in wasteful or inefficient use of energy. The project will result in a **less-than-significant impact** related to consumption of energy resources during project operation.

b) A local temporary asphalt plant will conserve resources by reducing truck trip lengths that would otherwise need to come from Reno to serve the highway maintenance project (see a). The project will not conflict with or obstruct the goals related to energy included in the Plumas County

General Plan. The project will not conflict or obstruct plans related to renewable energy or energy efficiency. **No impact.**

VII. GEOLOGY AND SOILS Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Setting

The project is situated in the northeastern Sierra Nevada mountains physiographic province of California. The Sierra Nevada Mountains are a fault-block mountain range consisting of a large body of plutonic rocks known as the Sierra Nevada Batholith and overlying older metamorphic rocks. The Sierra Nevada physiographic province is bound to the east by the Sierra Nevada Frontal Fault system, which are a series of north-striking steeply dipping downward east normal faults. To the west, the range is bound by the Central Valley. The presumed hinge of the Sierra Nevada is buried under several kilometers of sediment along the axis of the Central Valley. To the south, the range is truncated by the Garlock Fault and the Peninsular Ranges. To the north, the boundary of

the range is marked by the southern limit of the active Cascade Volcanic arc and the Modoc Plateau volcanic field.

The Sierra Nevada batholith is overlain in much of its northern portion by more recent extrusive volcanic rocks of diverse origin. Uplift of the fault block containing the Sierra Nevada Mountains has over the past 5 million years exposed the plutonic rocks of the batholith.

The project site lies in the Humbug Valley bounded by Miocene age volcanic flows to the south and northwest, and plutonic granodiorite to the northeast. Deposits in the Humbug consist of Holocene aged alluvial and fluvial deposits. These deposits consist of undifferentiated, interbedded layers of sand, gravel, and silt. The site's close vicinity to the Middle Fork Feather River suggest that surficial soils are fluvial in nature. The site's surface has been disturbed from previous aggregate mining activity and based on cross sections and LiDAR the disturbance is to depths of approximately 4- to 6-feet below original ground surface.

The nearest Holocene-active fault is the Mohawk Valley Fault 5.8 miles southwest of the site. The nearest geologic structure to the site is an approximately located and concealed inactive normal fault mapped approximately 500 feet west of the site. The age of last displacement for this fault is unknown and is not precisely mapped. The fault is identified on the *Blairsden* and *Portola Quadrangle Geologic Maps* (Grose et al, 2000), however the fault is not shown on the USGS Quaternary Faults online database.

Topography

Elevations within the project site range between 4810 and 4830 feet above mean sea level (AMSL). Current topography is shown on Figure 5. The elevation of the site boundary 100 feet set back from the river is approximately 4815 feet (±3 feet) AMSL.

Soil Types

A Custom Soil Survey Report for Sierra, Plumas and Lassen Counties produced by the USDA was used to characterize soils at the proposed site (see Appendix E). Silt, sand, and gravel soils make up the soils mapped on site. The Natural Resources Conservation Service (2019) identified three soil types within the project boundary. Soil thickness ranges from 30 to 60 inches. Soil permeability varies by location but is generally moderately high to high. Some soils are well-drained, and some are poorly drained. Runoff potential is variable based on location and steepness of the terrain while ponding potential is very low. Soil descriptions and associated properties are summarized in Table 6.

Table 6 SOIL TYPES						
Soil Unit	Soil Unit Name	Slope %	Acres	Depth to Restrictive Feature (inches)	Permeability	Typical Profile (inches BGS)
10	Badenaugh very gravelly loam	2-5	0.1	>80	Moderately High	0-6: very gravelly loam 6-19: very gravelly sandy clay loam, very cobbly sandy clay loam 6-19: stratified extremely gravelly sandy loam to very cobbly sandy clay loam 19 to 30: gravelly loam
13	Dotta loam	2-5	10.5	>80	Moderately High	0-15: loam 15-27: sandy clay loam 27-60: sandy loam
237	Riverwash-Fluvents complex	0-5	16.8	>80	High	Riverwash: 0-60: stratified very stony loam sand to very gravelly loam Fluvents: 0-18: sandy loam 18-60: stratified very gravely loamy sand to loam **Riverwash:Fluvents 3:2**

Discussion

a) There is no evidence that this project will cause substantial adverse effects, including the risk of loss, injury, or death involving any of the following geologic features; see below. **No impact.**

i-iv) There is no evidence that this project will cause the rupture of a known earthquake fault or strong seismic ground shaking or seismic-related ground failure, including liquefaction or landslides. There are no active earthquake faults within the project area. According to the Plumas County General Plan Seismic and Geologic Hazards Map, this site does not contain potential for landslides, or high soil erosion potential, and liquefaction potential is considered minimal.

Several potentially active faults pass through Plumas County and the seismic hazard risk to areas within Plumas County has been mapped on the California Geological survey. The faults include Almanor Fault, Butt Creek Fault Zone, Indian Valley Fault, and the Mohawk Valley Fault. Plumas County is located in a region of low seismic hazard potential. The potential for rupture of a known earthquake fault, strong seismic ground shaking, and seismic related ground failure at the site is very low. No fault is located in the project area or near the project area. Impacts related to landslides will be less than significant. **No impact.**

b) The project consists of temporary structures such as the asphalt plant and office trailer with minimal grading and removal of topsoil and overburden material. Additionally, the site has previously undergone surficial topsoil disturbance for aggregate mining. The site will file for cover under the General Permit for Stormwater Discharges Associated with Industrial Activities (Order

2014-0052-DWQ as amended). A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the site. **Less-than-significant impact.**

c) The site will be generally flat, and grading will be minimal. No major slopes will host large structures that could result in on- or offsite landslides, lateral spreading, subsidence, or collapse. Liquefaction occurs in loosely deposited, saturated granular soils with low fines content and undergo rapid loss of shear strength through the development of excess pore pressure during strong earthquake induced ground-shaking of sufficient duration to cause the soil to behave as a fluid for a short period of time. Liquefaction only occurs in saturated soils in the upper 40 feet of the ground surface. Soils in this geologic setting align with these parameters and with the Feather River directly south of the site, soil saturation likely occurs within 40 feet of the ground surface. In this fluvial setting the site's soils consist of interbedded layers of loosely deposited granular sandy and gravelly soils with layers of fine-grained soils. However, liquefaction potential is considered minimal. Plumas County has a low potential for ground-shaking required to induce liquefaction. The presence of interbedded fine-grained soils further reduces the risk of liquefaction onsite. **No impact.**

d) Soils on the project site consist of mostly sand, silt, and well drained soils. Expansive soils are unlikely to be encountered on the project site. The soils on and in the vicinity of the site are characterized by low water-holding capacity and low fertility. Soil types are shown in Table 6. **No impact.**

e) The Natural Resources Conservation Service (2019) identified three soil types within the project boundary. Soil septic ratings and permeability vary with location and depth of profile with soil units but are generally high. **No impact.**

f) There are no known paleontological resources onsite or unique geologic features at this site. **No impact.**

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

Setting

This project includes the operation of a temporary asphalt plant in a previously permitted mining area. It is anticipated that the site would be used on a part-time basis, where equipment would be moved in for specific projects and removed when complete. The following equipment could be used on the project site:

- Water truck for dust control (one 300 horsepower truck);
- Dozer to move materials around the site (two 300 horsepower dozers);
- Asphalt plant;
- Lime mix plant;
- Wash plant; and
- a diesel generator(400-horsepower)

During Years 1 and 2, there would be a maximum of 150 truck round trips per day. Each truck round trip is estimated to be 40 miles. During Years 1 and 2, there would be a total of 2,000 truck trips and 4,000 truck trips, respectively. During Years 1 and 2, there would be ten employees onsite.

The proposed project site is located in the Mountain Counties Air Basin, which comprises the counties along the Sierra crest. Plumas is the northernmost county in the basin. The Northern Sierra Air Quality Management District has jurisdiction over air quality for the project.

The Portola area has a climate regime that is distinct from the rest of California. The basin has sharply defined seasons that follow a continental, rather than marine, pattern. Winters are cold, with snow being the primary precipitation type; summers warm and dry. The region is mountainous and the mountains control much of the air movement in the vicinity. The region receives limited transported air pollution from major urban areas. As in many rural areas in California, particulates from dust and wood smoke are problems.

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space and a portion of the radiation is absorbed by the Earth's surface. The

Earth emits this radiation back toward space, but the properties of the radiation change from high frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases absorb infrared radiation that otherwise would have escaped back into space. This results in a warming of the atmosphere. Carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs) contribute to GHG emissions. Most emissions of GHGs are attributable to human activities. Carbon dioxide equivalents are the measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. Generally, GHG emissions are measured in Metric Tons of CO_2e/yr.

While the presence of the primary GHG in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. CH_4 and N_2O are substantially more potent GHG than CO_2, with GWP of 25 and 310 times that of CO_2, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons (MT) of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

Thresholds of Significance

At this time, neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the proposed project. The NSAQMD, however, recommends that all projects subject to CEQA review be considered in the context of GHG emissions and climate change impacts, and that CEQA documents include a quantification of GHG emissions from all project sources, as well as minimize and mitigate GHG emissions as feasible. The project would generate GHG emissions through short-term operational activities.

In light of the lack of established GHG emissions thresholds that would apply to the proposed project, CEQA allows lead agencies to identify thresholds of significance applicable to a project that are supported by substantial evidence. Substantial evidence is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts" (14 CCR 15384(b). Substantial evidence can be in the form of technical studies, agency staff reports or opinions, expert opinions supported by facts, and prior CEQA assessments and planning documents. Therefore, to establish additional context in which to consider the order of

magnitude of the proposed project's GHG emissions, this analysis accounts for the following considerations by other government agencies and associations about what levels of GHG emissions constitute a cumulatively considerable incremental contribution to climate change:

- The Sacramento Metropolitan Air Quality Management District (SMAQMD) established thresholds, including 1,100 metric tons of CO_2e per year for the construction or operational phase of land use development projects, or 10,000 direct metric tons of CO_2e per year from stationary source projects.[1]
- The Placer County Air Pollution Control District (PCAPCD) recommends a tiered approach to determine if a project's GHG emissions would result in a significant impact. First, project GHG emissions are compared to the de minimis level of 1,100 metric tons of CO_2e per year. If a project does not exceed this threshold, it does not have significant GHG emissions. If the project exceeds the de minimis level and does not exceed the 10,000 metric tons of CO_2e per year bright line threshold, then the project's GHG emissions can be compared to the efficiency thresholds. These thresholds are 4.5 metric tons of CO_2e per-capita for residential projects in an urban area, and 5.5 metric tons of CO_2e per-capita for residential projects in a rural area. For nonresidential development, the thresholds are 26.5 metric tons of CO_2e per 1,000 square feet for projects in urban areas, and 27.3 metric tons of CO_2e per 1,000 square feet for projects in rural areas. The PCAPCD bright-line GHG threshold of 10,000 metric tons of CO_2e per year is also applied to land use projects' construction phase and stationary source projects' construction and operational phases. Generally, GHG emissions from a project that exceed 10,000 metric tons of CO_2e per year would be deemed to have a cumulatively considerable contribution to global climate change.[2]
- The Bay Area Air Quality Management District (BAAQMD) has adopted 1,100 metric tons of CO_2e per year as a project-level bright-line GHG significance threshold that would apply to operational emissions from mixed land-use development projects, a threshold of 10,000 metric tons of CO_2e per year as the significance threshold for operational GHG emissions from stationary-source projects, and an efficiency threshold of 4.6 metric tons of CO_2e per service population per year.[3]
- The South Coast Air Quality Management District (SCAQMD) formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. In December 2008, the SCAQMD adopted an interim 10,000 metric tons of CO_2e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD Resolution No. 08-35, December 5, 2008).

As described, the 10,000 metric tons of CO_2e per year threshold is used by SMAQMD, PCAPCD, BAAQMD, and SCAQMD for industrial and/or stationary source emissions of GHG. Since the

[1] Sacramento Metropolitan Air Quality Management District, Guide to Air Quality Assessment in Sacramento County, May 2018, http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools

[2] Placer County Air Pollution Control District, 2017 CEQA Handbook – Chapter 2, Thresholds of Significance. https://placerair.org/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDf

[3] Bay Area Air Quality Management District, CEQA Air Quality Guidelines, May 2017, http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

proposed project is an industrial project that includes stationary sources, the proposed project's GHG emissions were compared to the 10,000 metric tons of CO_2e per year quantitative threshold. The substantial evidence for this GHG emissions threshold is based on the expert opinion of various California air districts, which have applied the 10,000 metric tons of CO_2e per year threshold in numerous CEQA documents where those air districts were the lead agency.

Project GHG Emission Estimates

The proposed project's estimated operational GHG emissions are presented in Table 7. The estimated GHG operational emissions would be approximately 790 and 1,578 metric tons of CO_2e during Years 1 and 2, respectively, which is below the significance threshold of 10,000 metric tons of CO_2e.

Table 7
ANNUAL GREENHOUSE GAS EMISSIONS (metric tons)

Emission Source	Year 1	Year 2
Onsite Equipment	15	29
Employee Vehicles	2	4
Haul Trucks	133	264
Asphalt Plant	599	1,197
Asphalt Silo	-	-
Lime Slurry Mix	-	-
Wash Plant	-	-
Diesel Generator	42	83
Material Handling	-	-
Grand Total	**790**	**1,578**
Significance Threshold	**10,000**	**10,000**
Exceeds Threshold?	**No**	**No**

Source: RCH Group, 2022

a) A numerical threshold of significance for GHG emissions has not been established by Plumas County. Rather, Plumas County has determined that the appropriate threshold of significance for this project is the current CEQA guidance of 10,000 metric tons. The GHG emissions from the activities related to the asphalt plant and from truck traffic is significantly less than 10,000 metric tons and therefore will result in **less-than-significant impact.**

b) Project implementation would result in minor emissions of greenhouse gasses. However, no specific area plans or numerical threshold of significance for GHG emissions have been established by Plumas County. Therefore, the project has been evaluated for consistency with applicable federal and state regulations and programs adopted to achieve state and regional reductions in GHG emissions. As detailed in Appendix B: Air Quality Technical Report, the project meets all applicable standards and thresholds. **Less-than-significant impact.**

IX. HAZARDS AND HAZARDOUS MATERIALS Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Create a significant hazard to the public or the environment through the routine transport/use/disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Setting

Hazardous materials and waste are substances that are considered toxic, ignitable, corrosive, or reactive (as defined in California Code of Regulations, Title 22, and Sections 66261.20-66261.24). The release of hazardous materials into the environment could contaminate soils, surface water, and groundwater supplies. Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese list," includes CALSITE hazardous materials sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. DTSC maintains a list of hazardous substances and contaminated sites as part of the Envirostor database. Waste sites are also overseen by the State Water Resource Control Board (SWRCB) and information is listed on the GeoTracker database.

Discussion

a-b) During installation of the asphalt plant, common hazardous materials used at the project site could include fuel, propane, solvents, lubricating oils, and welding gases. During operation of the project, hazards include asphalt (petroleum) fumes and fuels for equipment onsite. Materials kept onsite will include liquid asphalt and hydrated lime quantities of which will depend on project demands, one 3,000-gallon tank of diesel fuel, one 55-gallon barrel of motor oil, one 55-gallon barrel of hydraulic fluid and 15-gallons of various lubricating oils. Petroleum products will be kept onsite within secondary containment.

A Hazardous Materials Business Plan (HMBP) will be prepared and submitted to Plumas County Department of Environmental Health via the California Electronic Reporting System (CERS) for the project. The HMBP will include a map and inventory of the hazardous materials and wastes at the project site including an Emergency Response and Contingency plan which outlines emergency response, evacuation and containment, and cleanup procedures for the site as well as required training for employees. Plumas County Environmental Health Division will provide the HMBP information to agencies responsible for the protection of public health and safety of the environment (e.g., fire departments, hazardous material response teams). The use and storage of hazardous materials and wastes will comply with all applicable local, state and safety standards. Impacts associated with the use, transport, disposal or accidental release of hazardous materials will be **less than significant.**

c) The proposed project site is within an existing industrial zone. There is no existing or proposed school within one-quarter mile of the project site. The closest schools are in the city of Portola and the nearest school is located approximately 1.5 miles from the project site. **No impact.**

d) A search of the Envirostor and GeoTracker databases was conducted to identify cleanup sites, permitted sites, or other records for the project site. The closest sites to the project site are located on the Union Pacific Railroad railyard at 1 Park St Portola, California 96122, approximately 1.15 miles to the northeast. These include a LUST Cleanup site and cleanup program site. The project site is not located on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and will not create a significant hazard to the public or the environment. **No impact.**

e) There is no airport in the vicinity of the project. The closest airport is the Plumas County Nervino Airport, approximately 8.4 miles away by way of Highway 70 to the east. The project will not result in a safety hazard related to airports for the people working in the project area. **No impact.**

f) The project site will be accessed from Highway 70 to South Delleker Road at the end of Milk Weed Drive. The project will not interfere with any emergency response plan or evacuation plan. **No impact.**

g) The project includes potential fire sources including the asphalt plant and equipment operation. The project area represents a low risk for fire danger. The parcel is isolated from the surrounding parcels. It is bordered by the railroad tracks and the Middle Fork Feather River which could both act as effective firebreaks. Additionally, vegetation onsite is extremely sparse and does not

represent a significant source of fuel. The risk of increased wildland fire danger is **less than significant.**

X. HYDROLOGY Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would	☐	☐	☒	☐
i) result in substantial erosion or siltation on or offsite;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite?	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk of release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Setting

The project area is bounded by the Middle Fork Feather River along its southern edge. Humbug creek crosses the western corner of the site after passing under a railroad bridge. A drainage ditch wholly within the Union Pacific Railroad ROW runs parallel to the train tracks from the Middle Fork Feather River to Humbug creek. While the project site is bordered by streams and rivers, no surface water is present onsite. Figure 6 displays the nearby watercourses and waterbodies. Surrounding wetlands are shown on Figure 8.

The project site is within the FEMA 100-year flood plain. The majority of the project area is within Zone A – Area Subject to Inundation; No Base Flood Elevations Determined with a small portion

in Zone X – Area of Minimal flooding where the railroad crossing exists as shown on Figure 7.

Discussion

a) Installation of the asphalt plant could result in temporary surface water quality impacts if disturbed soils are exposed to precipitation. The project site is greater than one acre in size, however less than one acre of ground will be disturbed. The asphalt plant will operate on temporary basis and installation will involve bringing in existing structures such as the asphalt plant and office trailer, rather than building them onsite. As such, there will be very little ground disturbance and the project will not require coverage under the Construction General Permit (Order 2009-0009-DWQ). Operations will require coverage under the *General Permit for Stormwater Discharges Associated with Industrial Activities*, (Order 2014-0057-DWQ). Industrial stormwater discharges from the site will be required to comply with all requirements, provisions, limitations, and prohibitions in the permit to control pollutants in stormwater discharged from the project site.

No wastewater discharge will occur as a result of operation of the asphalt plant. Water used in the lime slurry treatment and added as a component of asphalt production is retained within the mixture and will not be discharged. Employee restroom facilities will be provided by portable toilets and will not generate any dischargeable waste.

Project design and compliance with the Construction General Permit will ensure the project does not substantially degrade surface or groundwater quality or violate water quality standards or waste discharge compliance. Project impacts will be **less than significant.**

b) The project will require the use of water for the treatment of lime and for dust suppression onsite. Water service for the project will be diverted from the Middle Fork Feather River. The project site exists within the FEMA 100-year flood plain. In order to avoid impacts as a result of flooding, the high elevation portion of the parcel will be expanded to accommodate the asphalt plant. Stormwater from the project site will flow in the same general direction as existing topography and will be conveyed to the Middle Fork Feather River. The project will not interfere with groundwater recharge within the basin. The project will not substantially decrease groundwater supplies or interfere with groundwater recharge such that the project would impede sustainable groundwater management of the basin. **Less-than-significant impact.**

c) The project site is bordered by the Middle Fork Feather River and Humbug Creek. The project will result in the addition of impervious surfaces at the project site. The site of the asphalt plant will be graded and the road paved.

i) Due to the close proximity to the Middle Fork Feather River, there is a potential risk of erosion or siltation. The installation of the asphalt plant will not require ground disturbance greater than one acre as the facilities will be brought to the site, preconstructed from a plant that is already in operation. During operation of the project stormwater discharges will be managed in accordance with the Industrial Permit for Stormwater Discharges Associated with Industrial Activities. Impacts related to erosion and siltation onsite and offsite will be **less than significant.**

ii) The project will not result in an increase in the rate and amount of surface runoff. The asphalt plant footprint is a relatively small area of the 20-acre parcel and very few impervious surfaces will be added. The majority of the area will be used for the storage of feedstock during the operational period and will not be graded or paved. All feedstock materials will be removed during the winter when storm events are most likely to occur. The open, undeveloped area provides ample opportunity for ground water infiltration and gives ample area for the rate of runoff to be restored to natural levels. The project will not result in flooding onsite or offsite. **No impact.**

iii) The project will result in a minor increase in runoff due to the addition of impervious surfaces at the project site (paved roadway). The majority of the project site will be gravel and the road area paved. The project includes a stormwater drainage system to capture stormwater runoff from the project site in a drainage swale located along the western boundary of the project site. Runoff from the project site will be managed in accordance with the requirements contained in the General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ. Impacts related to runoff from the project site will be **less than significant.**

iv) The project site is within a flood hazard zone. See d) below. **Less-than-significant impact.**

d) The project is within a flood hazard zone. The majority of the project area is within Zone A – Area Subject to Inundation; No Base Flood Elevations Determined with a small portion in Zone X – Area of Minimal flooding where the railroad crossing exists as shown in Figure 7. While the site is operational, materials such as aggregate, hydrated lime, and liquid asphalt will be stored onsite. Per the project design, the plant will only operate on a temporary basis from April to November for a two-year period. During the winter, all feedstock will be removed from the site. The asphalt plant itself will remain onsite through the winter months and will not be removed until temporary operations cease. A flood study of the Middle Fork Feather River for the project area was conducted by Pacific Hydrologic Incorporated and includes extent of inundation during a 100-year flood event (Appendix A; Figure 3). The asphalt plant will be constructed on the area of the site that has no risk of inundation. If more area is necessary, then material will be added to the site to increase the elevation and decrease flood risk. An addition of material to the site represents a restoration of historical site conditions. The previous owner removed approximately 100,000 cubic yards and decreased the site elevation by up to three feet in some areas. Cross-sections of the site prior to mining (2004) and at present are shown on Figure 11. With the removal of material during the winter and the increased elevation, there will be a **less-than-significant impact.**

e) According to the groundwater exchange website for California water basins, the prioritization for the Humbug Valley basin, where the project site is located, is considered low to very low. The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **No impact.**

XI. LAND USE AND PLANNING Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less-than-significant impact	No impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Setting

The project site is located west of the city of Portola in Plumas County. The project site sits between the Union Pacific Railroad ROW and the Middle Fork Feather River. The site was mined by the previous owner and approximately 100,000 cubic yards of material were removed. The parcel is zoned Heavy Industrial and is adjacent to the Delleker Transfer Station and a concrete supply yard.

As shown on Figure 3, the current land use of the project site as designated by the Plumas County General Plan is Industrial. According to the Plumas County General Plan, Industrial land use provides for the processing, manufacturing, assembly, packaging, storage, and distribution of goods and commodities where access is available to transportation routes. Under this land use, the surrounding land use and environmental setting will permit most uses without major adverse impacts.

As shown on Figure 4, the project site is zoned Heavy Industrial (I-1). The Plumas County Code of Ordinances provides a description of the purpose and uses of Heavy Industrial Zones under Title 9 – Planning and Zoning and is as follows:

Purpose (I-1): The purpose of the Heavy Industrial Zone (I-1) is to provide for industry where access is available to transportation routes, transportation facilities, and public service facilities and where surrounding land use and the environmental setting will permit most industrial uses without major adverse impacts.

