

NOTICE OF INTENT
To Adopt the Negative Declaration for the
Tulelake Street Project
March 25, 2021

Lead Agency: **City of Tulelake**
Tulelake, California 96134

Project Title: Tulelake Street Project

Project Location: The proposed project is located on ten streets within the city limits of Tulelake (Siskiyou County), California. The project area is within Section 35, Township 48N, Range 4E.

The following streets are to be repaved:
Siskiyou Street, from B Street north to Highway Street;
First Street, from B Street north to Highway Street;
Main Street, from D Street north to C Street;
Intersection of Main Street and D Street;
Fifth Street, from E Street north to D Street;
Fifth Street, from F Street north to E Street;
Main Street, from G Street north to E Street;
Park Street, from G Street north to E Street; and
G Street, from Park Street east to Main Street.

Project Description: The City of Tulelake proposes to rehabilitate ten streets within the city limits of Tulelake, California by grinding and inlaying of existing pavement.

The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk.

The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot.

Public Review Period: The 30-day public review period for the Negative Declaration commenced on December 20, 2020 and ends on January 20, 2021 for any interested and concerned individuals and public agencies to submit written comments on the document. Copies of the Negative Declaration are available for review at the Siskiyou County Planning Department located at 806 South Main Street, Yreka, California 96097.

Public Meeting: Siskiyou County will consider the adoption of the Negative Declaration at a future meeting of the planning commission. The date of the meeting is to be determined at a later time.

Written comments on the Negative Declaration must be addressed to:

City of Tulelake
591 Main Street
Tulelake, California 96134

Comments may also be sent via email to tulelakepublicworks@cot.net.

Mitigated Negative Declaration Tulelake Street Project

Lead Agency: City of Tulelake
Tulelake, California 96134

Project Title: Tulelake Street Project

Project Location: The proposed project is located on ten streets within the city limits of Tulelake (Siskiyou County), California. The project area is within Section 35, Township 48N, Range 4E.
The following streets are to be repaved:
Siskiyou Street, from B Street north to Highway Street;
First Street, from B Street north to Highway Street;
Main Street, from D Street north to C Street;
Intersection of Main Street and D Street;
Fifth Street, from E Street north to D Street;
Fifth Street, from F Street north to E Street;
Main Street, from G Street north to E Street;
Park Street, from G Street north to E Street; and
G Street, from Park Street east to Main Street.

Project Description: The City of Tulelake proposes to rehabilitate ten streets within the city limits of Tulelake, California by grinding and inlaying of existing pavement.

The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk.

The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot.

Proposed Finding: The City of Tulelake conducted an Environmental Initial Study, which determined the proposed project would not have a significant adverse effect on the environment.

Documentation: The attached Environmental Initial Study documents the reasons to support the above determination.

Results of Public Review: Public review period from March 25, 2021 to April 25, 2021.

No comments were received during the public input period.

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Air Quality

AIR-1:

The following controls shall be implemented at the construction site to control construction emissions:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per week. The use of dry power sweeping shall be prohibited.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points regarding maximum idling time.
- All construction 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.
- The contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Siskiyou County Air Pollution District's office phone number shall also be visible to ensure compliance with applicable regulations.

Timing/Implementation: During construction

Monitoring/Enforcement: Siskiyou County

Cultural Resources

CULT-1:

If prehistoric or historical archaeological deposits or features are discovered during project activities, all work within 25 feet of the discovery shall be redirected until a qualified archaeologist assess the situation and provides recommendations. Adverse effects to archaeological deposits should be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for the California Register of Historical Resources eligibility. If the resources are not eligible, avoidance is not necessary. If the resources are eligible, they will

need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessing recovered archaeological materials at an appropriate curation facility; and public outreach, such as brochures or displays at libraries and museums. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City and the Northwest Information Center.

CULT-2:

If archaeological deposits are identified during project activities, a qualified archaeologist shall first determine whether such deposits are historical resources as defined in Section 15064.5. If the deposit qualifies as a unique archaeological resource, it will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessing recovered archaeological materials at an appropriate curation facility; and public outreach, such as brochures or displays at libraries and museums. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City and the Northwest Information Center.

CULT-3:

In the event that human remains are encountered, work within 25 feet of the discovery shall be redirected at the County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel should not collect or move any human remains and associated materials. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City and the Northwest Information Center.

Timing/Implementation: During construction

Monitoring/Enforcement: Siskiyou County

Greenhouse Gas Emissions

GHG-1:

To the extent feasible, the following measures shall be incorporated into the design and construction of the project:

- On-site idling of construction equipment shall be minimized (no more than 5 minutes maximum);
- Biodiesel shall be used as an alternative fuel to diesel for at least 15 percent of the construction vehicles/equipment used if there is a biodiesel station within 5 miles of the project site;
- At least 10 percent of building materials shall be local to the extent feasible; and
- At least 50 percent of construction waste or demolition materials shall be recycled.

Timing/Implementation: During construction

Monitoring/Enforcement: Siskiyou County

Hazards and Hazardous Materials**HAZ-1:**

Project construction plans shall include emergency procedures for responding to hazardous materials releases for materials that will be brought onto the site as part of construction activities. The emergency procedures for hazardous materials releases shall include the necessary personal protective equipment, spill containment procedures, and training of workers to respond to accidental spills/releases. All use storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities shall be performed in accordance with existing local, state, and federal hazardous materials regulations.

Timing/Implementation: During construction

Monitoring/Enforcement: Siskiyou County

Noise**NOISE-1:**

During construction, the City shall require the contractor to ensure that all equipment is maintained in proper working order, including proper muffling.

NOISE-2:

During construction, the contractor shall locate portable equipment as far as possible from adjacent residences.

NOISE-3:

During construction, the contractor shall store and maintain equipment as far as possible from adjacent residences.

NOISE-4:

If construction-related noise exceeds City standards for non-transportation sources, the City shall require the contractor to implement additional appropriate noise-reducing measures, including but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around construction noise sources.