Uses (I-1):
(a)The following uses shall be permitted in the Heavy Industrial Zone (I-1) subject to site development review as set forth in Article 11.3 of this chapter:

(1) Assembly, building supply, manufacturing, processing, electric generation, junk yards, salvage operations, public utility facilities, heavy equipment sales, heavy equipment services, storage, and transport stations;

(2) Retail sales and wholesaling when associated with and appurtenant to a use permitted in subsection (1) of this subsection or subsection (b) of this section;

(3) One dwelling unit, including additional quarters, when in conjunction with an industrial use; and

(4) Child day care homes and limited child day care homes.

(b)The following uses shall be permitted subject to the issuance of a special use permit.

(1) Mining, and public service facilities; and

(2) Permitted uses which exceed the height limitations.

(c)Telecommunications facilities in the Heavy Industrial Zone (I-1) shall be as permitted in Section 9-2.4105, Permits Required, of Article 41, Telecommunications, of this chapter, except as exempted under Section 9-2.4106, Exemptions, of Article 41, Telecommunications, of this chapter.

Discussion

a) The project site is within an established industrial zoned area with existing industrial and commercial development. The project will not physically divide an established community. **No impact.**

b) The project site is designated Industrial land use and zoned Heavy Industrial (I-1). As discussed above, the purpose of the Heavy Industrial district is to provide suitable areas for assembly, building supply, manufacturing, processing, electric generation, junk yards, salvage operations, public utility facilities, heavy equipment services, storage, and transport stations. Except by special permit, development in heavy industrials zones must not contain structures exceeding 75 feet in height, building coverage must not exceed 70 percent of the lot, and the lot must be at least 10,000 square feet with a minimum width of 60 feet.

The proposed project meets the standards and the intended use of the industrial land use designation, and the Heavy Industrial zone as provided by the Plumas County Code of Ordinances. The project will not conflict with any applicable land use plan, policy, or regulation for purpose of avoiding or mitigating an environmental effect with implementation of mitigation measures included in the Air Quality and Noise sections of this document. **No impact.**

XII. MINERAL RESOURCES Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Setting

California's Surface Mining and Reclamation Act of 1975 (SMARA) requires the State Geologist to classify land into mineral resource zones based on the known or inferred mineral resource potential of that land. The primary goal is to ensure that important mineral resources do not become inaccessible due to uniformed land-use decisions. To this end, the California Geological Survey performs objective mineral land classifications to assist in the protection and wise development of California's mineral resources (California Department of Conservation 2019).

A search of the SMARA Mineral Lands Classification Portal shows that Plumas County is one of 14 counties in which no SMARA Classification has occurred.

Discussion

a) The State of California has not designated an area of statewide or regional mineral resource significance within the project site. The project site was mined for aggregate by the previous owner in 1990 and approximately 100,000 cubic yards of material were removed from the site. The mining operations primarily took place within the southwest end of the parcel as to avoid impacts to the Middle Fork Feather River and to the Union Pacific Railroad ROW. The proposed site of the asphalt plant takes advantage of the relatively flat ground on the northeast end of the parcel and will have relatively low ground coverage. Additionally, the project is temporary and after the two-year operational period ends, all equipment will be removed. Due to the low ground cover and temporary nature of the project, there is no risk of loss of availability of a mineral resource of value to the region or residents of the state or delineated locally important mineral resource. **No impact.**

b) The project will not result in the loss of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan. **No impact.**

XIII. NOISE Would the project result in:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting

The project site is located west of the city of Portola. The 20-acre site is zoned as Heavy Industrial (I-1). The lands surrounding the parcel boundary are zoned Heavy Industrial (I-1), General Forest (GF), Mining (M), Multiple Family Residential (M-R), Periphery Commercial (C-2), Secondary Suburban (S-3), and Suburban (S-1). Noise generating activities proposed on the project site include operation of a diesel generator, asphalt plant operation, wash plant operation and loading and hauling of material. Existing sources of noise in the vicinity of the project site include traffic noise from State Route 70 as well as the Union Pacific Railroad located north of the project site. Noise from State Route 70 in the project area is estimated to be 70 dB within 100 feet of roadway (Plumas County 2013).

Noise level measurements of the former mining activities occurring at the project site were conducted by Plumas County Planning Department personnel in 1990. Noise levels were measured at the property line of a residential property immediately south of the existing mining operation (APN 125-080-023-000). Ambient noise levels as high as 60 dB were recorded at the property line without mining equipment operating. When ambient noise levels were calm, the noise level readings at the property line with the mining equipment operating were 46, 47, and 48 dB. These sound levels were measured while each of the different pieces of equipment were in operation. These various pieces of equipment were a loader, a bulldozer, and a 21-yard dump truck (Plumas County 1990). The distance to the residence and equipment was not specified.

Section 9-2.413 of the Plumas County Code of Ordinances contains general requirements pertaining to noise. According to Section 9-2.413 (a), new uses shall not increase offsite noise to a level which exceeds the ambient noise level for the specified land use area. The Plumas County General Plan Noise Element contains construction noise standards and land use compatibility

standards. The construction noise standards are included in Table 8. The standards apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends or on federally recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards.

Table 8
MAXIMUM ALLOWABLE NOISE EXPOSURE- CONSTRUCTION NOISE

Land Use Designation	Time Period (7 a.m.-7 p.m.)	Noise Level (dB)	
		Leq	Lmax
Residential	7 am to 7 pm	55	75
	7pm to 10 pm	50	65
	10 pm to 7 am	45	60
Commercial and Public Facilities	7 am to 7 pm	--	90
	7pm to 7am	--	75
Industrial	Any time	--	90

Source: Plumas County, 2013

The Land Use Compatibility Standards contained in The Plumas County General Plan Noise Element are included as Table 9. According to the Noise Element, when considering a discretionary project, the County shall refer to the Noise Land Use Compatibility Standards as a guide to ensure compatibility of land uses. Standards are expressed as Ldn (Day Night Average Sound Level) and CNEL (Community Noise Equivalent Level) which are calculations of the average sound level over a 24-hour period with a penalty added for noise during nighttime and evening hours. According to the Noise Element, evaluating new development projects for noise impacts should be based on a comparison of the noise compatibility standards identified in Table 9 with noise contours and other available information. Fences, landscaping, and noise insulation can be used to mitigate the hazards of excessive noise levels.

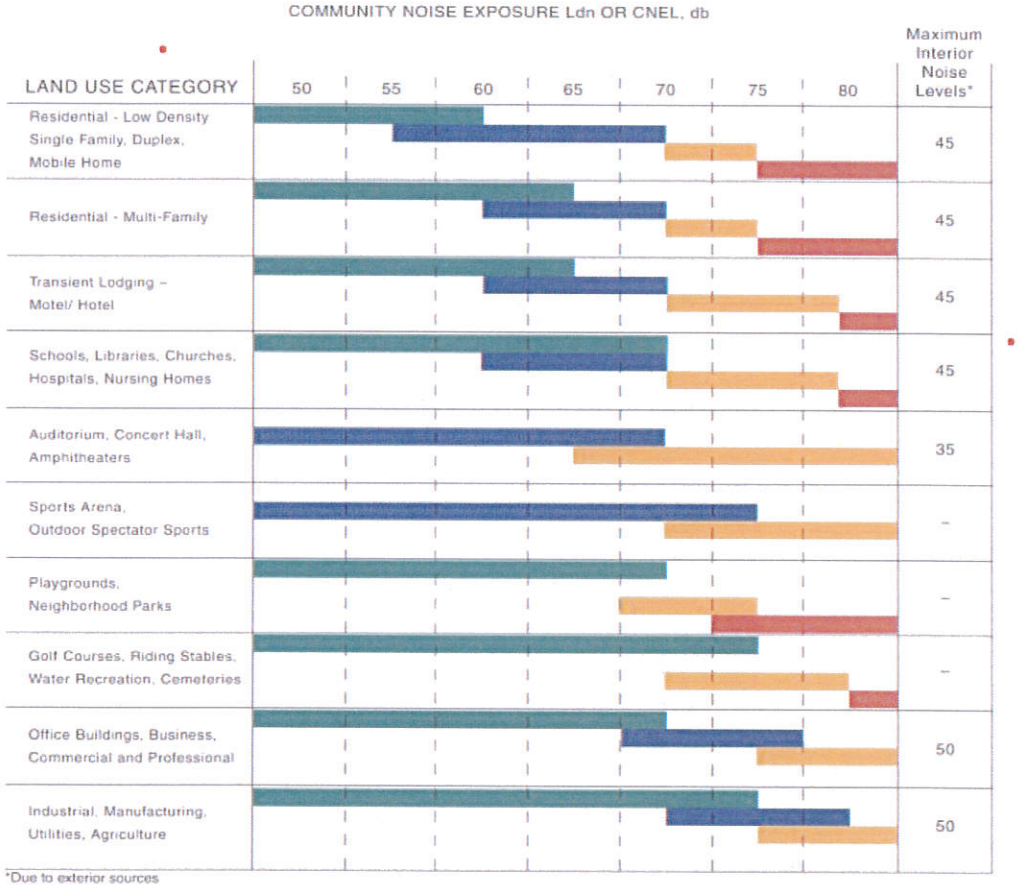
The Noise Element identifies residences, hospitals, convalescent homes, schools, and churches as noise sensitive land uses. The project site is located north of the town of Portola. The nearest sensitive land uses include residential properties. Residential properties are located along Meadow Ridge Lane over 2,200 feet way and North Iron Horse Drive are located on a bluff approximately 70 feet in elevation above the site.

Discussion

a) The project will result in an increase in noise levels in the project vicinity compared to current conditions onsite. The asphalt plant will not result in activities occurring closer to nearby residential land uses than have occurred at the project site in the past. An increase in processing equipment (addition of an asphalt plant, lime plant) will increase noise levels at the project site. The site would typically operate five days a week from 6:00 a.m. to 6:00 p.m, between April and November, on an as-needed basis. The facility would be expected to operate during two separate years. The project may operate up to 24 hours per day, and the facilities would operate for 20 days and 40 days during Years 1 and 2, respectively; however, the facilities may operate for more days but at a lower daily production rate. The project will include periods of nighttime operations when

processing equipment and haul trucks will operate 24 hours a day, which will result in an increase in nighttime noise levels. In addition, the project will result in periods of increased truck volumes related to material hauling which will increase traffic noise levels along area roadways. During Years 1 and 2, there would be a maximum of 100 truck round trips per day. During Years 1 and 2, there would be a total of 2,000 truck trips and 4,000 truck trips, respectively.

Table 9
LAND USE COMPATIBILITY STANDARDS



SOURCE: Bolt, Beranek, and Newman, Inc., 1974, State of California General Plan Guidelines, Office of Planning and Research, 1998, and ESA, 2008

Plumas County General Plan Update . 208739

Most of the noise generated by the project is related to project operations. Installation of the

asphalt plant may require the use of heavy equipment which could temporarily increase noise levels in the area. Table 10 contains Plumas County suggested maximum sound levels for analysis for types of equipment.

Table 10
TYPICAL HEAVY EQUIPMENT NOISE LEVELS

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Electric Saws	66 to 72	70
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	85 to 90	88
Tractors	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	85
Air Compressors	76 to 89	85
Trucks	8 to 87	85

Source: Bolt, Beranek, and Newman 1987 as cited by Plumas County 2013

Noise levels from the project site will lessen with distance from the noise source. A noise attenuation rate of 7.5 dB per doubling of distance is anticipated due to soft site conditions (soft dirt, grass, or scattered bushes and trees) between the asphalt plant and the nearby residential receptors (Caltrans 1998). Based on Plumas County suggested maximum sound levels for analysis, an excavator, loader will produce maximum noise levels of 70.9 and 72.9 dB at a distance of 200 feet. The noise level will be lower than these estimates at the location of the houses on the residential properties since they are set back from the property line. Noise levels from project installation will not exceed Plumas County maximum noise levels as long as installation occurs within daytime hours. In addition, standard noise mitigation measures will be implemented. **Mitigation Measure N-1** will ensure that temporary noise impacts will be **less than significant with mitigation incorporation.**

Operational Noise

Mobile equipment such as an excavator, haul trucks, generator, and track dozer will be used throughout the site. The site will operate five days a week from 6:00 a.m. to 6:00 p.m., between April and November during two separate years. The project may operate up to twelve hours per day, the facilities would operate for 20 days and 40 days during Years 1 and 2, respectively. However, the facilities may operate for more days but at a lower daily production rate. The project will result in increased truck volumes, there would be a maximum of 100 truck round trips per day.

Estimated noise levels from several pieces of equipment and activities in the processing area are included in Table 11. Noise levels are estimated at the distance of the closest residential property line to the source using reference noise levels for proposed activities at the site and an attenuation rate of 7.5 dB per doubling of distance due to soft site conditions (soft dirt, grass, or scattered bushes and trees) between the asphalt plant area and the nearby residential receptors.

Table 11
ESTIMATED NOISE LEVELS AT RESIDENTIAL PROPERTY LINES

Equipment/Activity	Reference Noise Level dB Leq[2]/Lmax[3]	Distance to Closest Residential Property Line	Estimated Noise Level at Closest Residential Property Line
Asphalt Plant[1]	85.6 dB Leq 87.5 Lmax @ 50 feet from burner and 40 feet from generator	700 feet	56.9 dB Leq 58.8 dB Lmax
Stockpiles (Front-End Loader)	88 dB Lmax @ 50 feet	700 feet	70.5 dB Lmax
Trucks	85 dB Lmax @50 feet	240 feet	68 dB Lmax

[1] Reference noise levels from comparable operations analyzed in *Hat Creek Materials Facility Expansion Revised Environmental Noise Analysis.* Prepared by j.c. brennan & associates February 6, 2019.
[2] Leq is the average or equivalent sound level which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour)
[3] Lmax or maximum sound level, descriptor is the highest sound level measured during a single noise event (such as a vehicle pass by), in which the sound level changes value as time goes on

Based on the average noise levels generated by the proposed asphalt plant, loader operation, and haul truck (56.9 dB, 70.5 dB, and 68 dB), the project has the potential to exceed the 60 dB LDN/CNEL normally acceptable standard for residential land uses during a normal 12-hour operating day 6:00 a.m. through 6:00 p.m.). Maximum noise levels would be within the Continentally Acceptable levels for residential land use. The LDN/CNEL at the nearby residential properties will depend on the amount of time equipment is running each day and which activities are occurring simultaneously in the processing area. During 24-hour operations, processing equipment could result in a short-duration Ldn/CNEL of over 60 dB at the nearest residential land uses if operated continuously during the 24-hour period. The nearest residential properties the proposed operating area are along Meadow Ridge Lane over 2,200 feet way, and North Iron House Drive approximately 1,000 feet away. Homes along North Iron Horse Drive are located on a bluff approximately 70 feet in elevation above the site.

Based on estimated maximum noise levels from the processing area of the site **Mitigation Measure N-2** would reduce noise from the processing area of the site at nearby residential land uses and be **less than significant with mitigation incorporated.**

Traffic Noise
The project will result in an increase in truck trips on roadways in the project area. Trucks will access the project site from State Route 70 on South Delleker Road. Estimated project traffic includes a maximum of 75 trucks leaving the site and returning empty for a total of 150 truck trips per day. Travel will be from the site to State Route 70. The maximum number will occur in response to specific project operations.

Based on Caltrans traffic data, average daily traffic on Highway 70 in the project area is 3,450 vehicles a day and truck traffic was recorded at 206 trucks per day. The project will generate a maximum of 150 truck trips per day during peak operations. Noise from State Route 70 in the project area is estimated to be 70 dB within 100 feet of roadway (Plumas County, 2013). Truck traffic during normal operating periods will not result in a noticeable increase in traffic noise levels along the highway. Maximum project traffic occurring during the project will result in increase of current truck volumes on Highway 70 (for an estimated 20-40 days per year) resulting in a noise increase along State Route 70. A doubling of the noise source produces a 3 dB increase in sound pressure level. Plumas County does not have standards related to maximum traffic noise levels, however an increase of 3 to 5 dB is typically considered potentially significant. Trucks will exist the site and travel north via South Delleker Road through an exclusively industrial area. Maximum truck traffic will occur during periods of 24-hour operations requiring truck trips during nighttime hours. Nearest residences to this route are located at Meadow Ridge Lane more than 2,200 feet way. During peak operational periods when maximum project traffic is occurring, noise increases along Meadow Ridge Lane will be **less than significant.**

b) Heavy equipment, including excavators and loaders will generate low levels of vibration. A large bulldozer will generate a vibration velocity level of 87 VdB at a distance of 25 feet and loaded trucks will generate a vibration velocity of 86 VdB at 25 feet (USDOT, 2006). The project will result in a **less-than-significant impact** related to generation of excessive groundborne vibration or groundborne noise levels.

c) The project is not within an airport land use plan, or within two miles of a public airport, or within the vicinity of a private airstrip. The project will not expose people residing or working in the project area to excessive noise levels from aircraft. **No impact.**

Noise Mitigation Measures:

The following mitigation measures are included to reduce project noise impacts.

Mitigation Measure N-1: Maintenance of equipment and limits on hours of site installation

- Installation will occur between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends or on federally recognized holidays.
- All equipment will be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturer's specifications.

Mitigation Measure N-2: Processing equipment noise reduction measures.

- Electricity will be used to power processing and plant equipment as feasible. The use of an electric motor on the asphalt plant could result in a 5 to 10 dB reduction in noise levels compared to a diesel engine (BSI 2014).
- Unnecessary revving of engines will be avoided, and equipment will be switched off when not required.
- Rubber linings will be used in chutes and dumpers to reduce impact noise.

- Drop height of materials will be minimized.
- The processing and plant equipment and vehicles will be started sequentially rather than all together.
- Significant sources of noise will be enclosed as reasonably practicable. The extent to which this can be done depends on the nature of the machine or process to be enclosed and their ventilation requirements.

XIV. POPULATION AND HOUSING Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Setting

This project site is located west of Portola on Industrial Way. Surrounding properties include a concrete supply yard and the Delleker Transfer Station. The Iron Horse neighborhood is located to the south of the project area, across the Middle Fork Feather River.

Discussion

a) The asphalt plant will be staffed by 10 employees during its operational period. The workforce is expected to come from the Portola area. Due to its temporary and seasonal nature, The project will not induce unplanned population growth in the area or include the expansion of major roads or infrastructure. The project will not generate commercial activities that would induce substantial growth in the project area. Impacts related to substantial unplanned population growth will be **less than significant.**

b) The project site is industrial land not designated or zoned for residential use and does not contain housing. The project will not displace existing housing or require the construction of replacement housing elsewhere. **No impact.**

XV. 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 public services:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Setting

Local volunteer and private fire districts provide fire protection services throughout the county. There are no CAL FIRE stations or service areas in Plumas County. The project site is within the Eastern Plumas Rural Fire Protection District. The Eastern Plumas Rural Volunteer Fire Department is the closest fire department to the project site and is approximately 0.5 miles north at 141 Delleker Drive. Law enforcement services are provided by the Plumas County Sheriff's Office. The project site is located within the Plumas Unified School District and within the Eastern Plumas Recreation District.

Discussion

The project will not result in population changes that would require new or physically altered schools, parks, or other public facilities. The project will not result in an impact to service ratios, response time or other performance objectives for fire or police protection which would require the construction of new or physically altered governmental facilities. The project will have **no impact** to public services.

XVI. RECREATION Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Setting

Plumas County is rich in recreation. Plumas County encompasses Plumas National Forest, many parks and historical water ways such as Feather River, Antelope Lake, Bucks Lake, Lake Davis, Lakes Basin, Little Grass, Sly Creek and Frenchman Lake. Recreation activities in these areas include camping, hunting, fishing, boating, hiking, wildlife viewing, horseback riding, scenic drives, winter sports, water activities, bicycling, climbing, historic lodges and gold mining. This area is a destination spot for many tourists looking for outdoor activities. The project is located within the boundaries of the Eastern Plumas Recreation District, which promotes recreation in the area.

Discussion

a) The project will not result in a population increase that would increase the rate of existing neighborhood or regional parks or other recreational facilities that substantial deterioration of the facility would occur or be accelerated. **No impact.**

b) The project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. See a). **No impact.**

XVII. TRANSPORTATION Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA guidelines 15064.3, subdivision?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

Setting

The project site is located at the end of Milk Weed Drive and will be accessed south of Highway 70 by South Delleker Road. According to the Caltrans Traffic Census Program (Caltrans 2020), Annual Average Daily Traffic (AADT) on Highway 70 at Portola West city limit (1.1 miles east of the Highway 70/South Delleker Road intersection) PM 75.332 was 4,850 AADT west of the intersection, and 4,850 AADT east of the intersection.

Regulatory Setting

State

The California Department of Transportation (Caltrans) has jurisdiction over state highways. Caltrans requires a traffic impact study when a project:

1. Generates over 100 peak hour trips assigned to a state highway facility
2. Generates 50 to 100 peak hour trips assigned to a state highway facility – and, affected state highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").
3. Generates 1 to 49 peak hour trips assigned to a state highway facility – the following are examples that may require a full TIS or some lesser analysis:
    a. Affected state highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").
    b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
    c. Change in local circulation networks that impact a state highway facility (i.e. direct access to a state highway facility, a non-standard highway geometric design, etc.).

Discussion

a) Plumas County has a Level of Service (LOS) Standard that the County shall maintain at a minimum a LOS D in areas for which Community Plans or Specific Plans have been prepared and LOS C in other areas of Plumas County. For unsignalized intersections, LOS standards apply to the total intersection LOS (Table 12). For roundabouts and stop-sign controlled intersections, LOS standards apply to the worst-approach LOS. Project traffic (employee trips and haul trips) will access the site using South Delleker Road to State Route 70. The project would result in an increase in traffic on State Route 70 and South Delleker Road.

Table 12
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Delay Range (Sec/Veh)
A	≤ 10
B	$>10 \leq 15$
C	>15 and ≤ 25
D	>25 and ≤ 36
E	>35 and ≤ 50
F	>50

The asphalt plant is anticipated to operate between April and November for a period of 20 to 40 days over the course of two years. As such, there will be significant periods with no traffic impacts and short project periods with traffic impacts.

The estimated project condition is that "no hauling" (i.e., no truck trips) will occur on approximately 325 days for each year. The estimated project condition is a maximum of 300 one-way truck trips per day (150 round-trip truck trips) during the limited days on which the plant will operate. Travel will be from the asphalt plant to Highway 70 for a 40-mile round trip.

Traffic is also studied with Vehicle Miles Traveled (VMT). The VMT in the project region is dependent upon the total trip generations and the length of the vehicle trips. The projected VMT is approximately 40 miles for each haul truck.
The Vehicle Miles Traveled (VMT) associated with operation of the asphalt plant are not necessarily "generated" by the proposed project but are actually necessitated by the construction projects that need the asphalt from the plant. Without the proposed project, these construction projects would still occur. That is, a similar number of dump truck trips would be generated in the study region regardless of where the asphalt is sourced.

The asphalt plant will operate to provide for various Caltrans highway maintenance projects that are approximately 20 miles away on Highway 70. If the plant were not in operation, the nearest supplier for a project in this area is Reno, which is 49 miles away from the Portola area. VMT would be kept to a minimum by allowing this project. Without the proposed project, it can be concluded that driving outside of the area for materials would more than double VMT to Reno. Because the proposed project would result in a reduction in VMT in the region, impacts would be less than significant.