Timing/Implementation: During construction

Monitoring/Enforcement: Siskiyou County

Initial Study for Tulelake Street Project

Tulelake, CA

Initial Study

Prepared for:
City of Tulelake
December 2020



421 Commercial Street
Klamath Falls, OR 97601
andrea@rabeconsulting.com
(541) 891 - 2137

PROJECT DESCRIPTION	3
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	6
EVALUATION OF ENVIRONMENTAL IMPACTS	7
ENVIRONMENTAL CHECKLIST	8
1. Aesthetics.....	8
2. Agriculture and Forestry Resources.....	10
4. Biological Resources	15
5. Cultural Resources	19
7. Geology and Soils.....	25
8. Greenhouse Gas Emissions.....	28
9. Hazards and Hazardous Materials	30
10. Hydrology and Water Quality	33
11. Land Use and Planning.....	37
12. Mineral Resources	38
13. Noise	39
14. Population and Housing.....	42
15. Public Services	43
16. Recreation.....	45
17. Transportation/Traffic	47
18. Utilities and Service Systems	49
19. Mandatory Findings of Significance.....	51
REPORT PREPARERS AND REFERENCES	53
A. REPORT PREPARERS.....	53
B. REFERENCES	53
APPENDIX.....	56

PROJECT DESCRIPTION

1. Project title:

Tulelake Street Project

2. Lead agency name and address:

City of Tulelake
591 Main Street
Tulelake, California 96134

3. Contact person and phone number:

Brett Nystrom	City of Tulelake
City Manager	591 Main Street
(530) 667-5522	Tulelake, California 96134
tulelakepublicworks@cot.net	

4. Project Location:

The proposed project is located on ten streets within the city limits of Tulelake (Siskiyou County), California. The project area is within Section 35, Township 48N, Range 4E. The project consists of rehabilitating ten streets in Tulelake through the grinding and inlaying of existing pavement. The following streets are to be repaved:

Siskiyou Street, from B Street north to Highway Street;
First Street, from B Street north to Highway Street;
Main Street, from D Street north to C Street;
Intersection of Main Street and D Street;
Fifth Street, from E Street north to D Street;
Fifth Street, from F Street north to E Street;
Main Street, from G Street north to E Street;
Park Street, from G Street north to E Street; and
G Street, from Park Street east to Main Street.

The area is zoned for commercial use. See Figure 1 for project location.

5. Project sponsor's name and address:

City of Tulelake
591 Main Street
Tulelake, California 96134

6. General Plan designation:

Residential/Commercial

7. Zoning:

Commercial Development/Residential

8. Description of project:

The City of Tulelake proposes to rehabilitate ten streets within the city limits of Tulelake, California by grinding and inlaying of existing pavement.

The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk.

The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot.

9. Surrounding land uses and setting:

The project is located within the city limits of Tulelake (Siskiyou County), California. Tulelake lies south of the Oregon-California border, with the Tule Lake Wildlife Refuge located west of the city. The city of Tulelake lies in the Tule Lake Basin, on the outskirts of the Klamath Lake Basin (USDA NRCS 2019b). Lost River runs north/south along the west side of Tulelake and flows into Tule Lake.

The area surrounding the project are zoned as commercial and residential.

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

Not Applicable

FIGURE 1



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" or "Potentially Significant Unless Mitigated" as indicated by the checklist on the following pages

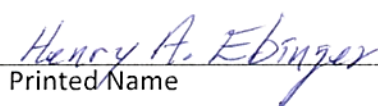
- | | | |
|---|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural/Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards/Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/ Planning | <input type="checkbox"/> Minerals |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> 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.
- X 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 "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Signature


Printed Name

1/20/2021

Date

City of Tulelake

Lead Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

The section identifies the potential environmental impacts of this project by answering questions from Appendix G of the CEQA Guidelines, the Environmental Checklist Form. The environmental issues evaluated in this chapter include:

- Aesthetics
- Agricultural/Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

All analyses take account the entire action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Impacts are categorized as follows:

No Impact: when adequately supported if referenced information sources show that the impact simply does not apply to projects like the one involved. A No Impact Answer is explained where it is based on project-specific factors as well as general standards.

Less Than Significant Impact: The impact would not result in the substantial adverse change in the environment. This impact level does not require mitigation measures.

Less Than Significant with Mitigation Incorporated: An impact that may have a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (CEQA Guidelines Section 15382). However, the incorporation of mitigation measures that are specified after analysis would reduce the project-related impact to a less than significant level.

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

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Aesthetics				
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The project is located within the city limits of Tulelake, California. The streets which will be rehabilitated are currently paved. Commercial and residential areas, with businesses and/or residences on either side of the streets.

The project area is not located along a Scenic Byway or in a scenic corridor.

Due to the project's location and the surrounding buildings, there is a limited view of the surrounding area.

Discussion

a) *Have a substantial adverse effect on a scenic vista?*

No Impact. The project sites are in a relatively flat area. The streets which will be rehabilitated are currently paved. The City of Tulelake has not designated any scenic vistas in the vicinity of the project area. Therefore, the proposed project would not have a substantial adverse effect on scenic vistas. This impact is considered less than significant.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?*

No Impact. The project site is located within the vicinity of one State Scenic Highway: Volcanic Legacy Scenic Byway (California Highway 139) runs northwest/southeast through Oregon and California (America's Scenic Byways 2020). The proposed project would not substantially damage scenic resources, including trees and is not located near any rock outcroppings or historic buildings (COHP 2018). Therefore, no significant impacts to scenic resources would occur with implementation of the proposed project.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. Existing road surfaces are currently paved, due to this development of the proposed project would not result in a visual change to the project site.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. Existing streetlights, vehicle head and taillights, and lighting associated with the existing businesses are the existing sources of light and glare in the project area. The project does not include any new sources of light, due to this development of the project would not result in new sources of substantial light or glare that would adversely affect day or nighttime views in the area.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	--------------

2. Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12223(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Affected Environment

The project sites are on existing road surfaces that are currently paved. Soils are classified as the Tulebasin: a mucky, silty, clay loam with lacustrine deposits derived from igneous and sedimentary rock (WSS 2020). Due to the existing paved road surfaces and poor drainage, this soil would not be suitable for woodland or farmlands under its natural conditions. See Appendix B for Agriculture and Forestry Resources.

Discussion

- 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 a non-agricultural use?*

No Impact. The proposed project area is in an area categorized as 'Urban and Built-Up Land' (CDOC 2019c). This classification is defined as land occupied by structures with a building density of at least 1 unit to 1.5 acres, or residential, industrial, and commercial zones (CDOC 2019c). The property is located in commercially and residentially zoned areas within city limits. The proposed project would replace existing pavement. There will be no impact to farmland.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. The project site is not zoned for agricultural use and is not under a Williamson Act contract. Therefore, the proposed project would not 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))?*

No Impact. The project area contains no forest or timberland and is not zoned for forest land, timberland, or timberland production. There will be no impact.

- d) *Result in the loss of forest land or conversion of forest land to no-forest use?*

No Impact. See response (c) above.

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. The proposed project would not involve other changes in the existing environment, which could result in the conversion of farmland to non-agricultural use.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Air Quality				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The project site is located in the Northeast Plateau Air Basin Region (County of Siskiyou California 2020). The state air quality is overseen by the California Air Resources Board district with regulatory oversight of local air quality control districts. The local air quality control district is the Siskiyou County Air Pollution Control District (SCAPCD). According to SCAPCD, the primary sources of air pollution are wildfires, managed burning and disposal, wood burning stoves, unpaved road dust, farming operations, and motor vehicles.

The SCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates agricultural and non-agricultural burning. Other SCAPCD responsibilities include monitoring air quality, preparing air quality plans, and responding to citizen air quality complaints (County of Siskiyou California 2020).

Currently, the Siskiyou County is in attainment/unclassified for ozone and particulate matter (PM₁₀ and PM_{2.5}) as of August 2019 (California air Resources Board 2020).

See Appendix C for Air Quality Resources.

Discussion

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. Siskiyou County SCAPCD monitors and reports the air quality of the county through the air quality monitor site located in Yreka, California. This district monitors local air quality and has jurisdiction over the project area and enforces air quality plans. This project is not expected to conflict with or obstruct implementation of the air quality plan in Siskiyou County.

- 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?*

Less Than Significant Impact. As discussed in response (a), based on project-related emission estimates, the proposed project would not result in substantial impacts to the levels of any criteria pollutants either during operation or construction of the proposed project.

- c) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Sensitive receptors adjacent to the project sites include neighboring businesses and their customers and residential areas adjacent to the commercial properties. As described in response (a) above, the proposed project would generate short-term construction emissions from particulate matter. Implementation of Mitigation Measure AIR-1 would reduce potential impacts related to particulate matter and fugitive dust to a level below significance.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates and fugitive dust as well as a small quantity of construction equipment pollutants (i.e. diesel-fueled vehicles and equipment). As described in response (a) above, impacts would be of short duration.

Sensitive receptors are not expected to be exposed to substantial long-term pollutant concentrations, and no significant air quality impacts would result from the proposed project.

- d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less Than Significant Impact. The project would not generate emissions adversely affecting people. As described in responses (a)-(c) above, the project would be short in nature and generate minimal airborne particulates that could be exposed to sensitive receptors with implementation of Mitigation Measure AIR-1.

Mitigation Measures

The following controls shall be implemented at the construction site to control and reduce construction emissions:

Mitigation Measure AIR-1

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

- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per week. The use of dry power sweeping shall be prohibited.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points regarding maximum idling time.
- All construction 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.
- The contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Siskiyou County Air Pollution District's office phone number shall also be visible to ensure compliance with applicable regulations.

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

Plan, or other approved local,
regional, or state habitat conservation
plan?

Affected Environment

The proposed project is located within commercial and residential zoned areas in the city of Tulelake, California. The project would rehabilitate existing road structures that are currently paved.

The area where the city of Tulelake is situated was once the lakebed of Tule Lake. The lake has since been drained and is a national wildlife refuge located approximately 1.5 miles south of the city. The Lost River, located northwest of the city, flows into Tule Lake. A search was conducted on the Information Planning and Consultation (IPaC).

No fish are located within the project area.

The project sites are existing road structures that are currently paved, due to this they do not exhibit natural vegetation.

On November 18, 2020, an IPaC report was obtained from USFWS. The consultation code is 08EKLA00-2021-SLI-0018 and the event code is 08EKLA00-2021-E-00035.

There are no designated critical habitats for fish, plants, or wildlife in the proposed project sites.

The IPaC report for the Project site indicates the need for consideration of five species. These species include yellow-billed cuckoo (*Coccyzus americanus*), Lost River sucker (*Deltistes luxatus*), shortnose sucker (*Chasmistes brevirostris*), Greene's tuctoria (*Tuctoria greenei*), and slender orcutt grass (*Orcuttia tenuis*).

On December 20, 2020, a wildlife list was obtained from the California Natural Diversity Database (CNDDDB). The CNDDDB list for the Project site indicates the need for consideration of twenty-seven species. These species include golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsoni*), western snowy plover (*Charadrius alexandrinus nivosus*), prairie falcon (*Falco mexicanus*), greater sandhill crane (*Antigone canadensis tabida*), purple martin (*Progne subis*), bank swallow (*Riparia riparia*), tricolored blackbird (*Agelaius tricolor*), black tern (*Chlidonias niger*), California gull (*Larus californicus*), American white pelican (*Pelecanus erythrorhynchos*), greater sage-grouse (*Centrocercus urophasianus*), Columbian sharp-tailed grouse (*Tympanuchus phasianellus columbianus*), long-billed curlew (*Numenius americanus*), short-eared owl (*Asio flammeus*), white-faces ibis (*Plegadis chihi*), short-nosed sucker (*Chasmistes brevirostris*), Lost River sucker (*Deltistes luxatus*), blue chub (*Gila coerulea*), Crotch bumble bee (*Bombus crotchii*), desert bighorn sheep (*Ovis canadensis nelsoni*), gray wolf (*Canis lupus*), American badger (*Taxidea taxus*), Townsend's big-eared bat (*Corynorhinus townsendii*), dotted onion (*Allium punctum*), Columbia yellow cress (*Rorippa columbiae*), and Newberry's cinquefoil (*Potentilla newberryi*).

The National Wetland Inventory (NWI) map included in the wetland delineation did not indicate the presence of any wetlands within the project area.

See Appendix D for Biological Resources.

Discussion

- 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 Wildlife or U.S. Fish and Wildlife Service?*

No Impact. As described above, the project area is located in commercial and residential zoned areas within the city limits of Tulelake. The site is previously disturbed and will not have an adverse effect on any species as the project area is not located within the habitat of the listed species. The project area consists of currently paved roads which is not habitat for any of the sensitive species.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

No Impact. As described in (a) above, the site is not located in a riparian habitat or other sensitive natural community.

- 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?*

No Impact. As described above in (a) and (b), the site is not located in a wetland and will not have an adverse effect to a wetland, marsh, vernal pool, waterway, or other wetland resource.

- 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?*

No Impact. As described in previous responses (a)-(c), the site is not located in an area that would interfere with the movement of any native resident or migratory fish or wildlife species, 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?*

No Impact. As described in previous responses, the site is not located in an area that would conflict with any local policies or ordinances protecting biological resources.

- 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?*

No Impact. The project site is not located within any lands covered by the Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mitigation Measures

None required due to no negative impacts.

	Potentially significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Cultural Resources				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) 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 Resource Code § 5020.1 (k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

An initial record check found no historic properties listed on or within a 1-mile radius of the proposed project. CEQA Guidelines Section 15064.5(3) states, 'Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources...' No historic properties, buildings, structures, objects, etc. have been identified, noted, or recorded on or around the project area.

AB 52 (enacted July 1, 2015) established 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 as 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:

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

AB52 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."

The City of Tulelake is in the ancestral territory of the Klamath and Modoc peoples. Tribal consultation letters describing the project proposal and project location were sent to the Klamath Tribes and Modoc Tribe of Oklahoma on December 8, 2020. The Klamath Tribes responded on December 14, 2020, stating if the project has "the ability to disturb ground" a cultural resource survey needs to be completed and monitors present during ground disturbing activities. The proposed action is not disturbing ground, as the project involves grinding and relaying of existing pavement and non-native existing underlayment gravel. The Modoc Tribe of Oklahoma did not respond.

The Sacred Lands search results were negative.