In summary, up to 6,000 daily VMT are associated with the proposed project. These miles are generated by delivery of asphalt to Caltrans projects and would occur with or without the project. However, without project implementation, more daily VMT could conceivably be generated in the region. Without the proposed project, it can be concluded that the VMT associated with truck trips in the region would be about 2.45 times greater than that with the project. Because the proposed project would result in a reduction of VMT in the region, impacts would be **less than significant.**

b) Section 15064.3 was recently added to the CEQA Guidelines and states that VMT is the preferred method for evaluating transportation impacts (see a)). The asphalt plant will obtain any permits necessary for commercial use on local roads. **Less-than-significant impact.**

c) The project will not include a change in road design or construction or increase hazards. The access road has an encroachment onto the State Highway 70 that provides for the safe ingress and egress of commercial truck traffic. Truck traffic entering and exiting South Delleker Road from SR-70 is consistent with the existing use from the commercial and industrial sites in the area. **No impact.**

d) The project site is at the end of Milk Weed Dr by way of SR-70 to South Delleker Road. The surrounding areas are not accessed by way of the project site. The project will not change the existing emergency access to the project site or surrounding areas. **No impact.**

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

Setting

AB 52 was enacted on July 1, 2015, and establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource when feasible (PRC Section 21084.3).

Public Resources Code Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California cities, counties, and tribes

regarding tribal cultural resources. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

The project does not include additional disturbance beyond the permitted boundary. The plot has historically been used as an aggregate mine and approximately 100,000 cubic yards of material were removed from the site during the 1990s by the previous owner. Much of the site has been disturbed by the previous activities and the potential to encounter cultural resources or to disturb human remains is very low as the proposed project consists of very little ground disturbance or excavation compared to the previous uses.

A Non-confidential Records Search was conducted for the project area by the Northeast Information Center of the California Historical Resources Information System (IC File # NE23-37). The official maps and records were examined for historical resources and surveys in Plumas County. The historical resources in the inventory include archeological objects, sites, landscapes, districts, and all manner of buildings and structures associated with past human activities. The result of the record search showed that there were no archeological resources or historic properties within the project area.

The Northeast Information Center recommends that a professional archaeologist be contacted prior to ground disturbance. Although no historical resources were identified within the project area, the area is archeologically sensitive and has the potential for the discovery of additional resources. A sensitivity assessment was unable to be provided, and more research is needed to determine if the project area has the potential for discovery of archeological resources.

Discussion

a) i-ii Previous investigations of the project site for historical resources were conducted in 1994 (as described in the non-confidential records search). As the sight has not been surveyed within the last ten years, a pedestrian survey will be conducted by a professional archeologist prior to any ground disturbing activities. The project will not cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resource Code section 21074 and it will not cause adverse change in the significance of a historical resource as defined in 15064.5. California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code. Pursuant to AB 52, project notifications will be mailed by Plumas County to all tribes that have requested notice of projects proposed within the County to invite consultation and avoid potential impacts to tribal cultural resources. In the event that unidentified cultural resources are encountered during this project, work in the area will cease and a qualified professional archaeologist will be contacted to evaluate the situation. **No impact.**

XIX. UTILITIES AND SERVICE SYSTEMS Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Require or result in the construction of new water or wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Setting

The project site is within the service areas of the following utility and service providers:

Fire Protection:	Eastern Plumas Rural Fire Protection District
Law Enforcement:	Plumas County Sheriff's Department
Electricity:	Plumas-Sierra Rural Electric Cooperative
Natural Gas:	Propane by Private Contractor
Wastewater:	Portable toilets
Solid Waste:	Intermountain Disposal
Water:	Grizzly Lake Community Services District

Discussion

a) A SWPPP will be developed for the site prior to installation and operations. Electricity onsite will either be produced by diesel generators or purchased from Plumas-Sierra Rural Electric Cooperative. A powerline extends over the railroad tracks and may provide electricity without requiring modification to the existing utility. Water for operations and dust suppression will either be supplied by Grizzly Lake Community Services District or diverted from the Middle Fork Feather River (see b) below). Any necessary upgrade or expansion of utility and service access will

comply with federal, state, and local regulations and will not cause significant environmental impact. **Less-than-significant impact.**

b) The project will require 1,308,793 gallons (4.02 acre-feet) of water for lime treating aggregate and for onsite dust suppression. Over the life of the project, approximately 768,793 gallons of water will be used in the lime treatment and 6,000 gallons/day will be used for dust suppression. The water will be diverted from the Middle Fork Feather River under a riparian water right. The right to divert water is regulated by the California State Water Resources Control Board (SWRCB). According to the SWRCB, a riparian right entitles the landowner to use a correlative share of the water flowing past his or her property. Riparian rights do not require permits, licenses, or government approval. However, all water diverted must be put to beneficial use. These "beneficial uses" have commonly included municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering. Although a permit is not required for riparian right, a statement of diversion will be filed with the SWRCB prior to any diversion. Impacts related to water supplies will be **less than significant.**

c) The project will not result in the generation of new wastewater requiring treatment. Sanitary facilities will include portable toilet facilities only. No new facilities will be added. **No impact.**

d) Limited solid waste will be generated a result of project activities. Solid wastes generated by the project will not exceed state or local standards, exceed local infrastructure, or impair the attainment of solid waste reduction goals. A dumpster will be provided onsite to be collected by Intermountain Disposal. Any additional waste will be brought to the adjacent Delleker Transfer Station. **Less-than-significant impact.**

e) The project will comply with all federal state and local statues and regulations relating to solid waste and disposal. **No impact.**

XX. WILDFIRE If located on or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-significant impact	No impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	☐	☐	☒	☐
c) Require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Setting

A Fire Hazard Severity Zone (FHSZ) is a mapped area that designates zones (based on factors such as fuel, slope, and fire weather) with varying degrees of fire hazard (i.e., moderate, high, and very high). FHSZ maps evaluate wildfire hazards, which are physical conditions that create a likelihood that an area will burn over a 30- to 50-year period. The project is located within a State Responsibility Area, an area where the state has financial responsibility for wild land fire protection. Based on the Plumas County Fire Hazard Severity Zones in the State Responsibility Area map adopted by CAL FIRE on November 7, 2007, the project site is located in a Fire Hazard Severity Zone classified as high. The State Responsibility Area Fire Hazard Severity Zones were last updated November 21, 2022.

Discussion

a) The project is located within a local responsibility area. The project site is located in a Fire Hazard Severity zone classified as Moderate (Plumas County Fire Hazard Severity Zones Local Responsibility Areas for Fire Protection updated July 2020). The project is located at the end of Milk Weed Dr and will not impair an adopted emergency response plan or emergency evacuation plan. **No impact.**

b) The project could increase risk of fire at the site due to operation of the asphalt plant. Two propane burners onsite. One burner heats exchange fluid that keeps the liquid asphalt at 300-350 °F while the other heats the drying drum and the aggregates. Liquid asphalt is flammable at high

temperatures, however the temperature reached by the propane burner is well under the flash point. A 40,000-gallon water truck will be maintained onsite for dust and fire suppression. Further, the topography of the site is such that it represents a low risk of causing a wildfire. The project site is bordered by the railroad track and the Middle Fork Feather which act as exceptional firebreaks, should a fire start onsite. These measures will ensure impacts related wildfire risk at the project site will be **less than significant.**

c) The project will not include installation or maintenance of roads, fuel breaks, emergency water sources, or power lines that would exacerbate fire risk or result in impacts to the environment. **No impact.**

d) The project will not add a new risk for downslope or downstream flooding or landslide. Workers will not be exposed to downslope or downstream flood or landslides as a result of runoff, post-fire slope instability, or drainage changes. **No impact.**

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

a) Impacts associated with the project have been fully identified in this document. As discussed in sections above, the project has the potential to result in impacts to air quality, biological resources, cultural resources, noise, and tribal cultural resources. With the implementation of mitigation measures identified in this Initial Study, potential impacts to the quality of the environment, fish and wildlife species, and cultural/tribal cultural resources will be **less than significant with mitigation incorporation.**

b) There are no additional planned projects in the vicinity of the project known at this time. Impacts of the project that are cumulatively considerable in combination with other projects include impacts related to biological resources, noise, traffic, energy, air quality, and greenhouse gas emissions. The potential impacts of the project will be **less than significant with mitigation incorporation.** Therefore, cumulative impacts of the project will be **less than significant with mitigation incorporation.**

c) All environmental impacts including those that could affect human beings (Noise, Air Quality, Transportation, etc.) will be **less than significant, less than significant with mitigation,** or **No impact.** No additional mitigations measures beyond those included in this Initial Study will be required for impacts to human beings. The impact is **less than significant.**

4.0 REFERENCES

CALFIRE Fire Hazard Severity Zones. https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/#explorefhsz. Accessed January 25, 2023.

California Department of Conservation. "California Important Farmland Finder"[Web map]. Variable Scale. https://maps.conservation.ca.gov/dlrp/ciff/. (January 25, 2023).

California Department of Toxic Substances Control. Envirostor. https://www.envirostor.dtsc.ca.gov/public/ [Accessed January 25, 2023].

California Department of Transportation (Caltrans). 2023. Traffiic Volumes AADT. January 25, 2023. Traffic Volumes AADT | Traffic Volumes AADT | Caltrans Home (arcgis.com)

California State Water Resources Control Board. GeoTracker. https://geotracker.waterboards.ca.gov/ [Accessed January 25, 2023].

City of Portola, Plumas County, CA., General Plan 2020. Adopted January 11, 2012. Resolution No. 2111. http://www.chamberorganizer.com/cityofportola/docs/gp2020.pdf [Accessed January 25, 2023]

Grose, T.L.T., Durrell, C., D'Allura, J.A., Moar, R.R., Saucedo, G.J., and Little, J.D. "Geologic Map of the Blairsden 15' quadrangle, Plumas County, California"[Basemap]. 1:62,500. 2000. https://ngmdb.usgs.gov/Prodesc/proddesc_63096.htm (January 25, 2023).

Grose, T.L.T., Durrell, C., D'Allura, J.A., Moar, R.R., Saucedo, G.J., and Little, J.D. "Geologic Map of the Portola 15' quadrangle, Plumas County, California"[Basemap]. 1:62,500. 2000. https://ngmdb.usgs.gov/Prodesc/proddesc_63096.htm (January 25, 2023).

Plumas County General Plan as Adopted December 17, 2013.

PLUMAS COUNTY, CA., CODE OF ORDINANCES Title 9 – Planning and Zoning, December 29, 2022. https://library.municode.com/ca/plumas_county/codes/code_of_ordinances?nodeId=COORPLCOCA [Accessed January 25, 2023].

RCH Group. 2022 Air Quality Technical Report for the Plumas County Delleker Plant. August 3, 2022.

Roberts, S. (2022, July 10). *Scenic byways*. Plumas County California. Retrieved January 27, 2023, from https://plumascounty.org/blog/explore/scenic-byways/

United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2023. Custom Soil Resource Report for Plumas National Forest Area. Accessed January 25, 2023.

USGS Geologic Hazards Science Center Golden, CO. "U.S. Quaternary Faults"[ArcGIS Web Map] Variable Scale. https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf (January 25, 2023).

Figures

VESTRA

FIGURE 1
GENERAL SITE LOCATION
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_GeneralSiteLocation.mxd

Approximate Parcel Boundary

N

0 250 500 1,000 Feet

VESTRA

SOURCE: PLUMAS COUNTY 2019; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 2
GENERAL SITE LAYOUT
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_GeneralSiteLayout.mxd

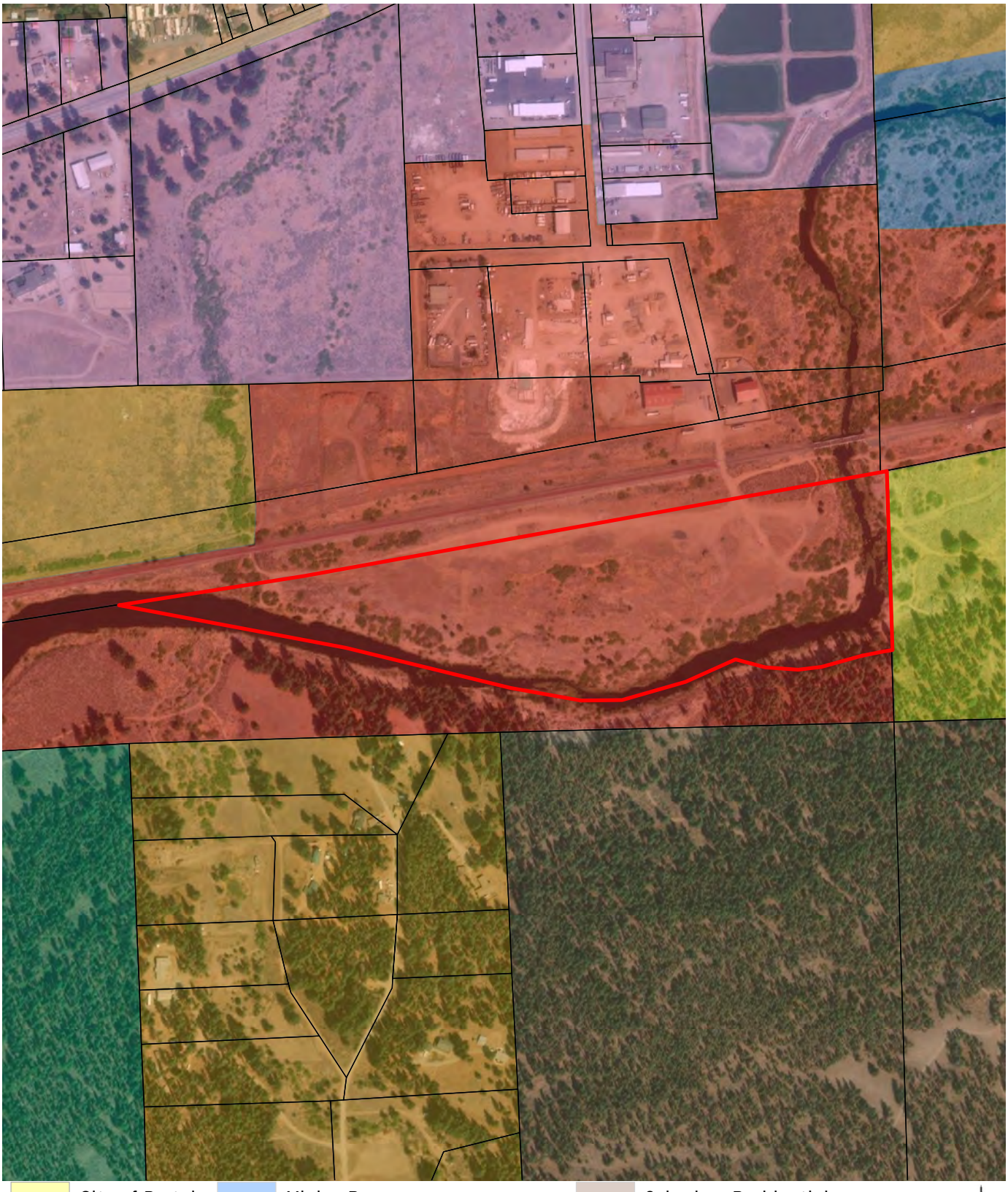
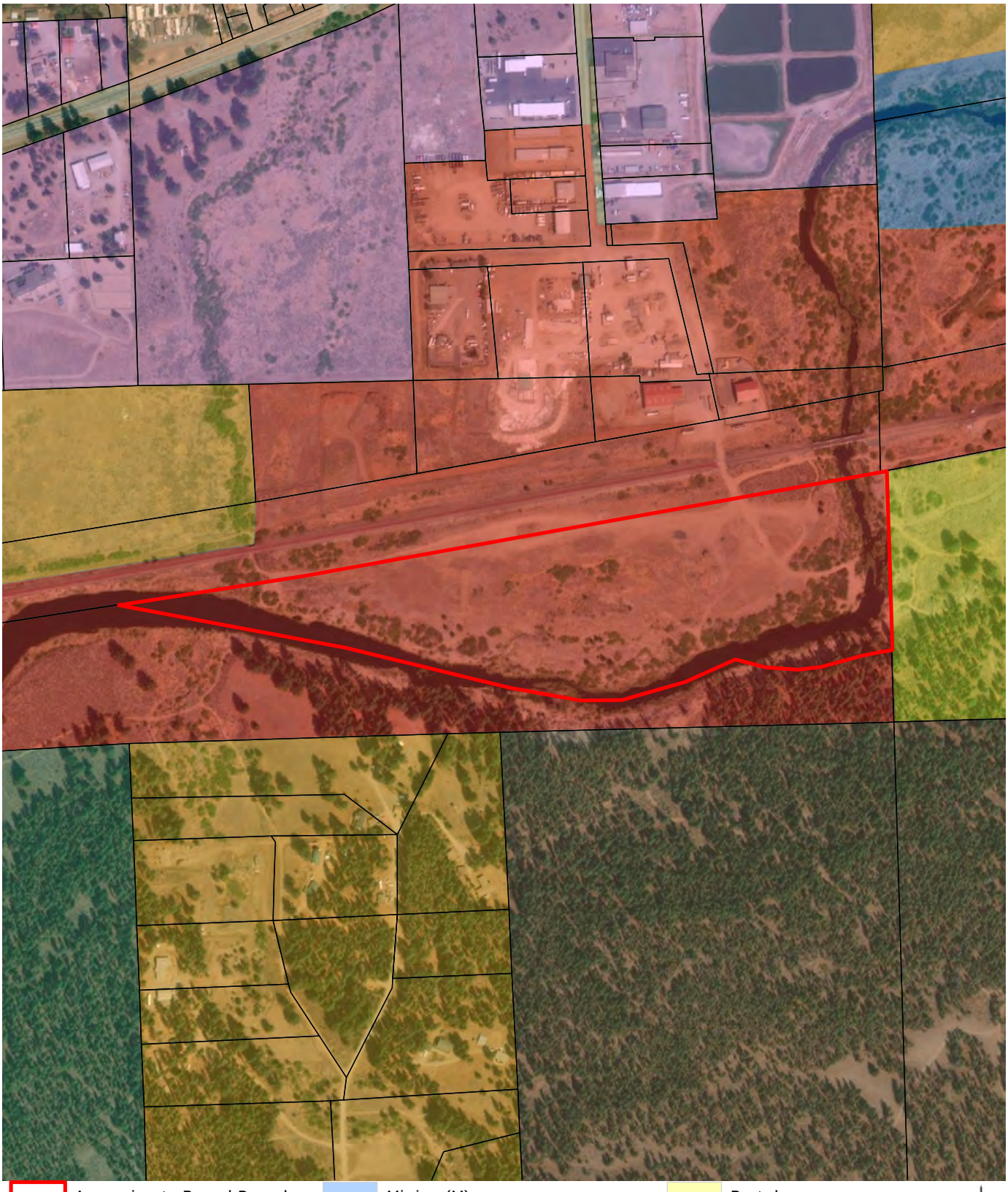


FIGURE 3
GENERAL PLAN LAND USE
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

SOURCE: PLUMAS COUNTY 2019; MAXAR 2021 AERIAL PHOTOGRAPH

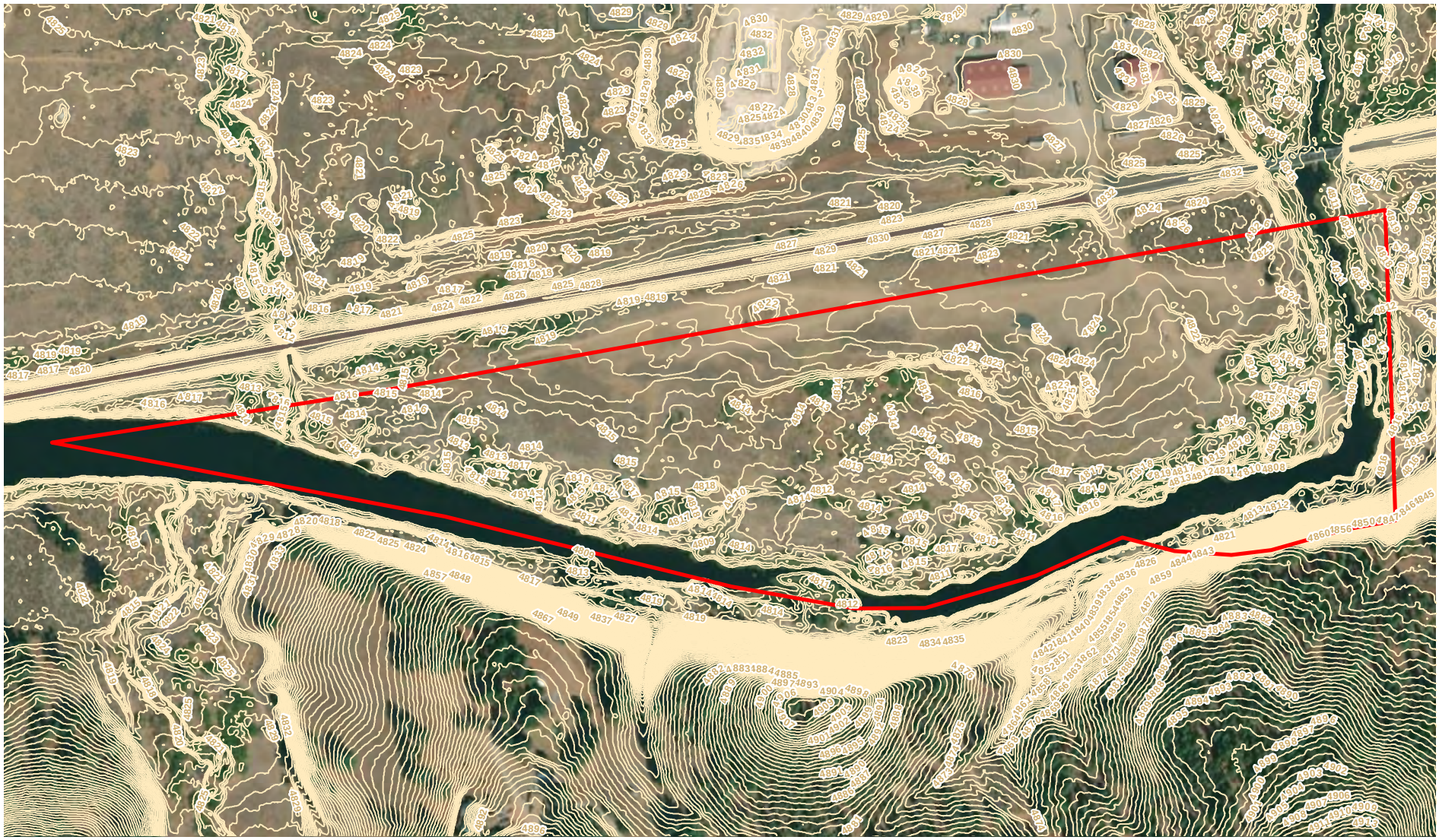
P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_LandUse.mxd



SOURCE: PLUMAS COUNTY 2019; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 4
ZONING
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_Zoning.mxd