Discussion

- a) *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Less Than Significant with Mitigation Incorporated. The project area contains no recorded resources listed in the California Office of Historic Preservation's *Historic Properties Directory*, the *National Register of Historic Place*, the *California Register of Historical Resources*. Implementation of Mitigation Measure CULT-1, described in the Mitigation Measures of this section, would reduce potential impacts from construction activities to a less-than-significant level.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less Than Significant with Mitigation Incorporated. The project site contains no recorded archaeological resources as defined in CEQA Guidelines Section 15064.5(3)(c) and CEQA Section 21083.2. See section (a) above for further information of property. However, intact subsurface archaeological deposits, which may qualify as archaeological resources, may be located within the project site, however disturbed. Implementation of Mitigation Measure CULT-2, described below in the Mitigation Measures section, would reduce potential impacts to unidentified archaeological resources to a less-than-significant level.

- c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

Less than Significant with Mitigation Incorporated. No recorded human remains have been identified within the project site from previous disturbance. See section (a) above for property disturbance information. Though the property has had ground disturbing activities in the past, remains may exist in the project area. Implementation of Mitigation Measure CULT-3, described in the Mitigation Measures of this section, would ensure that potential impacts to human remains would be reduced to a less-than-significant level.

- d) *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 Resource Code § 5020.1 (k)?*

No Impact. The project area is not listed, nor eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code § 5020.1 (k).

- 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 Resource 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?*

No Impact. The City of Tulelake is the lead agency and has not determined a resource or resources within the project area to be a significant resource to a California Native American tribe. On November 4, 2020, Rabe Consulting contacted the Associate Governmental Program Analyst for the Native American Heritage Commission, for a list of Tribes to contact. They responded to Rabe Consulting with a list of Tribes on November 20, 2020. The list of Tribes included, the Klamath Tribes and the Modoc Tribe of Oklahoma. Tribal consultation letters were sent to the Klamath Tribes and the Modoc Tribe of Oklahoma on December 8, 2020. The Klamath Tribes responded on December 14, 2020, stating if the project has “the ability to disturb ground” a cultural resource survey needs to be completed and monitors present during ground disturbing activities. The proposed action is not disturbing ground, as the project involves grinding and relaying of existing pavement and non-native existing underlayment gravel. The Modoc Tribe of Oklahoma did not respond.

Mitigation Measures

Mitigation Measure CULT-1: If prehistoric or historical archaeological deposits or features are discovered during project activities, all work within 25 feet of the discovery shall be redirected until a qualified archaeologist assesses the situation and provides recommendations. Adverse effects to archaeological deposits should be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for the California Register of Historical Resources eligibility. If the resources are not eligible, avoidance is not necessary. If the resources are eligible, they will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessing recovered archaeological materials at an appropriate curation facility; and public outreach, such as brochures or displays at libraries and museums. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City and the Northwest Information Center.

Mitigation Measure CULT-2: If archaeological deposits are identified during project activities, a qualified archaeologist shall first determine whether such deposits are historical resources as defined in Section 15064.5. If the deposit qualifies as a unique archaeological resource, it will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessing recovered archaeological materials at an appropriate curation facility; and public outreach, such as brochures or displays at libraries and museums. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City and the Northwest Information Center.

Mitigation Measure CULT-3: In the event that human remains are encountered, work within 25 feet of the discovery shall be redirected at the County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel should not collect or move any human remains and associated materials.

If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City and the Northwest Information Center.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Energy				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The CEQA Guidelines Appendix F states that energy consuming equipment and processes, which will be used during construction or operation, such as energy requirements of the project by fuel type and end use; energy conservation equipment and design features; energy supplies that would serve the project; and total estimated daily vehicle trips to be generated by the project and the additional energy consumed per trip by mode; shall be taken into consideration when evaluating energy impacts.

The proposed project would follow policies and regulations set forth by the Siskiyou County in the General Plan.

Discussion

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Less than Significant Impact. As described above, the project is located within city limits in commercial and residential zoned areas. Energy used during construction will be non-renewable in the form of diesel-powered vehicles and equipment.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

No Impact. The project will rehabilitate existing roads that are currently paved, due to this, the project will not conflict or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Geology and Soils				
Would the project:				
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-Proilo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The project area is situated in the Modoc Plateau geomorphic province, between the Saddle Blanket Fault Zone to the immediate east, the Gillem Fault system to the immediate west, and the Big Crack Fault to the south. The Gillem-Big Crack fault system is a 30-km long, approximately 15-km wide zone of north striking extensional faults (CDC 2019b, USGS 2019b). Though these fault systems surround the city of Tulelake, the area is not very seismically active, with no known earthquakes originating from them.

The project site does not lie within an Alquist-Priolo Special Studies Zone.

The City of Tulelake is situated in the Tule Lake subbasin of the Upper Klamath River Groundwater Basin. Tulelake sump is located southwest of the city and all that remains of the Tulelake waterbody.

Discussion

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?*

No Impact. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. The nearest fault is the Gillem-Big Crack fault system approximately 10 miles to the southwest. No active or potentially active faults have been mapped at the project site and the project is not disturbing ground below the existing road bed and pavement; therefore, potential for fault rupture at the site is negligible.

- ii. *Strong seismic ground shaking?*

No Impact. The project site and the entire Tulelake basin is in a seismically inactive region. The project does not include impact activities, such as pile driving or blasting.

- iii. *Seismic-related ground failure, including liquefaction?*

No Impact. Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. The soils in the project area are poorly drained, with a rare flood frequency and a ponding frequency of 0 (California Soil Resource 2020). For liquefaction to occur, the soils must be loose, granular sediment, there must be saturation of the sediment, and strong shaking. As discussed above, the soil is Tulebasin mucky, silty, clay-loam with poorly drained soils typical of lake basins (USGS 2019a).

iv. Landslides?

No Impact. The project area is situated on a 0-1% slope. Landslides are not prominent in the area and are not considered a significant threat to county inhabitants and/or visitors to the region.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact. Implementation of the proposed project would include rehabilitation through grinding and inlaying of existing pavement. The total depth of rehabilitation is 1 foot. Due to the proposed project consisting of existing road surfaces that are currently paved, there will be a no impact to soil erosion and loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. As discussed above (a)(iii), the soils on site are classified as a Tulebasin mucky, silty, clay-loam with poorly drained soils typical of lake basins (USGS 2019a). The project area is situated on a 0-1% slope. Landslides are not prominent in the area and are not considered a significant threat to county inhabitants and/or visitors to the region.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. Expansive soil is not present within the project area.

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?

No Impact. Septic tanks and alternative wastewater disposal systems would not be installed as part of this project. Therefore, implementation of the proposed project would not result in impacts to soils associated with the use of such wastewater treatment systems.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. There is no known unique paleontological resource, site, or unique geologic feature in project area.

Mitigation Measures

None required due to no negative impacts.