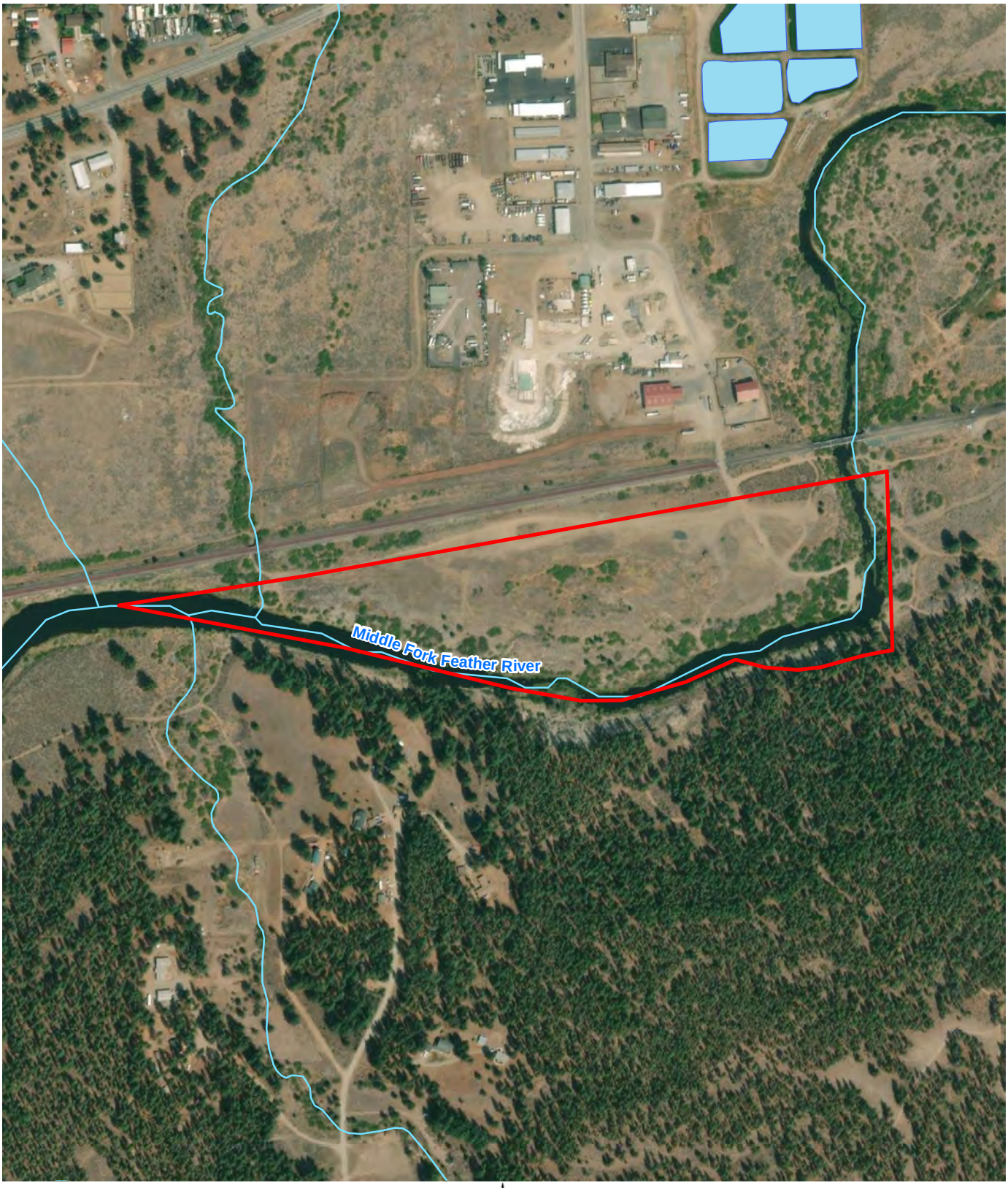


VESTRA

SOURCE: 2018 LIDAR ELEVATION DATA

FIGURE 5
TOPOGRAPHY
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_Topo.mxd

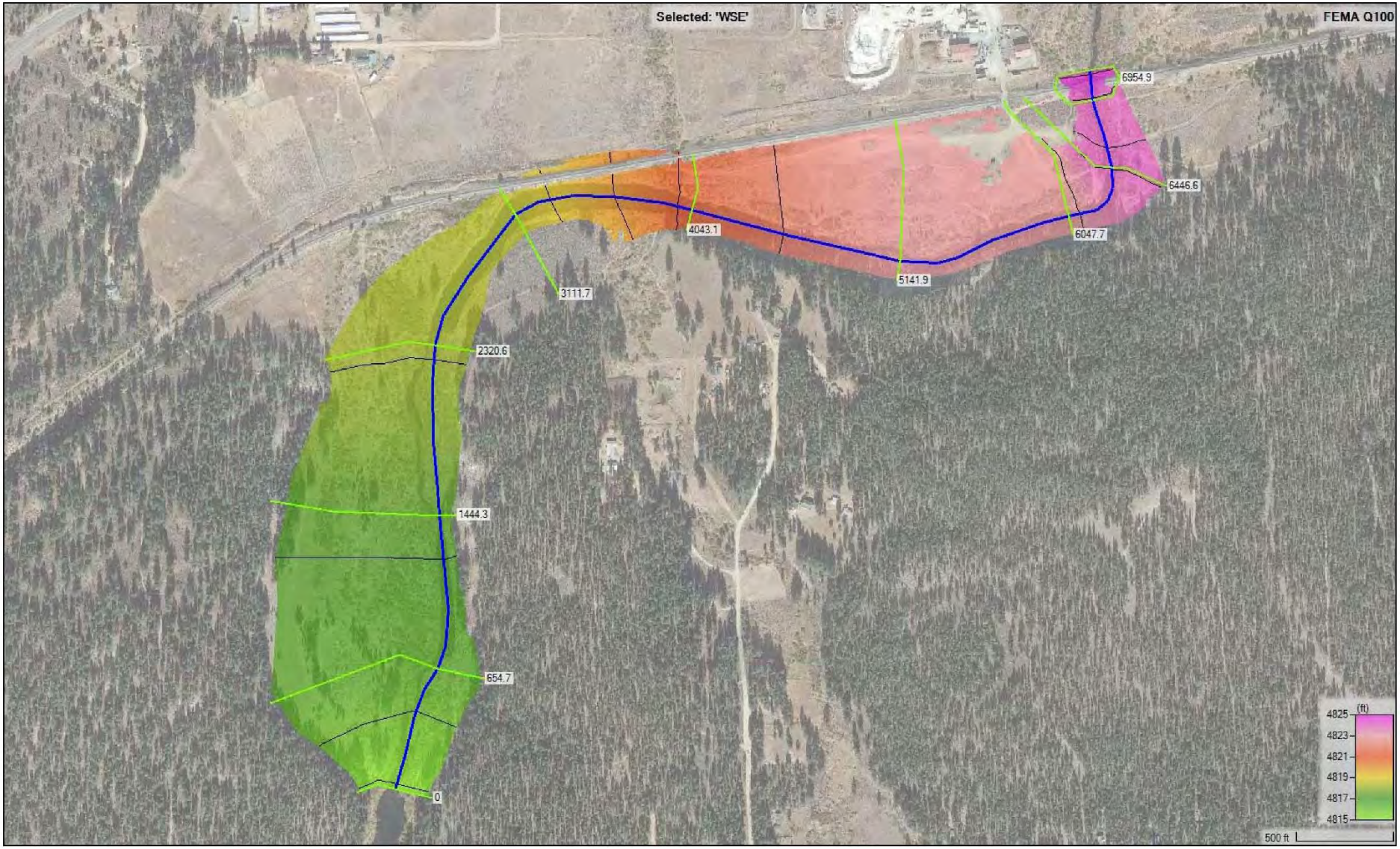


VESTRA

SOURCE: FEMA 2019; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 6
HYDROLOGY
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_Hydrology.mxd

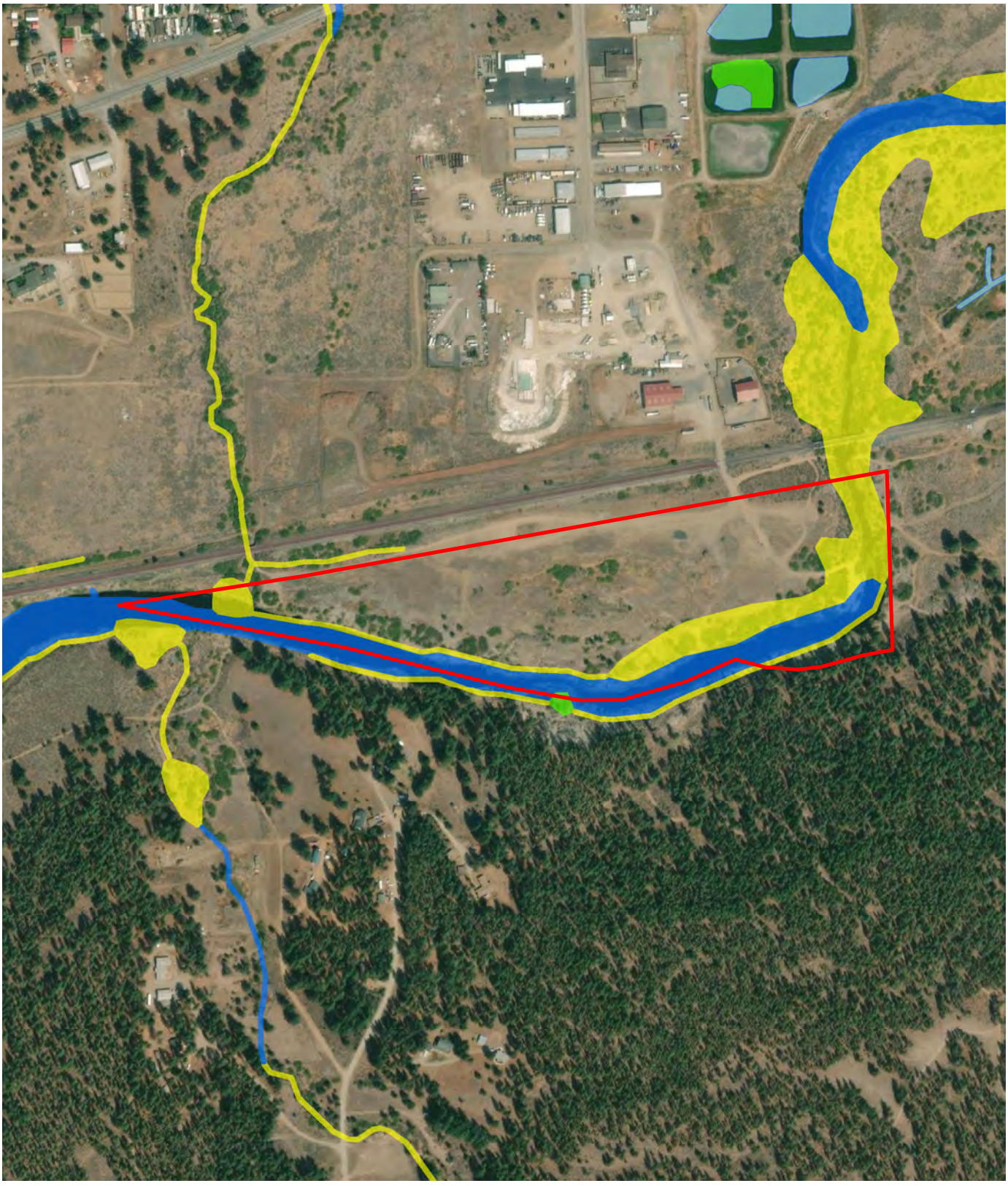


VESTRA

SOURCE: PACIFIC HYDROLOGIC INC. 2023

FIGURE 7
100-YEAR FLOOD WATER SURFACE ELEVATION
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

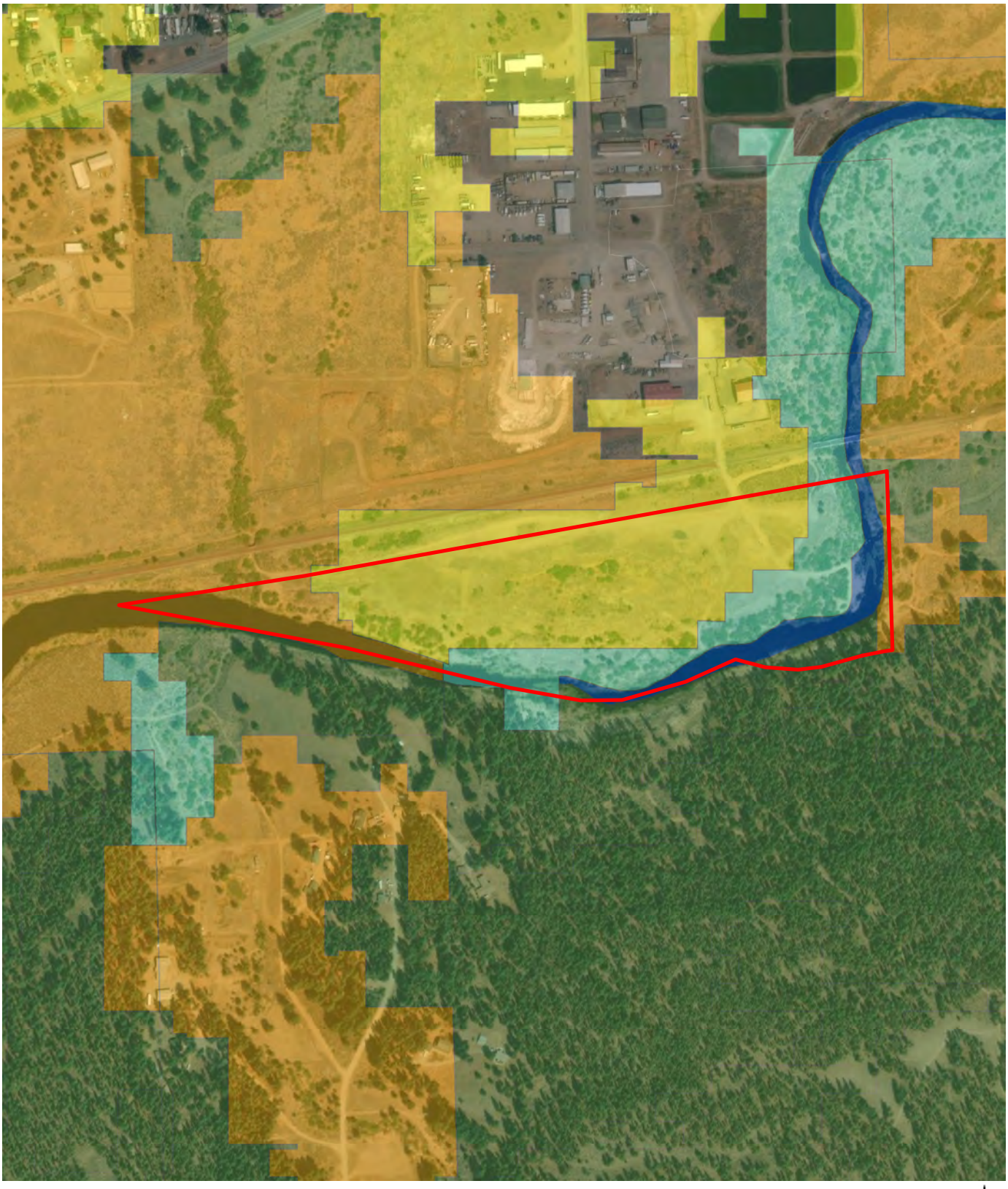
P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_FloodElevations.docx



SOURCE: USFWS 2022; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 8
WETLANDS
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

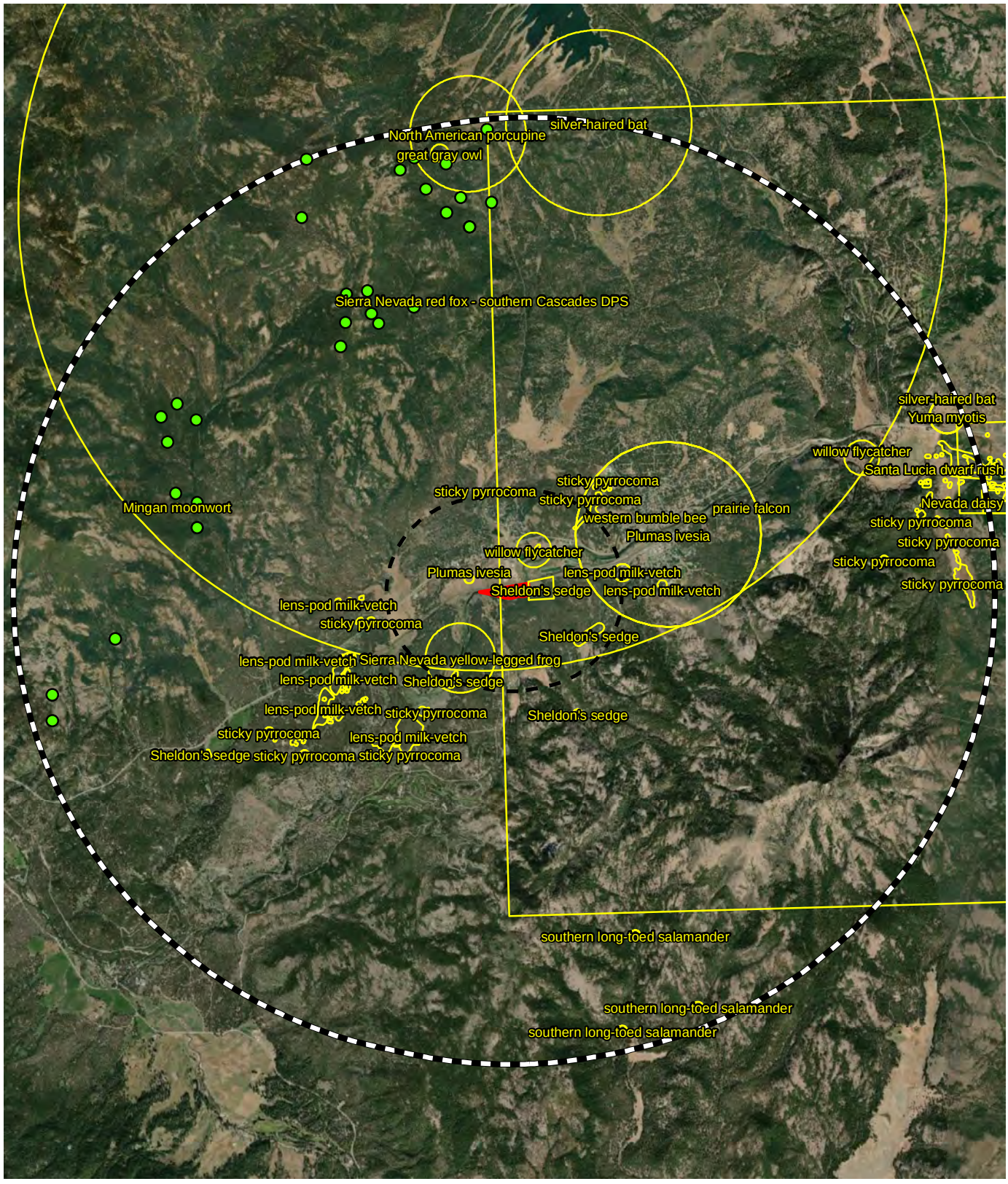
P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_Wetlands.mxd



SOURCE: USFS CALVEG 2005; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 9
CWHR VEGETATION TYPES
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_Vegetation.mxd



Spotted Owl Observation Location

1-Mile Buffer Around Parcel Boundary

CNDDB Occurrence

5-Mile Buffer Around Parcel Boundary

Approximate Parcel Boundary

VESTRA

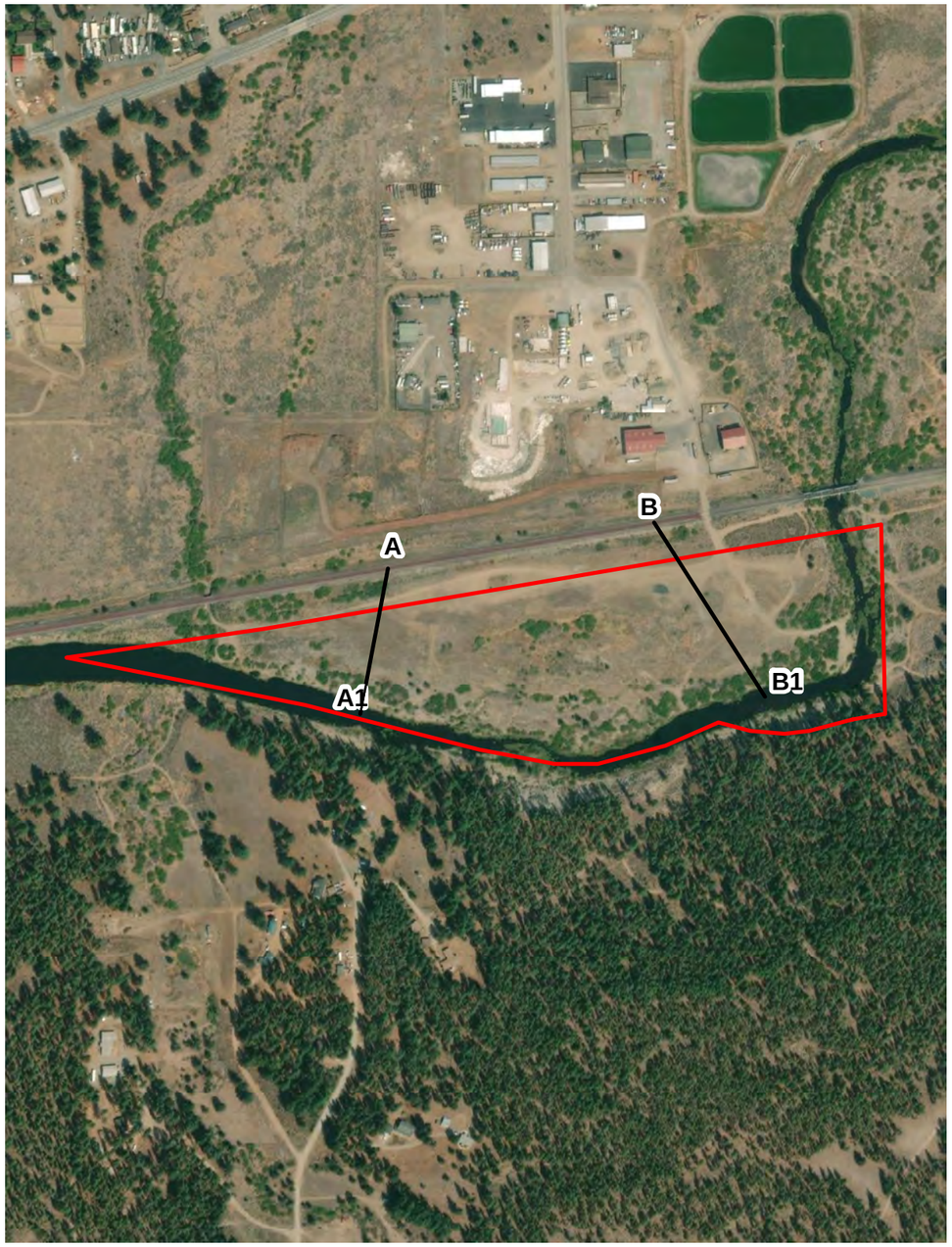
0 0.75 1.5 3 Miles

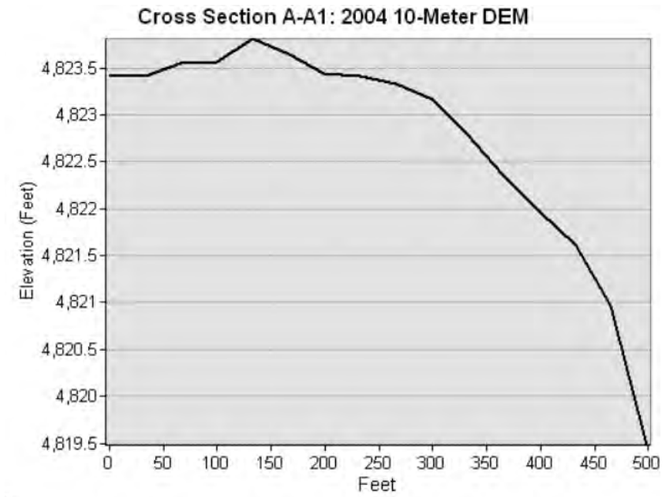
N

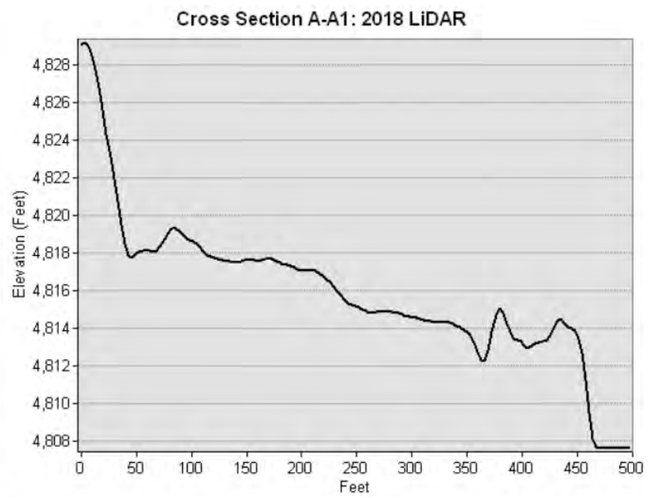
FIGURE 10
CNDDB OCCURRENCES
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