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

Affected Environment

California adopted Assembly Bill (AB) 32 and Senate Bill (SB) 97 to establish Greenhouse Gas reduction targets. These bills have determined that Greenhouse Gas emissions relate to global climate change and are a source of adverse environmental impacts. The County of Siskiyou has not established significant criteria for greenhouse gas emissions generated by a project and many regulatory agencies are sorting through suggested threshold and/or making project-by-project analyses. This approach is consistent with that suggested by CAPCOA and its technical advisory entitled *CEQA and Climate Change: Addressing Climate Change through the California Environmental Quality Act Review (California Air Pollution Control Officers Association [CAPCOA] 2008)*:

“In the absence of regulatory standards for GHG (Greenhouse Gas) emissions or other specific data to clearly define what constitutes a ‘significant project’, individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice.”

The impact that GHG emissions have on global climate change does not depend on whether the emissions were generated by stationary, mobile, or area sources, or whether they were generated in one region or another. Thus, consistency with the state’s requirements for GHG emissions reductions is the best metric for determining whether the proposed zoning text amendment would contribute to global warming.

Discussion

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less than Significant Impact. As discussed in the Air Quality section above, there would be some impact during construction due to the use of heavy equipment (i.e. diesel powered), and airborne particles (i.e. dust). Also mentioned above, this would be for a short duration until the project is complete. This would include combustion emissions during construction from various sources. During site preparation and construction of the project, Green House Gases would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate the combustion of fossil-based fuels creates Green House Gasses such as carbon dioxide, methane, and nitrous oxide. Furthermore, methane is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Implementation of Mitigation Measure GHG-1 would ensure that the proposed project would not generate greenhouse gas emissions that may have a significant impact on the environment, based on any applicable threshold of significance.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Mitigation Measures

Mitigation Measure GHG-1: To the extent feasible, the following measures shall be incorporated into the design and construction of the project:

- On-site idling of construction equipment shall be minimized (no more than 5 minutes maximum);
- Biodiesel shall be used as an alternative fuel to diesel for at least 15 percent of the construction vehicles/equipment used if there is a biodiesel station within 5 miles of the project site;
- At least 10 percent of building materials shall be local to the extent feasible; and
- At least 50 percent of construction waste or demolition materials shall be recycled.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
9. Hazards and Hazardous Materials				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

risk of loss, injury or death involving
wildland fires?

Affected Environment

Construction debris will be hauled offsite to a permitted landfill. The proposed action will not generate hazardous waste materials, including asbestos-containing building materials and lead-based paint.

Discussion

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

No Impact. The proposed land use would be a street, as the project is to rehabilitate existing streets that are currently paved. Normal operations would not introduce potentially hazardous materials.

While gas and diesel fuel would typically be used by construction vehicles, Best Management Practices (BMPs) would be utilized to ensure that no construction-related fuel hazards occur. Use, storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities would be performed in accordance with existing local, state, and federal hazardous materials regulations. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- 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?*

Less Than Significant with Mitigation Incorporated. Construction activities would include the use of ordinary equipment fuels and fluids. In the unlikely event of a spill, fuels would be required to be controlled and disposed of in accordance with county and State regulations. Implementation of Mitigation Measure HAZ-1 would ensure that handling of materials during construction activities would not create a hazard to the public or the environment, thereby reducing potential impacts to less-than-significant levels.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant with Mitigation Incorporated. Tulelake Basin Elementary School and Tulelake High School are located within one-quarter mile of the project site. Implementation of Mitigation Measure HAZ-1 would ensure that handling of materials during construction activities would not create a hazard to the schools, thereby reducing potential impacts to less-than-significant levels.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. The proposed land use would be a street, as the project is to rehabilitate existing streets that are currently paved. There are no known hazardous materials sites located on the project sites.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

No Impact. The project site is not located within an airport land use plan, or within two miles of a public airport or public use airport. The proposed project would not 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?*

Less Than Significant. The proposed project is the rehabilitation of existing, paved streets. Improvements to streets would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Flagging of closed lanes could slightly delay the emergency response time, but would not lead to a significant impact.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

No Impact. Due to the project's location within city limits, there is an extremely low possibility of it exposing people or property to a significant risk of loss, injury, or death involving wildland fires.

Mitigation Measures

Mitigation Measure HAZ-1: Project construction plans shall include emergency procedures for responding to hazardous materials releases for materials that will be brought onto the site as part of construction activities. The emergency procedures for hazardous materials releases shall include the necessary personal protective equipment, spill containment procedures, and training of workers to respond to accidental spills/releases. All use storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities shall be performed in accordance with existing local, state, and federal hazardous materials regulations.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Hydrology and Water Quality				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
I. Result in a substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IV. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Affected Environment

The City of Tulelake lies south of the Oregon-California border, with the Tule Lake Wildlife Refuge located west of the city. The city lies in the Tule Lake Basin, on the outskirts of the Klamath Lake Basin (USDA NRCS 2019b). Lost River runs north/south along the west side of Tulelake and flows into Tule Lake. The city is situated of what was once a shallow lake stretching from Sheepy Peak Ridge to the west, and approximately 13 miles east. Tule Lake was drained to create approximately 60,000 acres of agricultural farmlands and development.

Water quality is regulated by the U.S. Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES), which controls the discharge of pollutants to water bodies from point and non-point sources.

Groundwater is regulated by the Sustainable Groundwater Management Act (SGMA), which was signed into legislation in 2014. This act requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. The Tule Lake basin is categorized as a medium priority basin (CDWR 2020). The Siskiyou County Flood Control and Water Conservation District, the Siskiyou County Board of Supervisors, the Tulelake Irrigation District, and the City of Tulelake serves on the Groundwater Sustainability Agency (GSA). Together, the GSA's are required to develop Groundwater Sustainability Plans for the Tule Lake subbasin by January 31, 2022 that will assess the current and projected future conditions of the basins. They will also establish management, monitoring activities and long-term goals.

Discussion

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

No Impact. The proposed project would not violate water quality standards or discharge requirements. The project is not in the vicinity of waterbodies or wetlands; therefore, the will not be discharges which could affect 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?*

No Impact. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge as it would not draw on groundwater as a source of water supply.

- 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 a substantial erosion or siltation on- or off-site?*

No Impact. The proposed project will not result in substantial erosion or siltation on- or off-site. The project area is currently paved and will remain paved after project completion. Therefore, there is no exposed soils for erosion to occur.

- ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*

No Impact. The proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site as the project does not increase the amount of impervious surface. Therefore, this impact is considered less than significant.

- 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?*

No Impact. The proposed project would not create or contribute runoff water which would exceed the capacity of the existing system nor would it provide substantial additional sources of polluted runoff. The project does not create impervious surfaces and therefore does not provide substantial additional sources of polluted runoff. The amount of runoff will be the same before and after project implementation.

- iv. *Impede or redirect flood flows?*

No Impact. The proposed project would not significantly impede or redirect flood flows.

- d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

No Impact. There are no impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation as the project is located inland from the coast, in an area with an average rainfall of 11 inches, and averages 23 inches of snow per year.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

No Impact. The proposed project would not conflict with or obstruct implementation of a water quality control plan or substantial groundwater management plan. As discussed, the Groundwater Management Plan has not been implemented at the time of this study.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Land Use and Planning				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Property is located within city limits of Tulelake on existing paved, road surfaces. The project is in commercial and residential zoned areas.

Discussion

a) *Physically divide an established community?*

No Impact. The proposed project would not physically divide an established community. The Property is located within city limits and would be the rehabilitation of existing paved streets.

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?*

No Impact. The existing road surfaces are paved, and the project is in commercial and residential zoned areas. Due to this the proposed project would not impact nor conflict with any land use plan, policy, or regulation.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
12. Mineral Resources				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat and oil-bearing rock, but excluding geothermal resources, natural gas and petroleum. Rock, sand, gravel and earth are also considered minerals by the Department of Conservation when extracted by surface mining operations.

There are no known mineral resources within the project site or area around the site (CDC Mineral Land Classification 2019a).

Discussion

a) *Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?*

No Impact. The proposed project is not located on or immediately adjacent to a mineral resource as there is no known mineral resources in the project area.

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?*

No Impact. The proposed project would not result in the loss of availability of any locally important mineral resource recovery site.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Noise				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120-140 dB corresponding to the threshold of pain.

Existing Ambient Noise Environment

The proposed project encompasses approximately 1.48 miles of roadways in commercial and residential areas within city limits of the City of Tulelake. The primary contributors to the noise environment in the space include vehicle traffic, railroad traffic, sounds emanating from surrounding neighborhoods, including voices, noises from adjacent businesses, and naturally occurring sounds such as wind and

wind-generated rustling. Generally, intermittent short-term noises do not significantly contribute to longer-term noise averages.

Siskiyou County

The Siskiyou County General Plan Noise Element identifies land use compatibility standards for exterior community noise for a variety of land use categories for project planning purposes. For example, for residential land uses, an exterior noise level of 60 dBA Ldn (Day-Night Average Sound Level) is identified as being “acceptable” requiring no special noise insulation or noise abatement features unless the proposed development is itself considered a source of incompatible noise for a nearby land use. The Noise Element also describes the noise level for outdoor areas, such as farms and passively used open space areas, as 50 dBA Ldn. These outdoor noise levels are intended to “assure that a 45 dBA Ldn indoor level will be achieved by the noise attenuation with regular construction materials.”

City of Tulelake

Limitations and standards on noise are generally enforced through a noise ordinance or a jurisdiction’s municipal code. There is no adopted Noise Ordinance for City of Tulelake; thus, limits on noise are not regulated by the City of Tulelake Municipal Code. However, the County of Siskiyou Code of Ordinances Section 10-13.10 states, *“The best management practices shall be used throughout all phases of work to control dust, noise, and traffic, erosion and release of contaminants, so as to avoid adverse impacts on the public health, welfare, and safety and so as to avoid noise and/or the discharge of contaminants to the soil, water or atmosphere so as to avoid any violation of any applicable rules, regulations, ordinances, statutes, or other applicable law.”*

Significant noise sources in the City of Tulelake include traffic on major roadways (Highway 139), railroad operations, and localized noise sources from commercial businesses. Ambient noise levels in areas away from major transportation routes are generally low. The noise environment of the project area, outside of major thoroughfares and railroads, is considered typical of commercial areas and public parks, corresponding to the 50dBA Ldn outdoor noise level.

Discussion

- 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?*

Less than Significant with Mitigation Incorporated. Construction noise can be created from on-site and off-site sources. On-site noise sources would principally consist of the operation of heavy-duty diesel and gasoline-powered construction equipment. Off-site noise sources would include vehicles commuting to and from the job site, as well as from trucks transporting material to and from the construction area. These sources are described below:

Construction of the proposed project would require excavation activities that could generate noise levels that exceed established thresholds. Although these activities could result in infrequent periods of high noise, this noise would not be sustained and would occur only during the temporary construction period. Short term noise levels would be reduced to the extent practicable by the

mitigation measures presented below. Implementation of Mitigation Measures NOISE-1 through NOISE-4 would reduce potential impacts to less-than significant levels.

b) *Generation of excessive ground borne vibration or ground borne noise levels?*

Less Than Significant Impact. Construction of the proposed project would require excavation activities. Although these activities could result in infrequent periods of high noise, this noise would not be sustained and would occur only during the temporary construction period. Therefore, this impact is considered less than significant.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The proposed project is not located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public airport or public use airport.

Mitigation Measures

Mitigation Measure NOISE-1: During construction, the City shall require the contractor to ensure that all equipment is maintained in proper working order, including proper muffling.

Mitigation Measure NOISE-2: During construction, the contractor shall locate portable equipment as far as possible from adjacent residences.

Mitigation Measures NOISE-3: During construction, the contractor shall store and maintain equipment as far as possible from adjacent residences.

Mitigation Measures NOISE-4: If construction-related noise exceeds City standards for non-transportation sources, the City shall require the contractor to implement additional appropriate noise-reducing measures, including but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around construction noise sources.

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

Affected Environment

The proposed project would be located on existing, paved streets. Land uses in the project vicinity consist of commercial and residential areas.

Discussion

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)?*

No Impact. The proposed project would not result in new housing, commercial, or industrial space would be developed as part of the proposed project. Therefore, the proposed project would not directly or indirectly induce substantial population growth.

b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The project would not displace any people or housing as the project is on existing, paved streets.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Public Services				
Would the project:				
a) 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:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The project site is in a suburban area served by the existing public services:

Police Protection. Police protection to the project site is provided by the City of Tulelake Police Department. The city is currently served by two sworn officers for the population of 988 residents of Tulelake. The Tulelake Police Department is located at 470 C Street in Tulelake.

Fire Protection. The Tulelake area is serviced by a Volunteer Fire Department located at 1 Ray Oehlerich Way in Tulelake.

Schools. The project site is located within the boundaries of the Tulelake School District. Tulelake Basin Elementary School is located at 461 2nd Street (approximately 0.10 miles from project site), Tulelake High school is located at 850 Main Street (approximately 0.19 miles from project site), and Tulelake Basin Joint Unified is located at 400 G Street (approximately 0.17 miles from project site).

Parks. There is the current Tulelake Veterans Park located at 334 Main Street (approximately 0.15 miles from project site). Another park located on First Street from B Street to C Street (approximately 0.05 miles from project site), includes a tennis court, jungle gym, and a shaded picnic area with restroom facilities. The Tulelake Fairgrounds located at 800 Main Street (0.18 miles from project site) includes a racetrack and baseball field. The High school (mentioned above) has a paved track and two baseball fields, and the elementary school (mentioned above), has three baseball fields and a dirt track.

Discussion

a) *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: Fire Protection, Police Protection, Schools, Parks, other public facilities?*

No Impact. Implementation of the proposed project would not result in any local or regional population increase. Therefore, the project would not require construction of new schools, or result in schools exceeding their capacities.