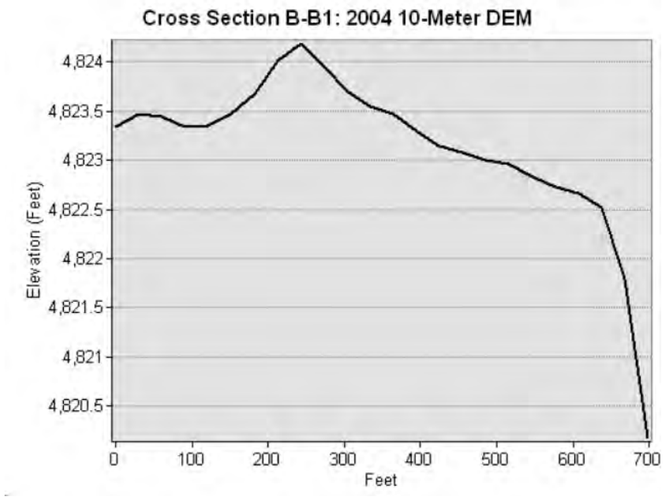
SOURCE: CDFW CNDDB DECEMBER 2022; MAXAR 2021 AERIAL PHOTOGRAPH

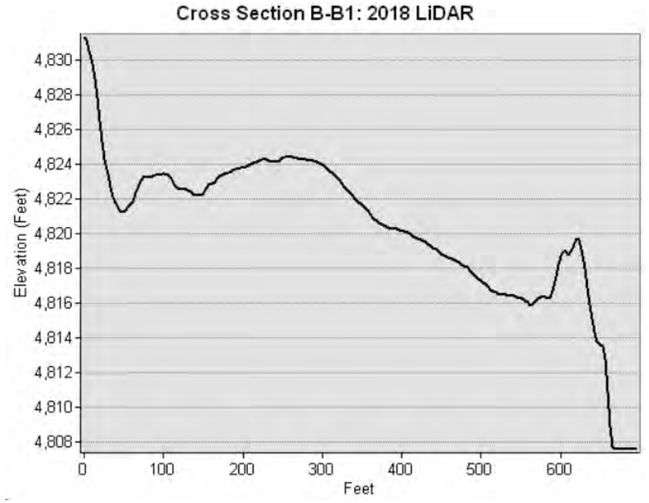
P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_CNDDB.mxd











Cross Section

Approximate Parcel Boundary

N

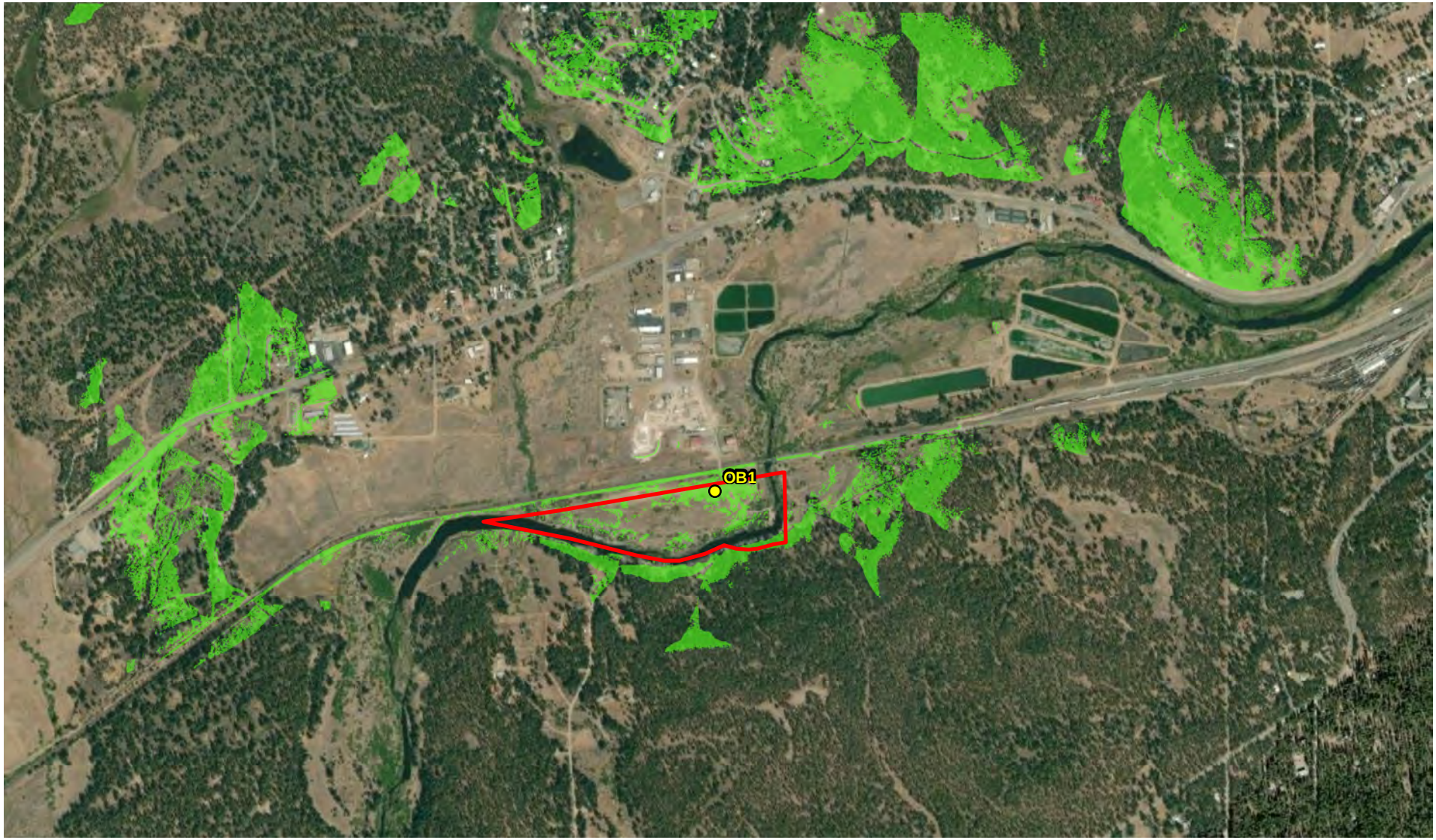
0 250 500 1,000 Feet

VESTRA

SOURCE: MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 11
CROSS SECTIONS
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_CrossSections.mxd



Observation Location

Approximate Parcel Boundary

Viewshed Area Visible from Observation Location OB1

N

0 0.125 0.25 0.5 Miles

VESTRA

SOURCE: 2018 LIDAR ELEVATION DATA; DIGITALGLOBE 2018 AERIAL PHOTOGRAPH

FIGURE 12
VIEWSHED ANALYSIS
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\CEQA\71305_Viewshed.mxd

Appendix A

Middle Fork Feather River Flood Study

Appendix A

Middle Fork Feather River Flood Study

PACIFIC HYDROLOGIC INCORPORATED
1062 MARKET STREET, REDDING, CA 96001
530-245-0864
PACIFIC_HYDROLOGIC@SBCGLOBAL.NET

January 19, 2023

Bennett Gooch
Vestra Resources, Inc.
5300 Aviation Drive
Redding, CA 96002

Re: Middle Fork Feather River Flood Study

Dear Mr. Gooch:

Pacific Hydrologic Incorporated (PHI) has completed a flood study to determine the potential impact of extending Industrial Street over an unnamed tributary to Churn Creek. Background, analysis, and results are described in the following paragraphs.

Background:

As a condition of development, Plumas County is requiring that the developer of a new asphalt plant conduct a flood study and submit an elevation certificate identifying the water surface elevation of the most probable 100-year flood and of the lowest floor elevation of the proposed facility. The proposed facility is located adjacent to the Middle Fork Feather River in a reach having flood risk mapped by FEMA using approximate study methods (Zone A). The development site is located within the Special Flood Hazard Area (SFHA) determined using approximate study methods however recent topographic mapping indicates that ground at the location of anticipated structures is likely to be above the 100-year flood. Water surface elevations during the most probable 100-year flood event are not published by FEMA within reaches having flood risk mapped using approximate study methods hence a new flood study is required for the reach. This study has been prepared to identify peak water surface elevations during the most probable 100-year flood event.

Flood Hydrology:

The current effective FEMA Flood Insurance Study Report identifies the 100-year flood peak flow in the Middle Fork Feather River to be 21,000 CFS at the railroad grade crossing of the river immediately upstream of the project. An unnamed tributary enters the Middle Fork Feather River opposite the project parcel. Accounting for the additional tributary area using the area exponent of the Sierra Region Equation in "Methods for Determining Magnitude and Frequency of Floods in California, Based on Data through Water Year 2006", Scientific Investigations Report 2012-5113, USGS, a 100-year flood peak flow of 21,600 CFS was determined for the Middle Fork Feather River downstream of the tributary. Direct application of the Sierra Region Equation is inappropriate at this location due to the presence of Davis Lake, Frenchman Lake, and excessive routing through the Sierra Valley within the basin.

River Reach:

The Middle Fork Feather River at the downstream end of the study reach is well confined between hillslopes and has a rock lined non-alluvial channel. A short distance upstream the river has a moderately wide alluvial floodplain with a poorly defined channel remaining lined with rock formations. This geometry extends along the project parcel however the channel, still laterally confined by rock is deep and likely has an alluvial bed. The bed is not easily observable due to ponding in the reach adjacent to the project parcel. Near the upstream end of the study reach, east of the development parcel, channel geometry is again dominated by rock formations.

Existing Condition Backwater Model:

A linear backwater model was prepared to identify the flood profile and extent of inundation during the most probable 100-year flood. The US Army Corps of Engineers' HEC-RAS v6.3.1 backwater program has been selected for the backwater model. Terrain data from "USGS one meter x71y441 CA NoCAL Wildfires PlumasNF B2 2018" were employed for the analysis. Eleven cross-sections were cut from the terrain data including five downstream of the project parcel. Although the LiDAR survey supporting terrain data was collected at a time of low flow, it represents significant ponding in the reach adjacent to the project parcel. Figure 1 identifies the locations of cross-sections employed in the model. Except where ponding is present in the channel, Manning's roughness coefficients ranging from 0.035 to 0.050 based on rock exposure was employed for the channel. In the reach of ponding adjacent to the project parcel, a Manning's roughness coefficient of 0.025 was employed to account for the fact that the terrain data does not account for the channel area under the surface of the pond. Manning's roughness coefficients of 0.035 to 0.050 were employed for overbank floodplains based on overbank soils (gravel/rock) and vegetation. Contraction and expansion coefficients of 0.1 and 0.3 were employed respectively for the natural channel. A hydraulic slope of 0.002 based on average hydraulic slope upstream of the boundary was employed for the downstream boundary condition. The model was run for a flow of 21,600 CFS below the unnamed tributary and 21,000 CFS upstream of the tributary. The railroad crossing of Middle Fork Feather River is not represented in the backwater model for reasons described below. After preparing and running the model, the results were reviewed extensively for reasonability.

Results:

The backwater model identifies a 100-year flood water surface elevation of 4825.2-feet NAVD88 immediately upstream of the railroad bridge (without the railroad bridge represented in the model) compared to 4823.0-feet NAVD88 published by FEMA. Consequently backwater model results were reviewed extensively and determined to be reasonable and reliable. It is likely that the backwater model relied upon by FEMA employed a poor downstream boundary condition. This disparity will have to be addressed if Plumas County requires that a Letter of Map Revision (LOMR) be prepared as a condition of development.

Figure 2 identifies the 100-year flood profile through the study reach. Figures 3 and 4 identify the 100-year flood water surface elevations in plan view and the depths and extents of flood inundation. Backwater model summary output is identified in Table 1. Summary output for cross-sections 3111.7, 4043.1, and 6047.7 identify velocities slightly higher than actual and channel areas slightly lower than actual due to ponding (compensated for in the backwater model by employing a low channel roughness coefficient). The backwater model and specified layer rasters are available by request.

Table 1: Backwater Model Summary Output

HEC-RAS Plan: Plan 01 River: MF Feather R Reach: 1 Profile: FEMA Q100

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	6954.9	FEMA Q100	21000.00	4812.37	4825.17	4821.20	4826.10	0.001865	9.28	2976.08	337.36	0.48
1	6804.5	FEMA Q100	21000.00	4811.01	4823.92	4821.60	4825.64	0.003738	12.00	2255.40	258.71	0.61
1	6446.6	FEMA Q100	21000.00	4808.09	4824.03	4819.98	4824.60	0.001286	7.22	3993.80	557.51	0.36
1	6047.7	FEMA Q100	21000.00	4807.62	4822.81	4819.98	4824.11	0.001019	11.19	3160.08	455.74	0.52
1	5141.9	FEMA Q100	21000.00	4807.63	4822.97	4817.37	4823.27	0.000391	6.25	5871.33	787.99	0.31
1	4043.1	FEMA Q100	21600.00	4807.62	4821.23	4818.50	4822.52	0.001022	10.63	2971.33	353.04	0.51
1	3111.7	FEMA Q100	21600.00	4807.62	4818.40	4816.88	4821.02	0.002236	13.40	1892.74	237.65	0.73
1	2320.6	FEMA Q100	21600.00	4807.62	4818.08	4815.12	4818.51	0.002461	6.41	4351.22	747.66	0.37
1	1444.3	FEMA Q100	21600.00	4804.19	4817.14	4812.74	4817.44	0.000683	5.56	6063.95	849.87	0.29
1	654.7	FEMA Q100	21600.00	4804.03	4816.64	4812.03	4816.83	0.000801	4.69	6931.29	1100.22	0.25
1	0	FEMA Q100	21600.00	4801.91	4814.93	4811.56	4815.96	0.002002	10.31	3159.51	357.83	0.51