The proposed project is not expected to result in impacts to other public facilities.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Recreation				
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

There is the current Tulelake Veterans Park located at 334 Main Street (approximately 0.15 miles from project site). Another park located on First Street from B Street to C Street (approximately 0.05 miles from project site), includes a tennis court, jungle gym, and a shaded picnic area with restroom facilities. The Tulelake Fairgrounds located at 800 Main Street (0.45 miles from project site) includes a racetrack and baseball field. Tulelake High School has a paved track and two baseball fields, and Tulelake Basin Elementary School has three baseball fields and a dirt track.

Discussion

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?*

No Impact. The proposed project would have no impact on existing neighborhood and regional parks or other recreational facilities since the project rehabilitates existing, paved streets and does not generate demand for such uses.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

No Impact. The proposed project is the rehabilitation of existing, paved streets. The project does not include recreational facilities or require the construction or expansion of recreational facilities.

Mitigation Measures

None required due to no negative impacts.

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

Affected Environment

Highway 139 provides regional access to the City of Tulelake. The proposed project is the rehabilitation of existing streets that are currently paved.

Discussion

a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less Than Significant Impact. The proposed project would improve the project site as the streets within the project scope would be re-paved and sections of the project area will have curb gutter and sidewalks replaced. The focus of the proposed project is to fix areas of existing, paved streets that currently have potholes and missing pieces of asphalt.

Short-term impacts of the proposed project would cause traffic to be slower or have to be detoured during construction.

Long-term impacts of the proposed project would improve the quality of the streets.

This impact is less than significant.

b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

No Impact. Section 15064.3 of the CEQA Guidelines establishes specific considerations for evaluating a project's transportation impacts. The CEQA Guidelines identify vehicle miles traveled (VMT), which is the amount and distance of automobile travel attributable to a project, as the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Vehicle miles traveled exceeding an applicable threshold of significance for land use projects may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area, compared to existing conditions, should be presumed to have a less than significant transportation impact.

The project is not located within one-half mile of either an existing major transit stop, or a stop along an existing high-quality transit corridor.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project would not change or alter the current boundaries of the existing, paved streets proposed for the project. The proposed project would increase the quality of the streets that are to be rehabilitated.

d) Result in inadequate emergency access?

No Impact. The proposed project would not result in inadequate emergency vehicle access within the 1.48 miles of streets that are to be rehabilitated.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. Utilities and Service Systems				
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Affected Environment

Utilities and service systems for the project site are described below.

Water. This project does not generate wastewater. Water usage from the project is limited to BMP's to protect air quality. See Section 3- Air Quality- Mitigation Measure AIR-1.

Wastewater. The project does not generate wastewater.

Other Utilities. City of Tulelake garbage is provided by Siskiyou County Integrated Solid Waste Management Regional Agency.

Discussion

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

No Impact. The proposed project would not result in the construction of new water or wastewater treatment facilities or expansion of existing treatment facilities. The amount of additional water demand and wastewater generation would not exceed the capacity of existing facilities.

- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

No Impact. The project will not use water, and therefore will not have a significant impact to the water supply.

- 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?*

No Impact. The project will not generate wastewater.

- 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?*

No Impact. Construction of the proposed project would generate construction waste. However, the amount of construction waste would not be substantial and would not result in a substantial reduction in the capacity of a landfill. Therefore, this impact is considered less than significant.

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less Than Significant Impact. As seen above in section d, the project would only generate construction waste. The project complies with federal, state, and local management and reduction statutes and regulations related to solid waste.

Mitigation Measures

None required due to no negative impacts.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
19. Mandatory Findings of Significance				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

- 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?*

Less Than Significant with Mitigation Incorporated. As described in the sections above, all environmental effects were determined to be less than significant or reduced below levels of significance with mitigations. The proposed project would result in the rehabilitation of existing, paved streets. Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples 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 probably future projects.)*

Less Than Significant Impact. The impacts of the proposed project are individually limited and not cumulatively considerable. The proposed project would result in rehabilitation of existing, paved streets. All environmental impacts that could occur as a result of the project would be reduced to less than significant levels through implementation of the mitigation measures recommended in this Initial Study.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less than Significant with Mitigation Incorporated. During project construction, the proposed project could result in environmental effects, such as short-term construction noise and air quality impacts. Implementation of the mitigation measures recommended in this Initial Study would ensure that construction of the proposed project would not cause adverse effects on human beings.

REPORT PREPARERS AND REFERENCES

A. REPORT PREPARERS

Rabe Consulting

421 Commercial Street
Klamath Falls, OR 97601

Andréa Rabe, Principal (Senior Environmental Consultant, Botanist, and Professional Wetland Biologist)
Megan Solus (Senior Environmental Consultant, Certified Wildlife and Fisheries Biologist)
Nettie Pitman (NEPA Specialist)

B. REFERENCES

America's Scenic Byways. California. <https://scenicbyways.info/state/CA.html>. Website accessed 2020.

California Air Resources Board. 2019. Area Designations Maps/State and National.
<https://ww3.arb.ca.gov/desig/adm/adm.htm>. Website accessed 2020.

California Department of Conservation.

2019a. CGS Information Warehouse: Mineral Land Classification.

<https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>. Website accessed 2020.

2019b. Fault Activity Map of California 2010. <http://maps.conservation.ca.gov/cgs/fam/>. Website accessed 2020.

2019c. Siskiyou County. <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Siskiyou.aspx>. Website accessed 2020.

California Department of Fish and Wildlife & California Natural Diversity Database.

(n.d.). *California's Wildlife*. Retrieved 2021, from <https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range>

California Department of Water Resources. 2019. Sustainable Groundwater Management Act Basin Prioritization Dashboard. <https://gis.water.ca.gov/app/bp-dashboard/p2/>. Website Accessed 2020.

California Fire. 2019. Wildland Hazard & Building Codes.

http://frap.fire.ca.gov/webdata/maps/siskiyou/fhszs_map.47.pdf. Website accessed May 3, 2019.