Sincerely,

Norman S. Braithwaite, P.E., President
Pacific Hydrologic Incorporated

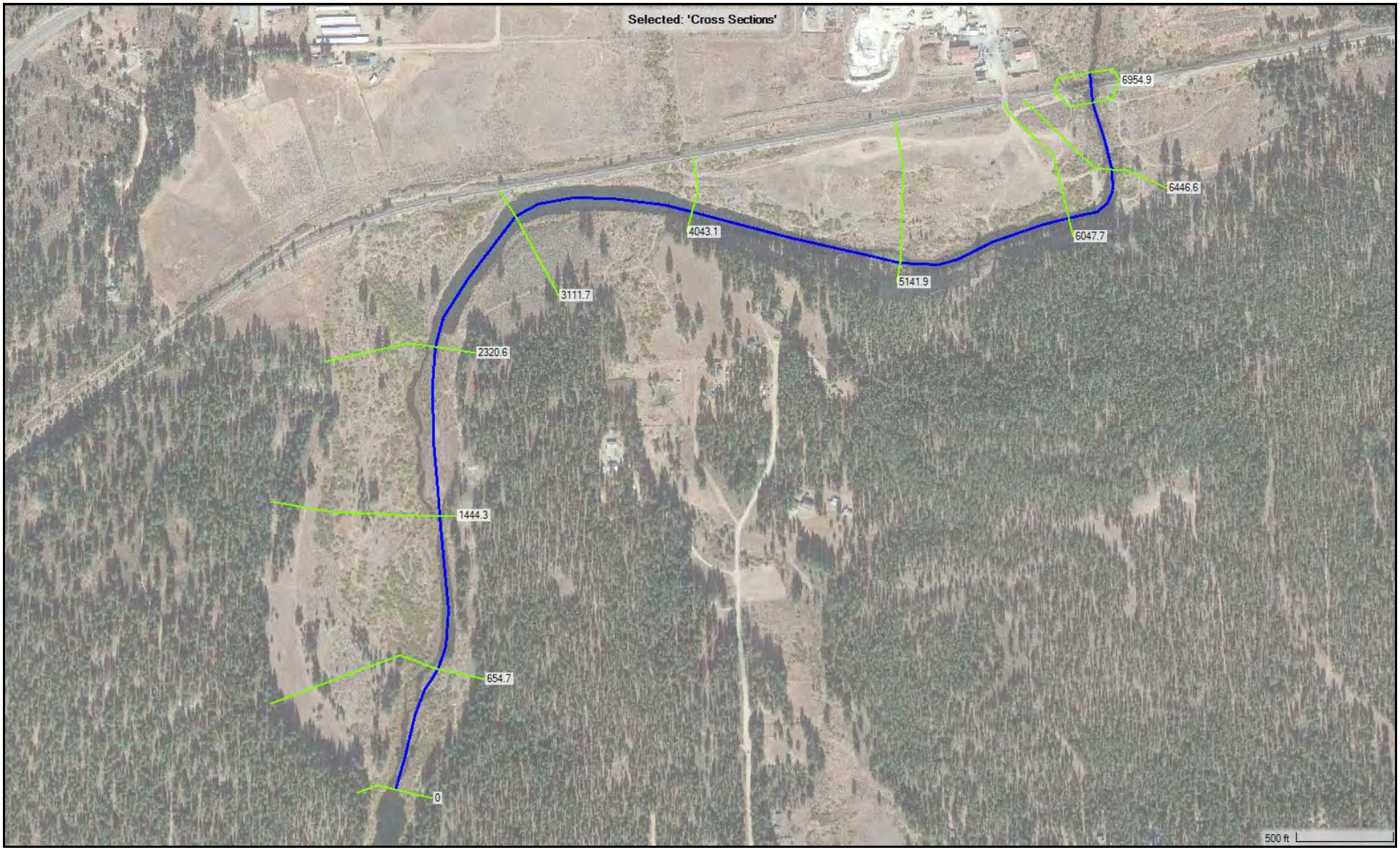


Figure 1: Location of Cross-sections Employed in Backwater Model

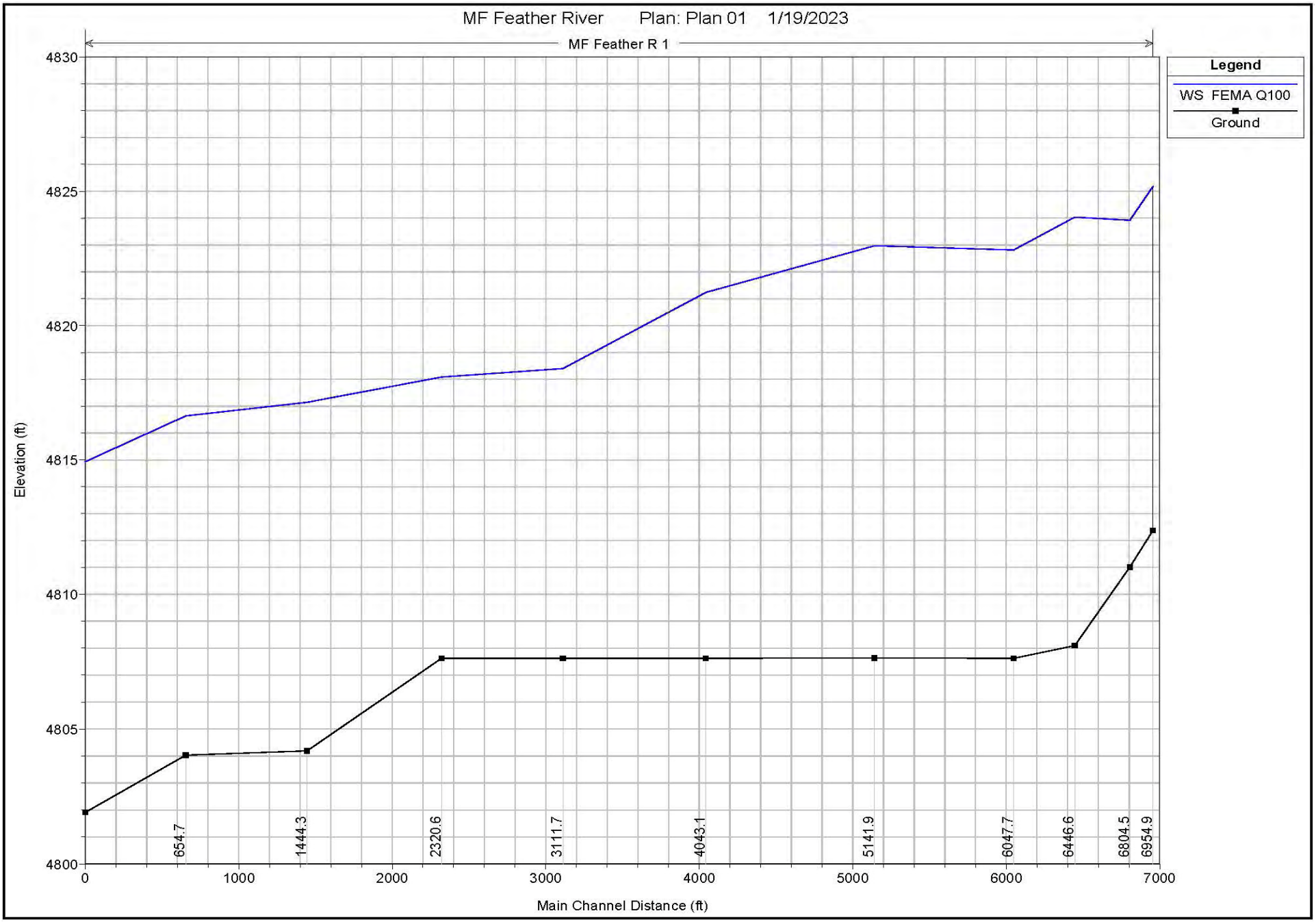


Figure 2: 100-year Flood Water Surface Profile

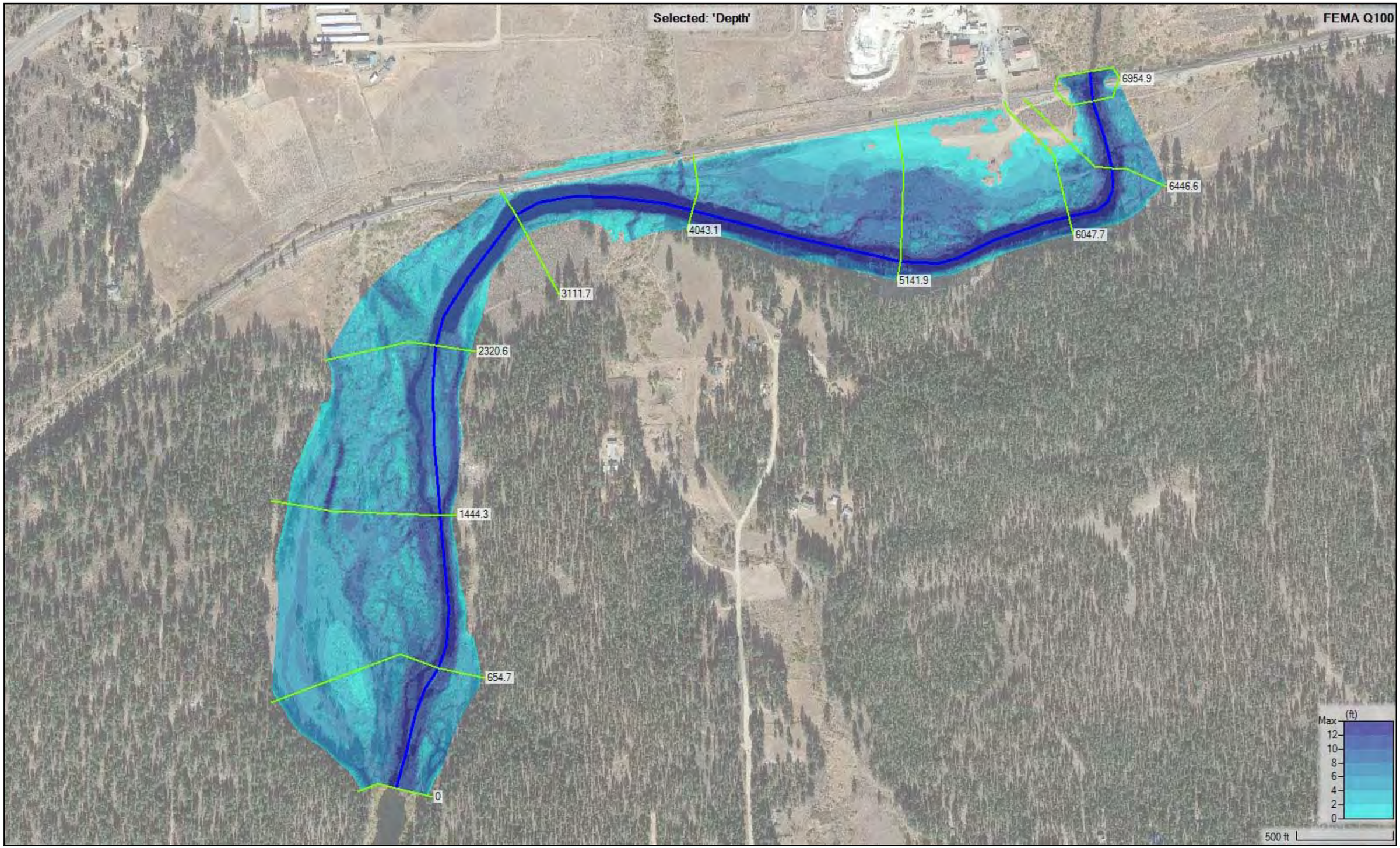


Figure 3: Extent of Inundation during 100-year Flood

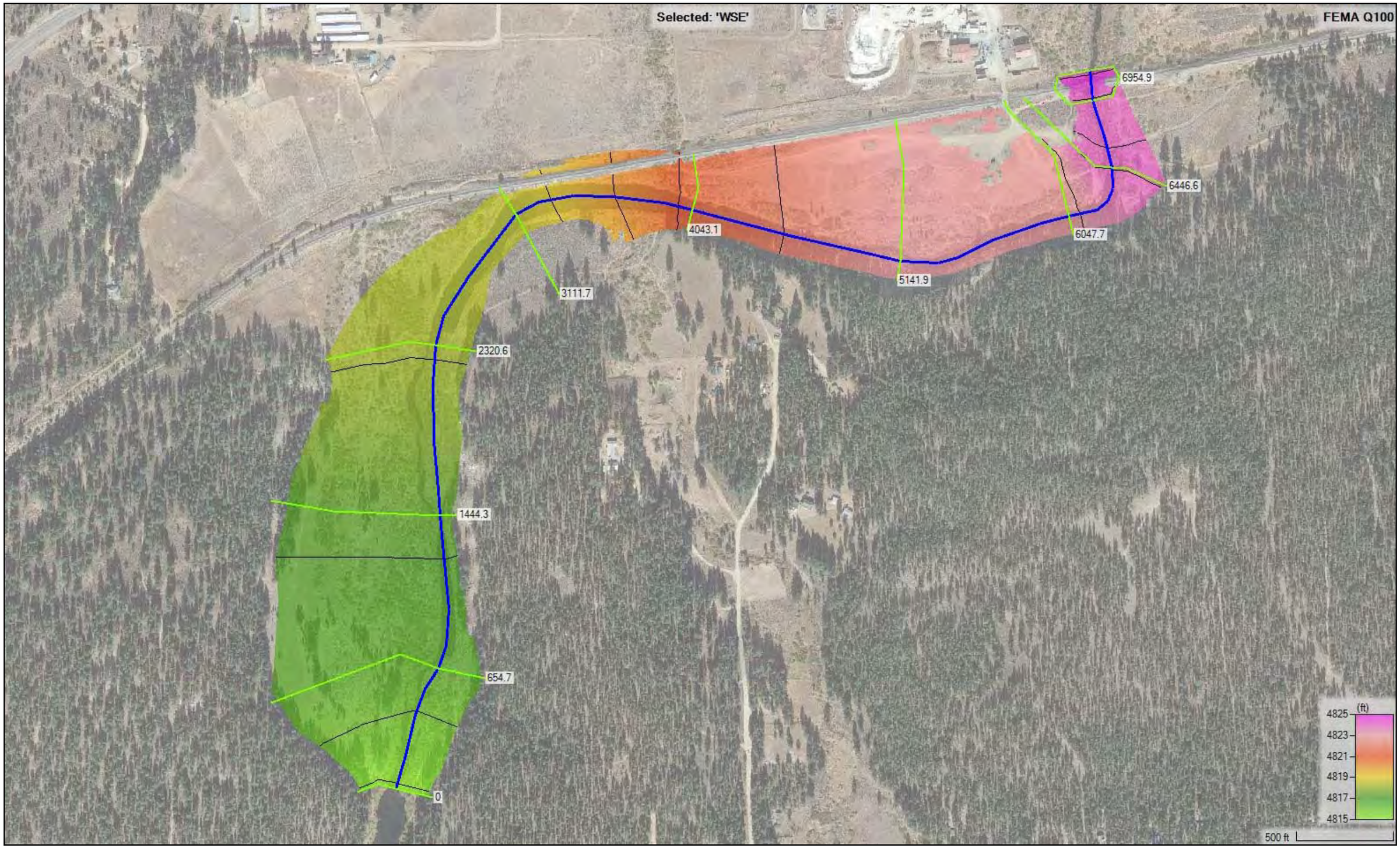


Figure 4: 100-year Flood Water Surface Elevations

Appendix B

Air Quality Technical Report

The Air Quality Technical Report contains confidential information.
Copies of this report will be provided under separate cover.

Appendix C

Biological Resources Assessment

BIOLOGICAL RESOURCES ASSESSMENT

PORTOLA AGGREGATES
PLUMAS COUNTY, CALIFORNIA

Prepared for

Hat Creek Construction & Materials, Inc.

Prepared by

VESTRA Resources, Inc.
5300 Aviation Drive
Redding, California 96002

JANUARY 2023

BIOLOGICAL RESOURCES ASSESSMENT

PORTOLA AGGREGATES
PLUMAS COUNTY, CALIFORNIA

Prepared for

Hat Creek Construction & Materials, Inc.

Prepared by

VESTRA Resources, Inc.
5300 Aviation Drive
Redding, California 96002

71305

JANUARY 2023

TABLE OF CONTENTS

SECTION

TABLES

FIGURES

APPENDICES

A Site Photographs
B U.S. Fish and Wildlife Service Species List
C USDA Custom Soil Survey Report for Plumas National Forest Area, California

1.0 INTRODUCTION

The proposed project operations will include processing of aggregate for asphalt production on a portion of an approximate 20-acre site located at 7600 Industrial Way, Portola, California. The parcel is zoned as Heavy Industrial and can be identified by Assessor's Parcel No. (APN) 126-010-050. This property borders the Middle Fork of the Feather River.

The proposed activities include operation of an asphalt plant to produce pavement and paving materials. Operations of the asphalt plant will consist of mixing asphalt aggregates, stockpiling, lime treatments, RAP processing/storing, and aggregate washing. The site location is shown on Figure 1.

The asphalt plant and lime slurry mix plant will be rated at 200 tons per hour and 2,000 tons per day. The asphalt plant will produce 40,000 tons and 80,000 tons during Years 1 and 2, respectively. Once operations are complete, all equipment will be removed from the site.

Asphalt plant operations will use a variety of large machinery to transport material in and out of the processing area. Operations would be limited to April 1st through November 30th. Normal operation hours would be 6 a.m. to 6 p.m., Monday through Friday. The plant will only operate to meet the needs of highway maintenance projects on SR-70 which is estimated at 20 to 40 days per year.

2.0 REGULATORY FRAMEWORK FOR BIOLOGICAL RESOURCES

This section describes the federal and state regulation of special-status botanical and wildlife species and critical habitats, federally jurisdictional Waters of the United States, and other sensitive biological resources.

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

Section 9 of the federal Endangered Species Act of 1973 (ESA) prohibits acts that result in the "take" of threatened or endangered species. As defined by the federal ESA, "endangered" refers to any species that is in danger of extinction throughout all or a significant portion of its current range. The term "threatened" is applied to any species likely to become endangered within the foreseeable future throughout all or a significant portion of its current range. "Take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Sections 7 and 10 of the federal ESA provide methods for permitting otherwise lawful actions that may result in "incidental take" of a federally listed species. Incidental take refers to take of a listed species that is incidental to, but not the primary purpose of, an otherwise lawful activity. Incidental take is permitted under Section 7 for projects on federal land or involving a federal action; Section 10 provides a process for non-federal actions. The act is administered by the U.S. Fish and Wildlife Service (USFWS) for terrestrial species.

2.1.2 Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Mitigation measures can be identified to avoid or minimize adverse effects on migratory birds.

2.1.3 Clean Water Act

The objective of the Clean Water Act (1977, as amended) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Discharge of dredged or fill material into waters of the United States, including jurisdictional wetlands, is regulated by the Corps under Section 404 of the Clean Water Act (33 USC 1251-1376) under a permitting process. Applicants for Section 404 permits are also required to obtain water quality certification or waiver through the local Regional Water Quality Control Board under Section 401 of the Clean Water Act (33 USC 1341).

Corps regulations implementing Section 404 define waters of the United States to include intrastate waters, including lakes, rivers, streams, wetlands, and natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce. Wetlands are defined for regulatory purposes as "areas that are inundated or saturated by surface 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" (33 CFR 328.3; 40

CFR 230.3). To comply with the Corps policy of "no net loss" of wetlands, discharge into wetlands must be avoided and minimized to the extent practicable. For unavoidable impacts, compensatory mitigation is typically required to replace the loss of wetland functions in the watershed.

2.2 State Regulatory Requirements

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) lists species of plants and animals as threatened or endangered. Projects that may have adverse effects on state-listed species require formal consultation with California Department of Fish and Wildlife (CDFW). "Take" of protected species incidental to otherwise lawful activities may be authorized under Section 2081 of the California Fish and Game Code. Authorization from the CDFW is in the form of an Incidental Take Permit, and measures can be identified to minimize take. CDFW Species of Special Concern are considered under the California Endangered Species Act.

2.2.2 Birds of Prey

Under Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird, except as otherwise provided by this code or any regulation adopted pursuant thereto.

2.2.3 Migratory Birds

California Fish and Game Code, Section 3513, states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

2.2.4 Fully Protected Species

California statutes also accord "fully protected" status to several specifically identified birds, mammals, reptiles, amphibians, and fish. These species cannot be "taken," even with an incidental take permit (California Fish and Game Code, Sections 3505, 3511, 4700, 5050, and 5515).

2.2.5 Surface Mining and Reclamation Act of 1975 (SMARA)

Public Resources Code, Sections 2710-2796, provide a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized, and mined lands are reclaimed to a usable condition. SMARA, Chapter 9, Division 2, of the Public Resources Code requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources (California Code of Regulations, Title 14, Division 2, Chapter 8).

3.0 AFFECTED ENVIRONMENT

3.1 Project Location

The address of the property is 7600 Industrial Way, Portola, California. The site occurs within California USGS Quadrangle 23 and is located in Section 3, Township 22 North, Range 13 East MDBM. Elevations within the project site range between 4800 to 4900 feet above mean sea level. At the site, topography is negligible in elevation change.

The lands surrounding the parcel boundary are Heavy Industrial (I-1), General Forest (GF), Mining (M), Multiple-family Residential (M-R), Periphery Commercial (C-2), Secondary Suburban (S-3), and Suburban (S-1) zoned areas. The proposed project site encompasses a historical reclaimed mine site and is bordered by a thin riparian corridor adjacent to Middle Fork Feather River and the Union Pacific Railroad right-of-way.

3.2 Natural Resources

3.2.1 Vegetation Communities

Vegetation at the project site has been identified via the CDFW's Vegetation Classification and Mapping Program (VegCAMP), California Wildlife-Habitat Relationships (CWHR) data, and field surveys as eastside pine, sagebrush, annual grassland, montane chaparral, barren, and montane hardwood as shown on Figure 2. Site photographs are included as Appendix A.

The site habitat assessment conducted in July of 2019 found that the site is predominantly shrub/scrub with a few areas along the stretch of the Middle Fork Feather River that transition into shrub and scrub species on wetland-type saturated soils, but that lack the density to be considered a riparian scrub habitat. This section of vegetation is better classified as Woody Wetland habitat, and comprises the transitionary habitat occurring adjacent to the riparian corridor of the Middle Fork Feather River and outside the bounds of true shrub/scrub habitat. This woody wetland area matches the characteristics of Silver Sage Wet Shrubland. Evergreen forest borders the Middle Fork Feather River and extends slightly into the project area coinciding with the Woody Wetland habitat designation areas. The areas surrounding the north side of the project area access sites are classified as urban and developed open space with no vegetation. The typical structure and composition of habitat types that were observed onsite are described herein.

Urban-Barren
Although CWHR recognizes this designated area as an annual grassland, after the reconnaissance survey conducted in July of 2019, it is evident that there have been long-term historical impacts that has caused a shift from a grassland habitat to an urban/barren landscape. This landscape is poor in supporting annual grasses due to the compaction from frequent vehicle access, which retards the repopulation of plant species present.

Detwyler (1972) has classified urban vegetation into four major types: the interstitial forest, consisting of trees growing between man's constructions (buildings, streets, etc.); parks and green zones, existing in blocks or sizable patches that are relatively unbroken by human construction; gardens, in which are green ornamental plants as well as food plants; and lawns, or interstitial

grasslands. Clemens et al. (1984) suggest an additional classification unit, demolition sites those urban lands cleared of structures and supporting spontaneous vegetative cover. Many recent demolition sites in California cities are dominated by annual grasses and pioneer shrub species. The demolition site category also comprises vacant urban lands not supporting native vegetation types.

Montane Riparian- Montane Wetland Shrub
Montane riparian habitats can occur as alder or willow stringers along streams or seeps. In other situations, an overstory of Fremont cottonwood, black cottonwood and/or white alder may be present. Fringe habitat can consist of various ceanothus species and sagebrush seeing that the montane wetland scrub has a high occurrence in the Great Basin and Modoc plateau areas. In the Sierra Nevada and its transitionary areas, characteristic species include thinleaf alder, aspen, black cottonwood, dogwood, wild azalea, willow, and water birch (southern Sierra east of the crest), white alder and dogwood (north Sierra).

Sagebrush-Silver Sage Wet Shrubland
Typically, sagebrush habitat is composed of pure stands of big sagebrush, but many stands include other species of sagebrush, rabbitbrush, horse brush, gooseberry, western chokecherry, curl leaf mountain mahogany, and bitterbrush. (Munz 1959). Sagebrush habitats are usually almost solely populated with sagebrush species, with annual grasses and forbs to fill in the gaps in the canopy. In the Silver Sage Wet Shrubland habitat, Silver Sage is the dominant species that occupies a relatively small percentage of the area, while annual grasses and forbs fill in the rest of the groundcover. This herbaceous layer is sparse to continuous and is usually grassy. Silver sage is recognized as a facultative wetland specie that is not usually found in wetland areas; however this species in particular has known associations to wet meadows and riparian corridors.

3.2.2 Soils

A Custom Soil Survey Report for Plumas National Forest Area, produced by the U.S. Department of Agriculture, was used to characterize soils at the proposed site (see Appendix C). Silt, sand, and gravel soils make up the soils mapped onsite. The Natural Resources Conservation Service (2019) identified three soil types within the project boundary. Soil thickness ranges from 30 to 60 inches. Soil permeability varies by location but is generally moderately high to high. Some soils are well-drained, and some are poorly drained. Runoff potential is variable based on location and steepness of the terrain while ponding potential is very low. Soil descriptions and associated properties are summarized in Table 1.

3.2.3 Hydrology

Surface Water
There is no known surface water on the site. Middle Fork Feather River is located adjacent to the site. One small stream (Humbug Creek) is found outside the project area, on the far western end of the property.

Table 1 SOIL TYPES						
Soil Unit	**Soil Unit Name**	**Slope (%)**	**Acres**	**Depth to Restrictive Feature (inches)**	**Permeability**	**Typical Profile (inches below ground surface)**
10	Badenaugh very gravelly loam	2-5	0.1	>80	Moderately High	0-6: very gravelly loam 6-19: very gravelly sandy clay loam, very cobbly sandy clay loam 6-19: stratified extremely gravelly sandy loam to very cobbly sandy clay loam 19 to 30: gravelly loam
13	Dotta loam	2-5	10.5	>80	Moderately High	0-15: loam 15-27: sandy clay loam 27-60: sandy loam
237	Riverwash-Fluvents complex	0-5	16.8	>80	High	Riverwash:Fluvents 3:2 Riverwash: 0-60: stratified very stony loam sand to very gravelly loam Fluvents: 0-18: sandy loam 18-60: stratified very gravely loamy sand to loam Riverwash:Fluvents 3:2

Groundwater
A preliminary survey of groundwater wells monitored by the Department of Water Resources (DWR) showed one well within a one-mile radius and three wells within a six-mile radius of the site. Groundwater was found at 60 feet below the surface level. The proposed project will involve ground disturbance but not toa depth that is expected to impact groundwater.

3.3 Special-Status Species

3.3.1 Special-Status Plants

Special-status plant species include plants that are (1) designated as rare by CDFW or USFWS or are listed as threatened or endangered under the California Endangered Species Act (CESA) or ESA; (2) proposed for designation as rare or listing as threatened or endangered; (3) designated as state or federal candidate species for listing as threatened or endangered; and/or (4) ranked as California Rare Plant Rank (CRPR) 1A, 1B, 2A, or 2B. A list of regionally occurring special-status plant species was compiled based on a review of pertinent literature, the results of the field surveys, a review of the USFWS species list and California Natural Diversity Database (CNDDB), and a quad search of California Native Plant Society (CNPS) database records.

For each special-status plant species, habitat and other ecological requirements were evaluated and compared to the habitats in the study area and immediate vicinity to assess the presence of potential habitat. The habitat assessment is provided in Table 2.

3.3.2 Special-Status Animals

Special-status animal species include species that are (1) listed as threatened or endangered under the CESA or the ESA; (2) proposed for federal listing as threatened or endangered; (3) identified as state or federal candidates for listing as threatened or endangered; and/or (4) identified by the CDFW as Species of Special Concern or California Fully Protected Species.

A list of regionally occurring special-status wildlife species was compiled based on a review of pertinent literature and consultations with the USFWS Information for Planning and Consultation (iPAC) database (Appendix B), CNDDB database records, and a query of the California Wildlife Habitats Relationship (CWHR) system. The CNDDB query results are shown on Figure 3.

For each special-status wildlife species, habitat and other ecological requirements were evaluated and compared to the habitats in the study area and immediate vicinity to assess the presence of potential habitat. The habitat assessment is provided in Section 5, Table 2.

4.0 BIOLOGICAL SITE SURVEY

4.1 Desktop Review

Special-status plant and animal species and sensitive habitats that have the potential to occur within the project area were determined, in part, by reviewing agency databases, literature, and other relevant sources. The following information sources were reviewed in August 2019 and again in June 2020 to aid this determination:

- Portola, California, USGS 7.5-minute quadrangle;
- Aerial imagery of the project area and vicinity;
- The U.S. Fish and Wildlife Service (USFWS) official list of endangered and threatened species that may occur, or be affected by projects, as provided by the information for Planning and Consultation (iPAC) database;
- The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife 2023a) records for the Portola, California, USGS 7.5-minute quadrangle and the eight surrounding quadrangles;
- The California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants (California Native Plant Society 2023) records for the Portola, California, USGS 7.5-minute quadrangle and the eight surrounding quadrangles;
- California Wildlife Habitat Relationships (CWHR) System (California Department of Fish and Game 2023);
- GIS shapefiles of designated critical habitat from the USFWS Critical Habitat Portal website;
- CDFW publications including State and Federally Listed Endangered, Threatened and Rare Plants of California (California Department of Fish and Wildlife 2023b); State and Federally Listed and Threatened Animals of California (California Department of Fish and Wildlife 2023d); and Special Animals List (California Department of Fish and Wildlife 2023e);
- Pertinent biological literature including Bird Species of Special Concern in California (Shuford and Gardali 2008).

4.2 Field Methods

A site biological survey was completed in July of 2019 to determine the onsite presence of habitat that may support special-status species. The survey included pedestrian transects which covered the entire proposed project area. Site features considered during the habitat assessment included components of micro-habitats that may support special-status plants or animals, including habitat type, vegetative community, forest density and height, soil types, elevation, and site hydrology.

The habitat assessment considered the potentially occurring special-status plant species. Habitat for seven potentially occurring species was identified using the CWHR and CNDDB query results as well as recognition of habitat while conducting reconnaissance in the proposed project area.

4.3 Results

The plant community was consistent throughout the proposed plant area, being mostly barren due to previous industrial activity. The majority of plant diversity occurs along the edges of the project boundary, outside the proposed development areas. Plant species observed included willow (*Salix* spp.), sweet clover (*Melilotus albus*), tansyleaf evening primrose (*Taraxia tanacetifolia*), fireweed (*Epilobium* spp.), silver sage (*Artemisa cana*), and various juncus species (*Juncus* spp.). Wildlife observed onsite included the following: western toad (*Anaxyrus boreas*), barn swallow (*Hirundo rustica*), raccoon (*Procyon lotor*), and frogs (*Rana* spp.).

5.0 POTENTIAL IMPACTS TO BIOLOGICAL RESOURCES

5.1 Special-Status Species

The regionally occurring species identified during the pre-survey consultation were assessed based on the potential for their habitat to occur within the proposed project area. The habitat of each species and determination of whether the species is likely to occur in the project area is summarized in Table 2. The potential impacts to these species are discussed below.

Table 2
POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES

Scientific Name	Common Name	Fed Status	State Status	CRPR Status	Habitat	Habitat Present? (Y/N)
Birds						
Empidonax traillii	willow flycatcher	--	E	--	Almost exclusively in willow thickets. Most often found within meadow "islands" surrounded by riparian forest or late-seral forest.	Yes
Falco mexicanus	prairie falcon	USFWS BCC	CDFW WL	--	Nests on cliff ledges overlooking open meadows in grasslands and forests. This species will not be discussed further in this report.	No
Strix nebulosa	great gray owl	--	E	--	Old growth forest with dense stands and meadows; require large snags >3 feet DBH. Surrounding stand not adequate age or density for suitable habitat for nesting. No adequate meadows in vicinity to provide sustainable hunting resources.	No
Coccyzus americanus	western yellow-billed cuckoo	T	E	--	Dense riparian forest, no habitat presents north of Red Bluff. This species will not be discussed further in this report.	No
Mammals						
Vulpes necator	Sierra Nevada red fox	C	T	--	Forests interspersed with meadows or alpine fell-fields. This species is found above 7000 feet elevation; therefore the project is outside the range of the species. This species will not be discussed further in this report.	No
Invertebrates						
Bombus occidentalis	western bumble bee	--	CE	--	Nest in underground cavities such as squirrel burrow	Yes

Table 2 POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES						
Scientific Name	**Common Name**	**Fed Status**	**State Status**	**CRPR Status**	**Habitat**	**Habitat Present? (Y/N)**
Danae plexippus	monarch butterfly	C	--	--	Requires presence of milkweed as a food source and reproduction. No milkweed or habitat for milkweed present. This species will not be discussed further in this report.	No
Amphibians						
Rana sierrae	Sierra Nevada yellow-legged frog	E	T	--	Slow moving streams, ponds and lakes, devoid of predatory fish, rarely found farther than 3 feet from water.	Yes
Ambystoma macrodactylum sigillatum	southern long-toed salamander	--	CDFW SSC	--	Slow moving streams, devoid of predatory fish. Breeds in stagnant or slow-moving water. Adults are terrestrial and gravitate to moist cover such as under logs and layers of duff.	No
Plants						
Pyrrocoma lucida	sticky pyrrocoma	--	--	1B.2	Alkaline flats with clay soils; FL July-October	No
Carex sheldonii	Sheldon's sedge	--	--	2B.2	Riparian, wetland	Yes
Astragalus lentiformis	lens-pod milk-vetch	--	--	1B.2	Sandy or rocky soils in pine or sagebrush communities; FL May-July	Yes
Ivesia sericoleuca	Plumas ivesia	--	--	1B.2	Wet meadows; FL May-October	Yes
Juncus luciensis	Santa Lucia dwarf rush	--	--	1B.2	Riparian, wetland	Yes
Botrychium minganense	mingan moonwort	--	--	2B.2	Riparian area with dense shade, associated with late seral Red Cedar and substantial duff layers. This species will not be discussed further in this report.	No

Fed T: federally listed as threatened; **Fed E**: federally listed as endangered; **Fed C**: Candidate for listing; **State T**: state listed as threatened **State E:** state listed as endangered; **CDFW SSC**: Species of Special Concern; **CDFW FP**: CDFW fully protected; **CDFW WL**: CDFW watch list; **1B:** Plants rare, threatened, or endangered in California and elsewhere**; 2B**: Plants rare, threatened, or endangered in California but more common elsewhere.