California Native Plant Society. (n.d.). *Columbia Yellow Cress*. Retrieved 2021, from [https://calscape.org/Rorippa-columbiae-\(\)](https://calscape.org/Rorippa-columbiae-())

California Native Plant Society. (n.d.). *Newberry's Cinquefoil*. Retrieved 2021, from [https://calscape.org/Potentilla-newberryi-\(\)](https://calscape.org/Potentilla-newberryi-())

- California Office of Historic Preservation. 2018. Listed California Historical Resources. <http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=47>. Website accessed 2020.
- California Soil Resource. 2019. SoilWeb. <https://casoilresource.lawr.ucdavis.edu/gmap/>. Website Accessed 2020.
- City of Tulelake. 2019. City Administration. <http://www.cityoftulelake.com/departments/city-administration>. Website accessed 2020.
- Public Works Department. <http://www.cityoftulelake.com/departments/public-works-department>. Website accessed 2020.
- County of Siskiyou, California. (2020). *General Plan*. <https://www.co.siskiyou.ca.us/planning/page/general-plan>. Website Accessed 2020.
- County of Siskiyou California. 2019. North East Plateau Air Basin. <https://www.co.siskiyou.ca.us/bc/page/north-east-plateau-air-basin>. Website Accessed 2020.
- Flora of North America. (n.d.). *Allium punctum*. Retrieved 2021, from http://beta.floranorthamerica.org/Allium_punctum
- Los Padres Forest Watch. (2013). *Crotch's Bumblebee*. Retrieved 2021, from <https://lpfw.org/our-region/wildlife/crotchs-bumblebee/>
- National Wildlife Federation. (n.d.). *Sandhill Crane*. Retrieved 2021, from <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Birds/Sandhill-Crane#:~:text=Sandhill%20cranes%20spend%20most%20of,summer%20at%20their%20breeding%20grounds>
- University of California & Agriculture and Natural Resources. (n.d.). *Blue Chub*. California Fish Website. Retrieved 2021, from <http://calfish.ucdavis.edu/species/?ds=698&uid=10#:~:text=Blue%20Chubs%20are%20primarily%20found,sections%20of%20quiet%20large%20rivers.&text=Blue%20Chubs%20continue%20to%20grow,maximum%20age%20of%2017%20years>
- United States Climate Data. 2019. Tulelake, California. <https://www.usclimatedata.com/climate/tulelake/california/united-states/usca1166>.
- United States Department of Agriculture Natural Resources Conservation Service. 2019a. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Website accessed 2020.
- Quaternary Fault and Fold Database of the United States: Gillem-Big Crack Fault system (Class A) No. 3. 2019b. https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=3§ion_id=. Website Accessed 2020.

United States Department of Agriculture Natural Resources Conservation Service. 2019b. Klamath River Basin.

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrcs143_023523.

Website Accessed 2020.

U.S. Fish and Wildlife Service & Environmental Consolation Online System. (2020). *Information for Planning and Consultation*. <https://ecos.fws.gov/ipac/>. Website Accessed 2020.

U.S. Fish and Wildlife Service & Fish and Aquatic Conservation. (2019). *Shortnose Sucker*.

Retrieved 2021, from https://www.fws.gov/fisheries/freshwater-fish-of-america/shortnose_sucker.html#:~:text=HABITAT%3A%20The%20preferable%20habitat%20for,animals%2C%20algae%20and%20aquatic%20insects

U.S. Fish and Wildlife Service & Oregon Fish and Wildlife Service. (2019). *Lost River Sucker*.

Retrieved 2021, from

<https://www.fws.gov/oregonfwo/articles.cfm?id=149489443#:~:text=Adult%20Lost%20River%20sucker%20inhabit,rivers%20of%20their%20home%20lake.&text=Shoreline%20vegetation%20in%20both%20lake,of%20larval%20and%20juvenile%20suckers>

U.S. Fish and Wildlife Service. (2020). *National Wetlands Inventory*.

<https://www.fws.gov/wetlands/data/mapper.html>. Website Accessed 2020.

USDA & Natural Resource Conservation Service. (2019). *Web Soil Survey*.

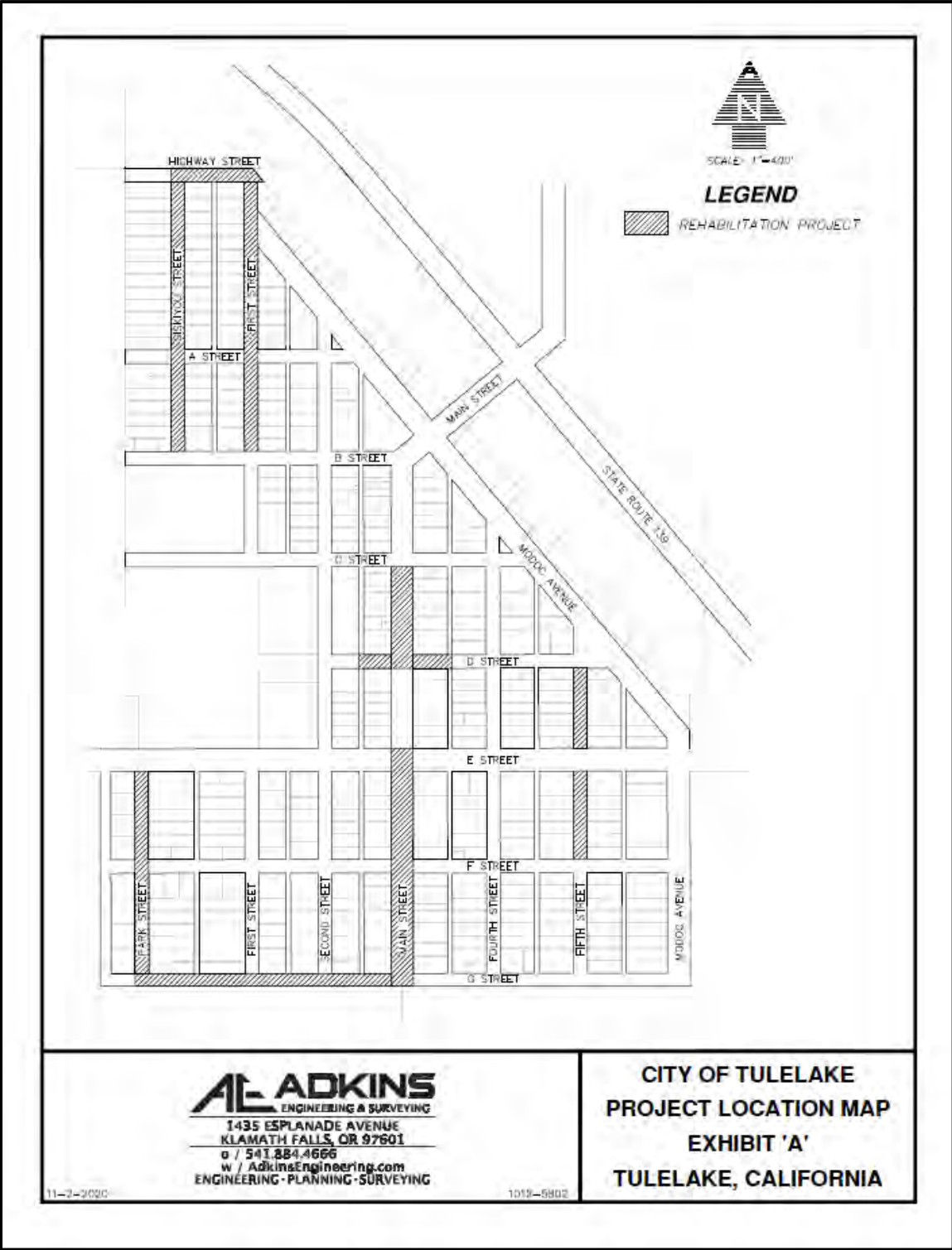
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Website Accessed 2020.