Willow Flycatcher
Empidonax traillii

Willow flycatchers have been observed in consistent association with wet meadows where high water tables result in standing water, riparian shrubbery, and late-seral timber (Fowler et. al. 1991). Their breeding habitat in the Sierra Nevada can be described as "islands" of meadows in a "sea" of forest conifers. Willow flycatchers in the Sierra Nevada typically reside in shrub layers that range in height of 6.5 to 13 feet, usually consisting of a dense base shrub layer for protection. This

species prefers to nest in dense shrubs, where they are protected from predators and elements. Some observations show that willow flycatchers may reside in aspens, blackberries, and alders. Shrub-dominated montane meadows may consist of willow year-round and standing water, flowing water, and highly saturated soils during the nesting season. As shown by Cain (2001; see also Cain et al., in press), the presence of water aids nesting success by inhibiting access of forest and edge predators and preventing establishment of lodgepole pine, which provides habitat for forest and edge predators. Water also provides habitat for important willow flycatcher prey. Willow flycatchers feed on insects, seeds, and fruit. Studies have shown strong association between prey availability and saturation of soils.

Willow flycatchers generally arrive back in Plumas County from their migratory paths in May through June, where mating and nest building occurs from June through August.

Given that the willow flycatcher traditionally inhabits willow thickets and riparian areas associated with late-seral stands, it is unlikely that this species would occur in the action area due to the lack of mature trees, lack of soil saturation, density of canopy, continuity of surrounding forest, as well as density of willow thickets. It is unlikely that this area would be chosen as alternative habitat due to the poor quality of the area for willow flycatcher breeding habitat. The presence of a few sparse willow thickets onsite could provide low-quality foraging habitat.

Willow flycatcher breeding habitat requires adequate meadow size, moisture, shrub coverage and foliar density. Their nesting and reproductive territories have been strongly associated with standing or slow-flowing water in large meadows surrounded by late seral forest. Over 95 percent of positive willow flycatcher reproductive observations have occurred in continuous wet meadows that are more than ten acres in size. There has been historical documentation of willow flycatcher occupying meadows approximately one acre or less in size; however, this has not been recorded since the initial documentation.

Therefore, there will be **a less-than-significant impact** to the willow flycatcher.

Sierra Nevada Yellow-Legged Frog
Rana sierrae

The Sierra Nevada yellow-legged frog (SNYLF) historically ranged from the Diamond Mountains in Plumas County, California, through the Sierra Nevada towards Inyo County. Several populations have been recorded north of the Feather River, with very few recent observations south of the Feather River. SNYLF inhabit lakes, ponds, meadow streams, and other bodies of water with substantial sunny riverbanks. Individuals are usually found very close to water, typically not straying any more than three meters from the closest surface water. They tend to be tolerant of varied landscapes within their requirements and are fairly adaptable (Stebbins 2003). SNYLF have been observed to have habitat preferences, being sloping banks transitioning into aquatic substrates and aquatic vegetation. SNYLF are found in water sources that do not dry up in the summer, and also do not freeze all the way to the bottom (Flaxington 2021). SNYLF feed on aquatic invertebrates, as well as terrestrial invertebrates when the opportunity arises. They have been known to feed on insects, snails, as well as their own young. Although their preference for hunting and reproductive habitat is devoid of predatory fish, it has been observed that the SNYLF will inhabit areas that coexist in areas of fish, however they will most likely establish territory in slow moving side channels, eddies, and bank pockets that fish would not typically access (Flaxington 2021).

The proposed project design includes avoidance of the riparian area, such that there will be no loss of habitat for breeding or hunting. It is unlikely the SNYLF would occur due to the speed of the water, homogeneity of bank structure, and lack of slow-moving reliefs in the area of the Middle Fork Feather River bordering the project site. It is unlikely that the SNYLF would be impacted by noise produced by the implementation of this project due to the surrounding current industrial activities. The proposed location of the asphalt plant is situated well over three meters from the Middle Fork Feather River and from Humbug Creek. Individual frogs that may occur are unlikely to venture far enough from a watercourse to be directly impacted by the project activities.

Therefore, there will be a **less-than-significant impact** to the Sierra Nevada yellow-legged frog.

Western Bumble Bee
Bombus occidentalis
The Western Bumble Bee has three basic habitat requirements: suitable nesting sites for the colonies, suitable overwintering sites for the queens, and nectar and pollen from floral resources available throughout spring, summer, and fall (Jepson et al. 2014). Nests occur primarily in underground cavities such as old squirrel burrows or other animal nests and in open west-southwest slopes bordered by trees. Queens overwinter underground in abandoned rodent nests and typically emerge about mid-March. Workers that emerge begin foraging and provisioning to accommodate additional recruits to the colony. Individuals emerging from fertilized eggs will become workers that reach peak abundance during July and August. Foraging individuals are largely absent by the end of September.

Historically, the Western Bumble Bee was one of the most broadly distributed bumble bee species in North America. Currently, the Western Bumble Bee is experiencing severe declines in distribution and abundance due to a variety of factors including diseases and loss of genetic diversity. Exposure to certain insecticides has recently been identified as a major contributor to the decline of many pollinating bees, including honeybees and bumble bees. In the absence of fire, native conifers encroach upon meadow habitat, which also decreases foraging and nesting habitat available for bumble bees (Furnish 2012).

The Western Bumble Bee habitat residence requirements are not anticipated to be significantly impacted by the project construction activities. Nesting areas and overwintering sites are not expected to be impacted due to the scarcity of friable soils able to be made into burrows by native rodents. Burrowing rodents commonly adapt to inhabiting areas with high human disturbance, however the soil is far too compacted to be of use to rodents. Therefore, nesting sites or queen overwintering burrows will likely not occur within the footprint of the project area.

The second requirement, proximity to nectar and pollen resources, will not be impacted by the proposed project activities due to the lack of nectar-bearing vegetation within the project area. Construction will take place within the current barren landscape with no vegetation removal, minimizing the total disturbed area. In subsequent growing seasons, flowering plants in the impacted areas have the potential to reoccupy disturbed areas. However, it is unlikely that the Western Bumble Bee will inhabit the project are or use it as an alternative habitat due to lack of current and historical resources.

Therefore, there will be **no impact** to the western bumble bee.

Plants
A habitat assessment was completed in July of 2019 to determine the potentially occurring special-status plant species. Habitat types that occur within the proposed project boundary were identified through consultation with the CWHR accompanied by a pedestrian reconnaissance site survey. Potentially occurring special-status plant species within the project area include Sheldon's sedge (*Carax sheldonii*), lens-pod milk-vetch (*Astragalus lentiformis*), Plumas ivesia (*Ivesia sericoleuca*), and Santa Lucia dwarf rush (*Juncus luciensis*).

No impact will occur to Sheldon's sedge (*Carax sheldonii*), lens-pod milk-vetch (*Astragalus lentiformis*), Plumas ivesia (*Ivesia sericoleuca*), and Santa Lucia dwarf rush (*Juncus luciensis*) due to the implementation of a wetland/riparian buffer. The proposed asphalt plant will be constructed in an area previously compacted and devoid of plants due to previous vehicle traffic and industrial activity.

Prior to any disturbance within the sagebrush or riparian areas, protocol-level surveys will be completed. Surveys will be completed by a qualified botanist and will take place at time of year when identification is possible (typically during the Spring flowering period). If a sensitive plant is located within an area where disturbance is proposed, then avoidance or mitigation measures will be implemented to reduce the project impacts to the species.

Migratory Birds
Migratory birds may nest in trees and other vegetation located within or in the immediate vicinity of the study area. All raptors and migratory birds, including common species and their nests, are protected from "take" under the California Fish and Game Code, Section 3503, and 3503.5, and federal Migratory Bird Treaty Act. Large trees onsite and in the surrounding forest provide potential nesting habitat for migratory birds. Impacts to migratory birds and raptors are not expected because there will be no vegetation removal activities, and noise impacts are **less than significant** due to current ambient noise levels from the nearby train and the Delleker Transfer Station.

Sloat Deer Herd
The Sloat Deer Herd ranges over an area of approximately 1,240 square miles that includes five California counties (Lassen, Plumas, Sierra, Nevada, and Placer) and one Nevada county (Washoe) (DFG 1982). Two distinct sub-units were described in the 1982 DFG Deer Herd Management Plan: the Sierra Valley sub-unit (SVSU) representing the X7a premium deer zone and the Verdi sub-unit (VSU) or X7b.

The herd range is bounded on the north by Highway 70 and extends southwest from Portola over Beckwourth Pass, along the crest of the Sierra Nevada south over Donner Pass to the Placer-El Dorado County line near Miller Lake then along McKinney Creek to the west shore of Lake Tahoe. The deer herd migrates between summer ranges primarily in California and winter ranges primarily in Nevada. The proposed project area is located north of the deer herd migration corridor. **No impacts** to deer migration will result from the proposed construction activities.

5.2 Rare Natural Communities and Sensitive Habitats

In addition to inventorying reported occurrences of special-status species, the CNDDB serves to inventory the locations of rare natural communities. Communities respond to environmental changes and can be an indicator of the overall health of an ecosystem and its component species. Rare natural communities are those communities that are of highly limited distribution. They may or may not contain rare, threatened, or endangered species. The CNDDB ranks natural communities according to their rarity and endangerment in California.

Silver Sage Wet Shrubland is S3 designated. This plant community will be avoided due to the wetland/riparian buffer such that **no impact** will occur to the Silver Sage Wet Shrubland.

5.3 Waters of the United States

No impacts to Waters of the United States (WOTUS) will occur due to the wetland/riparian buffer. The Middle Fork Feather River runs adjacent to the site boundary but does not occur within the project boundary. The tributary onsite would be avoided due to the previously mentioned avoidance measures.

6.0 CONCLUSION/AVOIDANCE AND/OR MITIGATION MEASURES

The potential impacts to locally common wildlife and special-status wildlife and plant species will be less than significant with the incorporation of pre-project surveys and avoidance or mitigation measures listed below.

6.1 Willow Flycatcher

Prior to any ground-disturbing activities, special attention will be given to the riparian shrub zone on the south end of the property to survey for willow flycatchers. Individuals are likely to remain within the protection of willow shrubs and thickets; the survey area will be within fifty meters of the edge of the willow flycatcher potential habitat. Because this area already contains noise pollution, attempting to conduct auditory surveys at the 100-meter option for willow flycatchers would be redundant.

CDFW recommends two separate surveys in one year per site. One survey required during Survey Period 2 (June 15-25), and the other occurring during Survey Period 1 or 3(see Table 3 for survey period outline). To be considered separate surveys, must be spaced at least five days apart. Performing surveys within this period increases the chances of detecting individuals during the early nesting period while individuals are displaying auditory calls for establishing territories. Auditory and visual pedestrian surveys will be conducted within the recommended survey periods, from first light until approximately 10:00 a.m.

Table 3
PROPOSED SURVEYS

Survey Period	Survey Timing	Life History Phase
1	June 1 to June 14	Establishing territories
2	June 15 to June 25*****	Courtship, early nesting
3	June 26 to July 15	Nesting, incubation

Notes: * = Required visit

6.2 Special-Status Plant Species

Potentially occurring special-status plant species include Sheldon's sedge (*Carax sheldonii*), lens-pod milk-vetch (*Astragalus lentiformis*), Plumas ivesia (*Ivesia sericoleuca*), and Santa Lucia dwarf rush (*Juncus luciensis*). Prior to any disturbance within the sagebrush or riparian areas, protocol-level surveys will be completed. Surveys will be completed by a qualified botanist and will take place at time of year when identification is possible (typically during the Spring flowering period). If a rare plant is located within an area where project activities are proposed, then avoidance or mitigation measures should be implemented to reduce the project impacts to the species.

6.3 Nesting Migratory Birds

There will be no vegetation removal activities and noise impacts are less than significant due to the existing noise levels from the nearby train and the Delleker Transfer Station.

7.0 REFERENCES

California Department of Fish and Wildlife (CDFW). California Interagency Wildlife Task Group. 2023. CWHR version 9.0 personal computer program. Sacramento, CA.

Calflora. Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals, including the Consortium of California Herbaria. [web application]. 2019. Berkeley, California. (Accessed: Jan 08, 2023).

California Native Plant Society. 2023. Inventory of rare and endangered plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. http://www.rareplants.cnps.org/ (accessed January 2023).

DeBecker, S. and A. Sweet. 1988. Crosswalk between WHR and California vegetation classifications. Pages 21-39 in: K.E. Mayer, and W.F. Laudenslayer, eds. 1988. A Guide to Wildlife Habitats of California. State of California, The Resources Agency, Department of Forestry and Fire Protection, Sacramento, California.

Harris, J. 2005. Silver Haired Bat Distribution, Abundance, and Seasonality. California Department of Fish and Wildlife, California Wildlife Habitat Relationships System. Accessed January 7, 2023.

Jepsen, S., S.F. Jordan, and R. Huff. 2014. Species fact sheet: Western bumblebee (Bombus occidentalis). 6 pp.

Johnston, Dave. Tatarian, Greg. Pierson, Elizabeth. Trapp, Gene. 2004. California Bat Mitigation Techniques, Solutions, and Effectiveness. Published December 29, 2004. HT Harvey & Associates.

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento. Accessed on January 17, 2023.

Squires, John R.; Reynolds, Richard T. 1997. Northern goshawk (Accipiter gentilis), [Online]. Issue No. 298. In: Poole, A., ed. The birds of North America Online. Ithaca, NY: Cornell Lab of Ornithology (Producer). http://bna.birds.cornell.edu/bna/species/298

U.S. Fish and Wildlife Service (USFWS). 1991. The distribution, habitat, and status of the valley elderberry longhorn beetle. U.S. Fish and Wildlife Service.

U.S. Forest Service (USFS). 1988. Plumas National Forest Land and Resource Management Plan. USFS Pacific Southwest Region. Pp. 4-334 to 4-335.

Beck, Thomas. Winter, Jon. May 2000. "Survey Protocol for the Great Gray Owl in the Sierra Nevada of California". USDA Forest Service Pacific Southwest Region. Vallejo, CA.

Kuchler, A. W. 1977. Appendix: the map of the natural vegetation of California. Pages 909-938 In M. G. Barbour and J. Major, eds, Terrestrial vegetation of California. John Wiley and Sons, New York.

Munz, P. A., and D. D. Keck. 1959. A California flora. Univ of California Press, Berkeley

Harris, J.H., S.D. Sanders, and M.A. Flett. 1987. Willow flycatcher surveys in the Sierra Nevada. Western Birds 18:27-36.

Stefani, R.A., H.L. Bombay, and T.M. Benson. 2001. Willow Flycatcher. Pp. 143-195 in USDA Forest Service, Sierra Nevada Forest Plan Amendment Final Environmental Impact Statement, Volume 3, Chapter 3, Part 4.4. USDA Forest Service, Pacific Southwest and Intermountain Regions, Vallejo, CA

Cain, J.W., M.L. Morrison, and H.L. Bombay. in press. Predator activity and nest success of willow flycatchers and yellow warblers. Journal of Wildlife Management.

Stebbins, Robert C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd Edition. Houghton Mifflin Company, 2003.

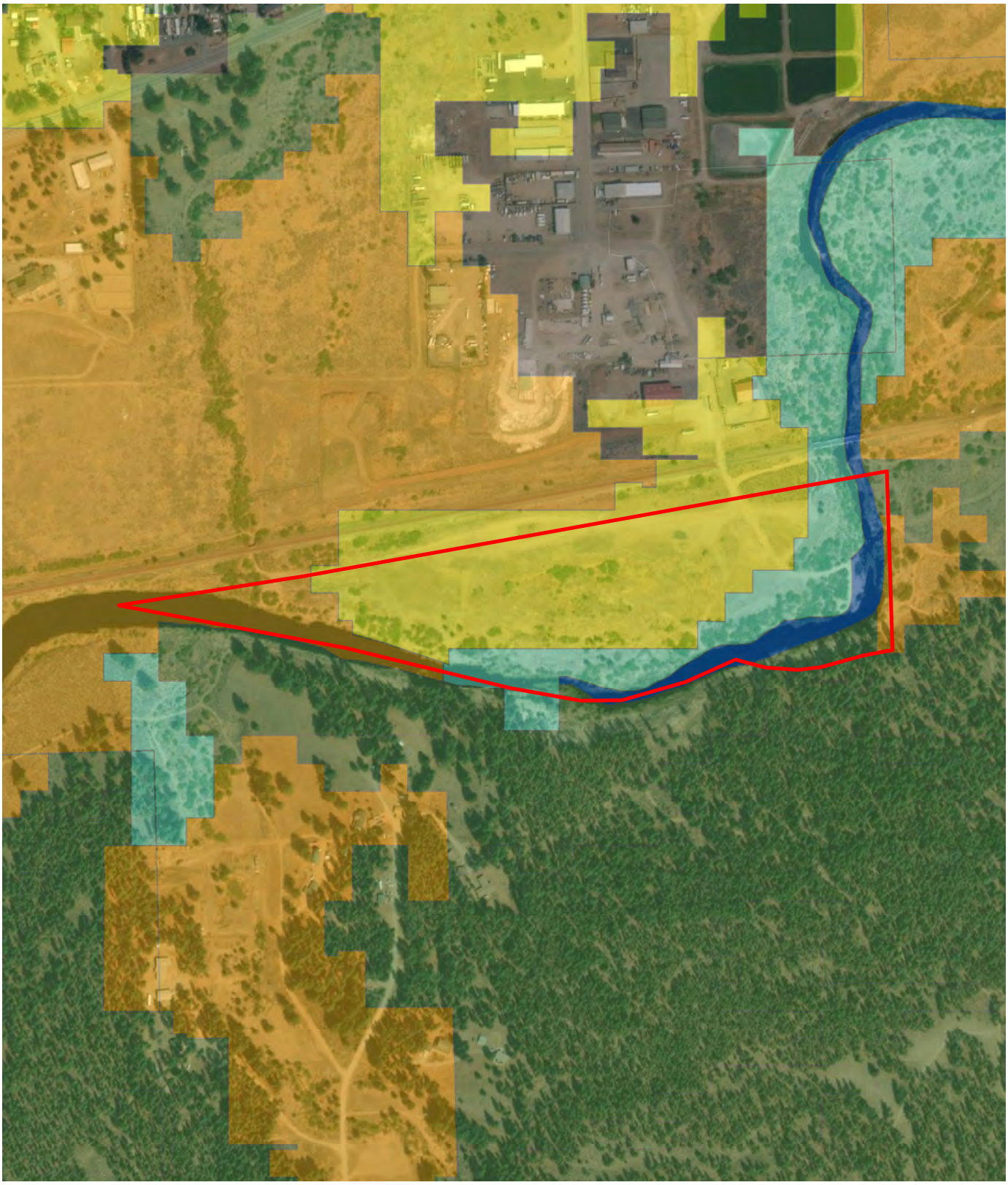
Flaxington, William C. 2021. *Amphibians and Reptiles of California: Field Observations, Distribution, and Natural History*. Fieldnotes Press, Anaheim, California, 2021.

Figures

VESTRA

FIGURE 1
GENERAL SITE LOCATION
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

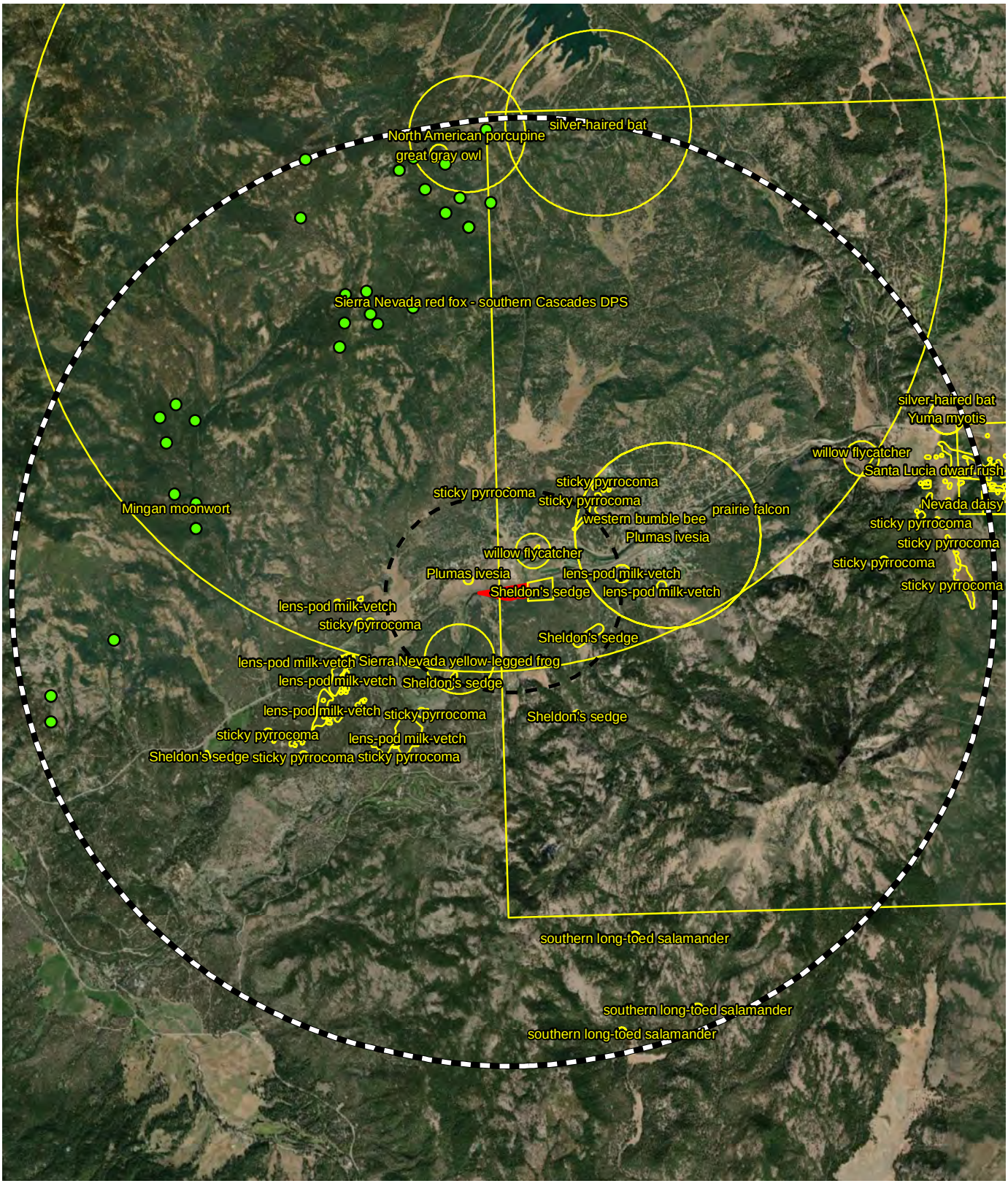
P:\GIS\71305\Portola_Asphalt\Figures\BioReport\71305_GeneralSiteLocation.mxd



SOURCE: USFS CALVEG 2005; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 2
CWHR TYPES
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\BioReport\71305_Vegetation.mxd



Spotted Owl Observation Location

1-Mile Buffer Around Parcel Boundary

CNDDB Occurrence

5-Mile Buffer Around Parcel Boundary

Approximate Parcel Boundary

VESTRA

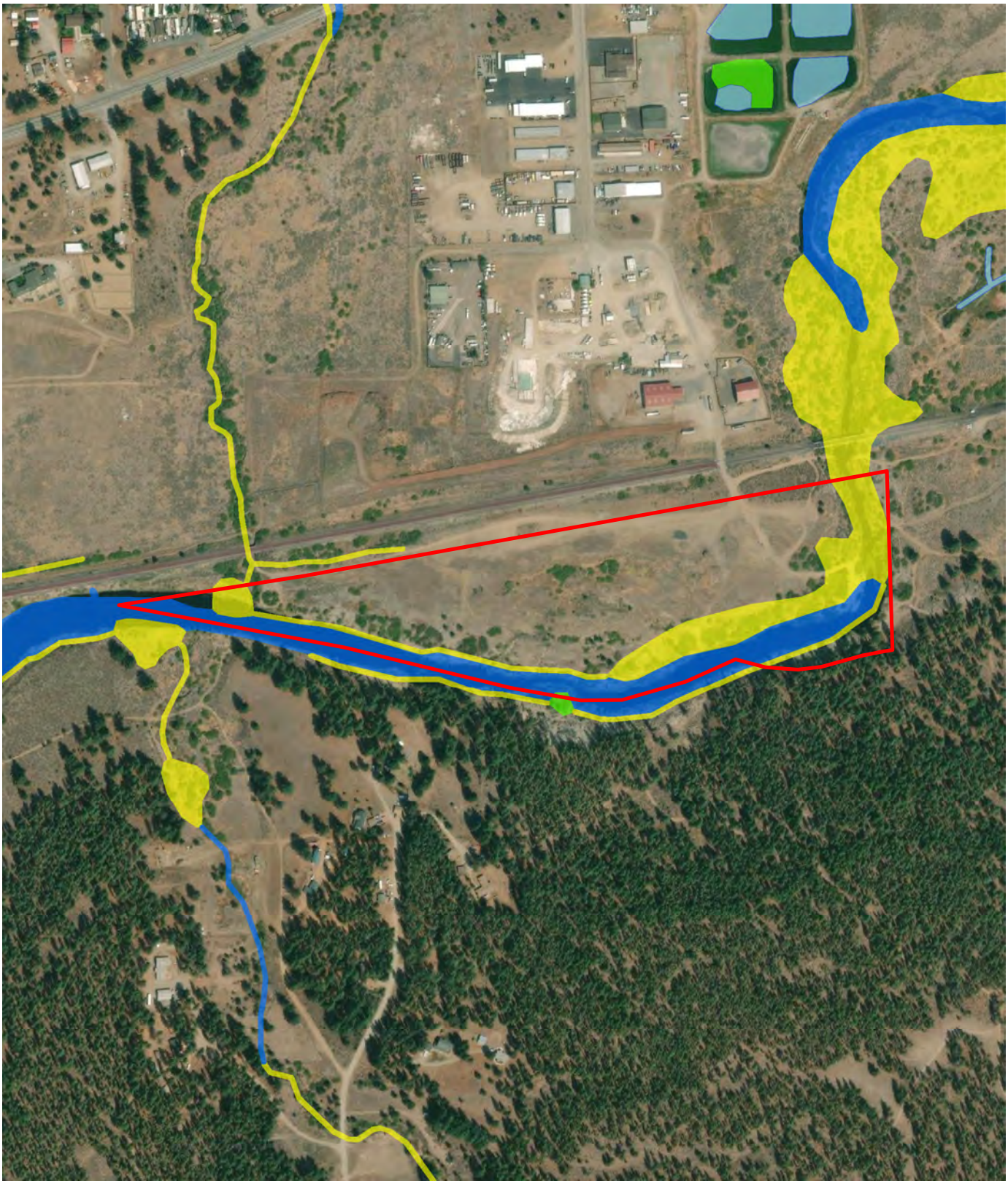
0 0.75 1.5 3 Miles

N

FIGURE 3
CNDDB OCCURRENCES
APN 126-010-050
PORTOLA, CALIFORNIA

SOURCE: CDFW CNDDB DECEMBER 2022; MAXAR 2021 AERIAL PHOTOGRAPH

P:\GIS\71305\Portola_Asphalt\Figures\BioReport\71305_CNDDB.mxd



SOURCE: USFWS 2022; MAXAR 2021 AERIAL PHOTOGRAPH

FIGURE 4
WETLANDS
PORTOLA ASPHALT PLANT
PORTOLA, CALIFORNIA

P:\GIS\71305\Portola_Asphalt\Figures\BioReport\71305_Wetlands.mxd

Appendix A

Site Photographs

Appendix B

U.S. Fish & Wildlife Service Species List (January 2023)

United States Department of the Interior

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

In Reply Refer To:
Project Code: 2023-0030710
Project Name: HCC Asphalt Batch Plant

January 05, 2023

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

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2023-0030710
Project Name: HCC Asphalt Batch Plant
Project Type: Commercial Development
Project Description: Asphalt batch plant
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.8006977,-120.49984553521355,14z

Counties: Plumas County, California

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

---

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

Birds

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog *Rana sierrae* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Vestra Resources
Name: Ashleigh Ehrke
Address: 5300 Aviation Drive
City: Redding
State: CA
Zip: 96003
Email mehrke@vestra.com
Phone: 5302232585

Appendix C

USDA Custom Soil Survey Report for Plumas National Forest Area, California

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Plumas National Forest Area, California

January 4, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

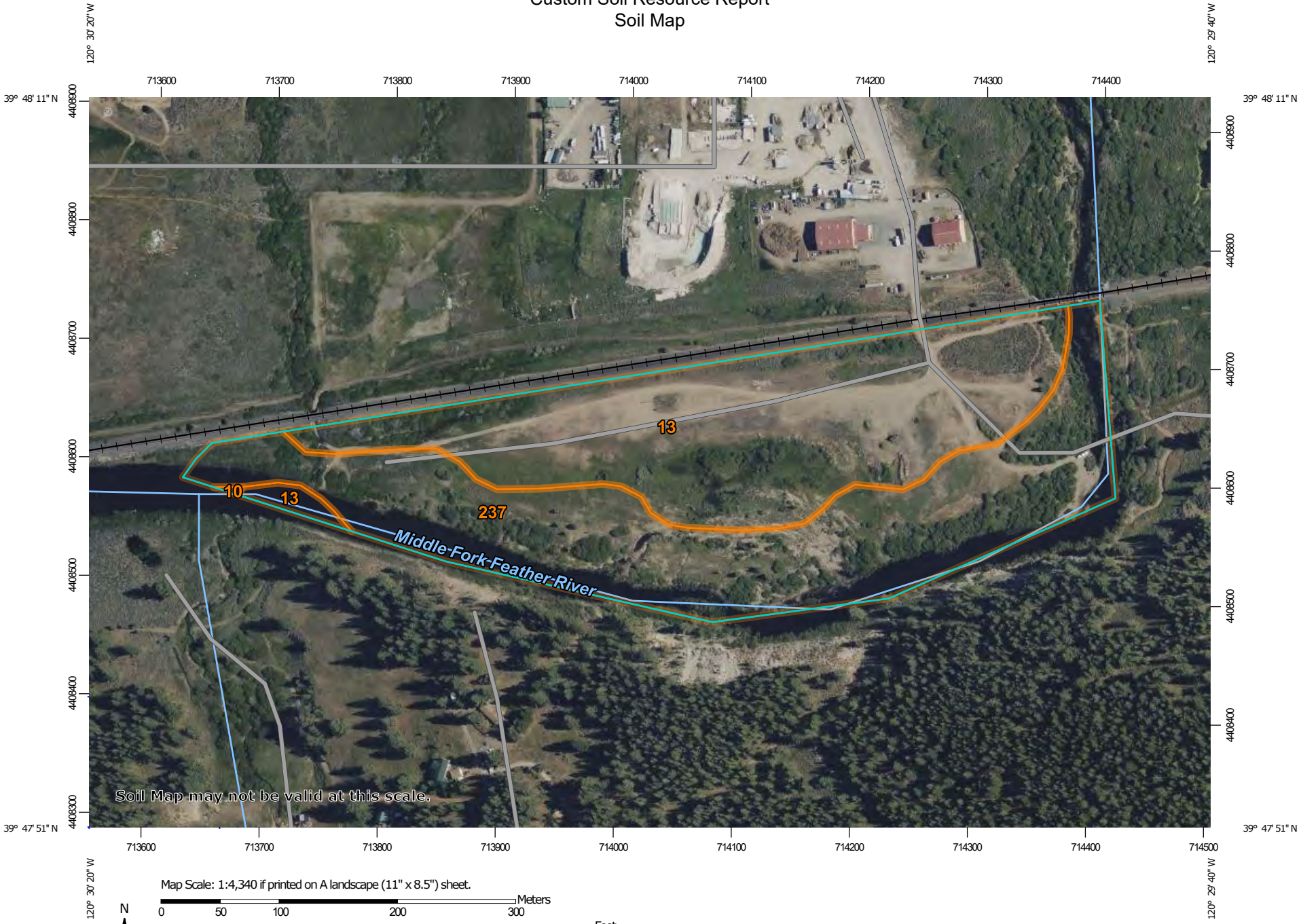
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,340 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Plumas National Forest Area, California
Survey Area Data: Version 17, Sep 7, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 8, 2019—Jun 21, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10	Badenaugh very gravelly loam, 2 to 5 percent slopes.	0.0	0.1%
13	Dotta loam, 2 to 5 percent slopes.	15.5	49.6%
237	Riverwash-Fluvents complex, 0 to 5 percent slopes.	15.7	50.3%
Totals for Area of Interest		**31.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Plumas National Forest Area, California

10—Badenaugh very gravelly loam, 2 to 5 percent slopes.

Map Unit Setting

National map unit symbol: htft
Elevation: 5,050 to 5,150 feet
Mean annual precipitation: 15 to 25 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 70 to 90 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Badenaugh and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Badenaugh

Setting

Landform: Stream terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 6 inches: very gravelly loam
H2 - 6 to 19 inches: very cobbly sandy clay loam
H3 - 19 to 30 inches: stratified extremely gravelly sandy loam to very cobbly sandy clay loam
H4 - 30 to 60 inches: gravelly loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: F022AW002CA - Alluvial Fans
Hydric soil rating: No

Minor Components

Ramelli

Percent of map unit: 10 percent

Hydric soil rating: No

Unknown

Percent of map unit: 5 percent
Hydric soil rating: No

Keddie

Percent of map unit: 5 percent
Hydric soil rating: No

13—Dotta loam, 2 to 5 percent slopes.

Map Unit Setting

National map unit symbol: htfx
Elevation: 5,050 to 5,150 feet
Mean annual precipitation: 15 to 25 inches
Mean annual air temperature: 55 to 57 degrees F
Frost-free period: 70 to 90 days
Farmland classification: Not prime farmland

Map Unit Composition

Dotta and similar soils: 85 percent
Minor components: 13 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dotta

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 15 inches: loam
H2 - 15 to 27 inches: sandy clay loam
H3 - 27 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R021XG910CA - Loamy
Hydric soil rating: No

Minor Components

Keddie

Percent of map unit: 8 percent
Hydric soil rating: No

Smithneck

Percent of map unit: 3 percent
Hydric soil rating: No

Dotta

Percent of map unit: 2 percent
Hydric soil rating: No

237—Riverwash-Fluvents complex, 0 to 5 percent slopes.

Map Unit Setting

National map unit symbol: htch
Elevation: 3,670 to 4,950 feet
Mean annual precipitation: 23 to 53 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 105 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Riverwash: 60 percent
Fluvents and similar soils: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Flood plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

H1 - 0 to 60 inches: stratified very stony loamy sand to very gravelly loam

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w

Hydric soil rating: Yes

Description of Fluvents

Setting

Landform: Flood plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 18 inches: sandy loam
H2 - 18 to 60 inches: stratified very gravelly loamy sand to loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: A
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix D

Northeast Information Center Non-Confidential Record Search

California Historical Resources Information System

BUTTE
GLENN
LASSEN
MODOC
PLUMAS
SHASTA
SIERRA
SISKIYOU
SUTTER
TEHAMA
TRINITY

Northeast Information Center
1074 East Avenue, Suite F
Chico, California 95926
Phone (530) 898-6256
neinfocntr@csuchico.edu

January 19, 2023

VESTRA Resources Inc.
5300 Aviation Drive
Redding, CA 96002
Attn: Matthew Hartt

IC File # NE23-37
Non-Confidential Records Search

RE: Portola Asphalt Plant Project
T22N, R13E, Section 3
USGS Blairsden (1972) 7.5'; Portola (1972) 7.5'; Blairsden (1956) 15'; & Portola (1950) 15' quadrangle maps
20.21 acres (Plumas County)

Dear Mr. Hartt

In response to your request, a records search for the project cited above was conducted by examining the official maps and records for historical resources and surveys in Plumas County. Historical resources in our inventory include archaeological objects, sites, landscapes, districts, and all manner of buildings and structures associated with past human activities. Please note that access to archaeological records is restricted to qualified individuals.

Results:

Archaeological Resources: According to our records, no resources of this type have been recorded within the project boundaries. In addition, forty-eight resources have been recorded within the one-mile vicinity.

Historic Properties: According to our records, no resources of this type have been recorded within or adjacent to the project boundaries. The Built Environment Resources Directory (BERD), which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places, lists no properties within or adjacent to the proposed project area. The BERD is available online at: https://ohp.parks.ca.gov/?page_id=30338

The USGS Blairsden (1972) 7.5'; Portola (1972) 7.5'; Blairsden (1956) 15'; & Portola (1950) 15' quadrangle maps depict archaeological sensitive areas within the project's region such as Feather River, roads, and Humbug Creek. Additional roads; as well as Humbug Valley, a sewage disposal, ponds, Plumas National Forest, the town of Delleker, structures, foundations, and trails are located in the general project vicinity.

A copy of the 1883 General Land Office (GLO) plat maps depicting waterways and historic roads within the project area is enclosed.

The project is located in a region utilized by Maidu populations at the time of Euro-American contact. Indigenous populations used the local region for seasonal and/or permanent settlement, as well as for the gathering of plants, roots, seeds, domestic materials, and hunting seasonal game. Historically, Euro-Americans utilized the region for mining and transportation opportunities.

Previous Investigations: According to our records, the project area has been partially surveyed for historical resources. Please refer to the list below.

Hamusek, Blossom (California State University, Chico)
1994 *RE: 5100 Forest Regulations Timber Harvest Plans THP #2-94-65 PLU (2) ARP #94-221.*
NEIC-000867A
Shaffer, Gary (California Department of Forestry and Fire Protection)
1994 *Archeological and Historical Resources Survey and Impact Assessment: Union Pacific THP.*
NEIC-000867

Literature Search: The official records and maps for archaeological sites and surveys in Plumas 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); **Built Environment Resource Directory** (2020); and **Handbook of North American Indians, Vol. 8, California** (1978).

Sensitivity Assessment and Recommendations:

Based upon the above information, the project area is archaeologically sensitive and has potential for the discovery of additional resources. We are unable to provide a sensitivity assessment based upon the above information alone; therefore, more research is needed to determine if the project area has the potential for discovery of archaeological resources.

Therefore, because the project area has not been surveyed for historical resources within the last ten years, we recommend that a professional archaeologist be contacted prior to ground disturbance. The project consultant can offer recommendations for avoidance and protection of any existing or newly identified resources. If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the

resources be assessed by a qualified specialist familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive. A list of qualified consultants is available online at www.chrisinfo.org.

During any phase of parcel development, if any potential prehistoric, protohistoric, and/or historic historical resources are encountered, all work should cease in the area of the find pending an examination of the site and materials by the project archaeologist. This request to cease work in the area of a potential historical resource find is intended for accidental discoveries made during construction activities and is not intended as a substitute for the recommended historical resources survey.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, historical resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Finally, Native American tribes have historical resource information not in the CHRIS Inventory, and the NAHC should be contacted at (916) 373-3710 for information regarding Native American representatives in the vicinity of the project.

Thank you for your dedication preserving Plumas County's and California's irreplaceable cultural heritage, and please feel free to contact us if you have any questions or need any further information or assistance.

Sincerely,

Ashlyn Weaver

Ashlyn Weaver, M.A.
Assistant Coordinator & GIS Specialist
Northeast Information Center
(530) 898-6256

Records Search Charge for IC File # NE23-37

The charge for this record search is **$150.00**. Please see the table below for an itemization.

THIS IS NOT AN INVOICE *		
Factor	**Charge**	**Your Charge**
Information Center Time	$150.00 per hour	$150.00 (1.0 hour)
Total Charge		**$150.00**

*An invoice will follow from Chico State Enterprises for billing purposes.

Appendix E

USDA Custom Soil Resource Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Plumas National Forest Area, California

January 4, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

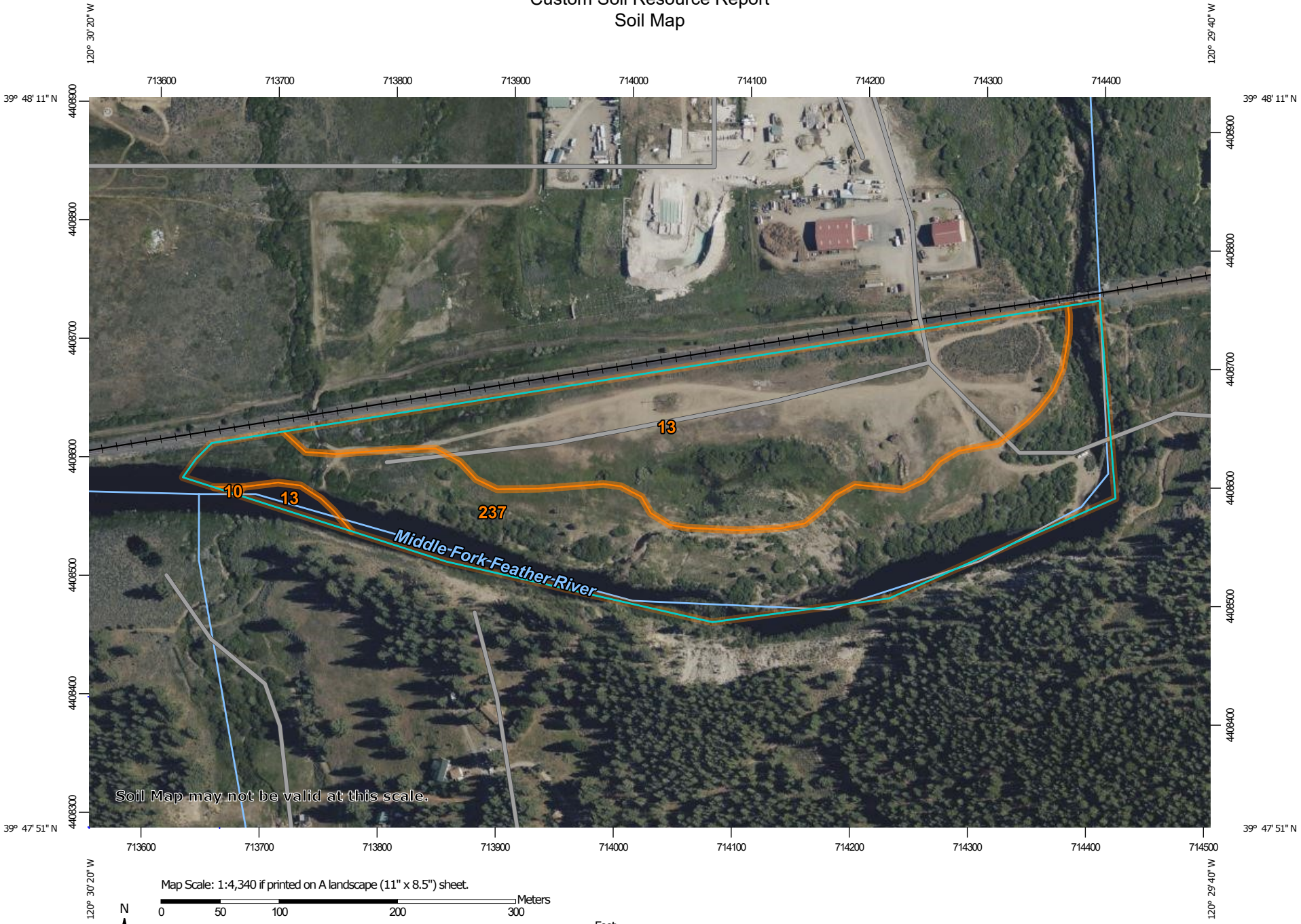
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


120° 30' 20" W
120° 29' 40" W
39° 48' 11" N
39° 47' 51" N
713600
713700
713800
713900
714000
714100
714200
714300
714400
714500
4408900
4408800
4408700
4408600
4408500
4408400
4408300
13
10
13
237
Middle Fork Feather River
Soil Map may not be valid at this scale.
Map Scale: 1:4,340 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 50 100 200 300
Feet
0 200 400 800 1200
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Plumas National Forest Area, California
Survey Area Data: Version 17, Sep 7, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 8, 2019—Jun 21, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10	Badenaugh very gravelly loam, 2 to 5 percent slopes.	0.0	0.1%
13	Dotta loam, 2 to 5 percent slopes.	15.5	49.6%
237	Riverwash-Fluvents complex, 0 to 5 percent slopes.	15.7	50.3%
Totals for Area of Interest		**31.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Plumas National Forest Area, California

10—Badenaugh very gravelly loam, 2 to 5 percent slopes.

Map Unit Setting

National map unit symbol: htft
Elevation: 5,050 to 5,150 feet
Mean annual precipitation: 15 to 25 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 70 to 90 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Badenaugh and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Badenaugh

Setting

Landform: Stream terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 6 inches: very gravelly loam
H2 - 6 to 19 inches: very cobbly sandy clay loam
H3 - 19 to 30 inches: stratified extremely gravelly sandy loam to very cobbly sandy clay loam
H4 - 30 to 60 inches: gravelly loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: F022AW002CA - Alluvial Fans
Hydric soil rating: No

Minor Components

Ramelli

Percent of map unit: 10 percent

Hydric soil rating: No

Unknown

Percent of map unit: 5 percent
Hydric soil rating: No

Keddie

Percent of map unit: 5 percent
Hydric soil rating: No

13—Dotta loam, 2 to 5 percent slopes.

Map Unit Setting

National map unit symbol: htfx
Elevation: 5,050 to 5,150 feet
Mean annual precipitation: 15 to 25 inches
Mean annual air temperature: 55 to 57 degrees F
Frost-free period: 70 to 90 days
Farmland classification: Not prime farmland

Map Unit Composition

Dotta and similar soils: 85 percent
Minor components: 13 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dotta

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 15 inches: loam
H2 - 15 to 27 inches: sandy clay loam
H3 - 27 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R021XG910CA - Loamy
Hydric soil rating: No

Minor Components

Keddie

Percent of map unit: 8 percent
Hydric soil rating: No

Smithneck

Percent of map unit: 3 percent
Hydric soil rating: No

Dotta

Percent of map unit: 2 percent
Hydric soil rating: No

237—Riverwash-Fluvents complex, 0 to 5 percent slopes.

Map Unit Setting

National map unit symbol: htch
Elevation: 3,670 to 4,950 feet
Mean annual precipitation: 23 to 53 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 105 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Riverwash: 60 percent
Fluvents and similar soils: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Flood plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

H1 - 0 to 60 inches: stratified very stony loamy sand to very gravelly loam

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w

Hydric soil rating: Yes

Description of Fluvents

Setting

Landform: Flood plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Typical profile

H1 - 0 to 18 inches: sandy loam
H2 - 18 to 60 inches: stratified very gravelly loamy sand to loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: A
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf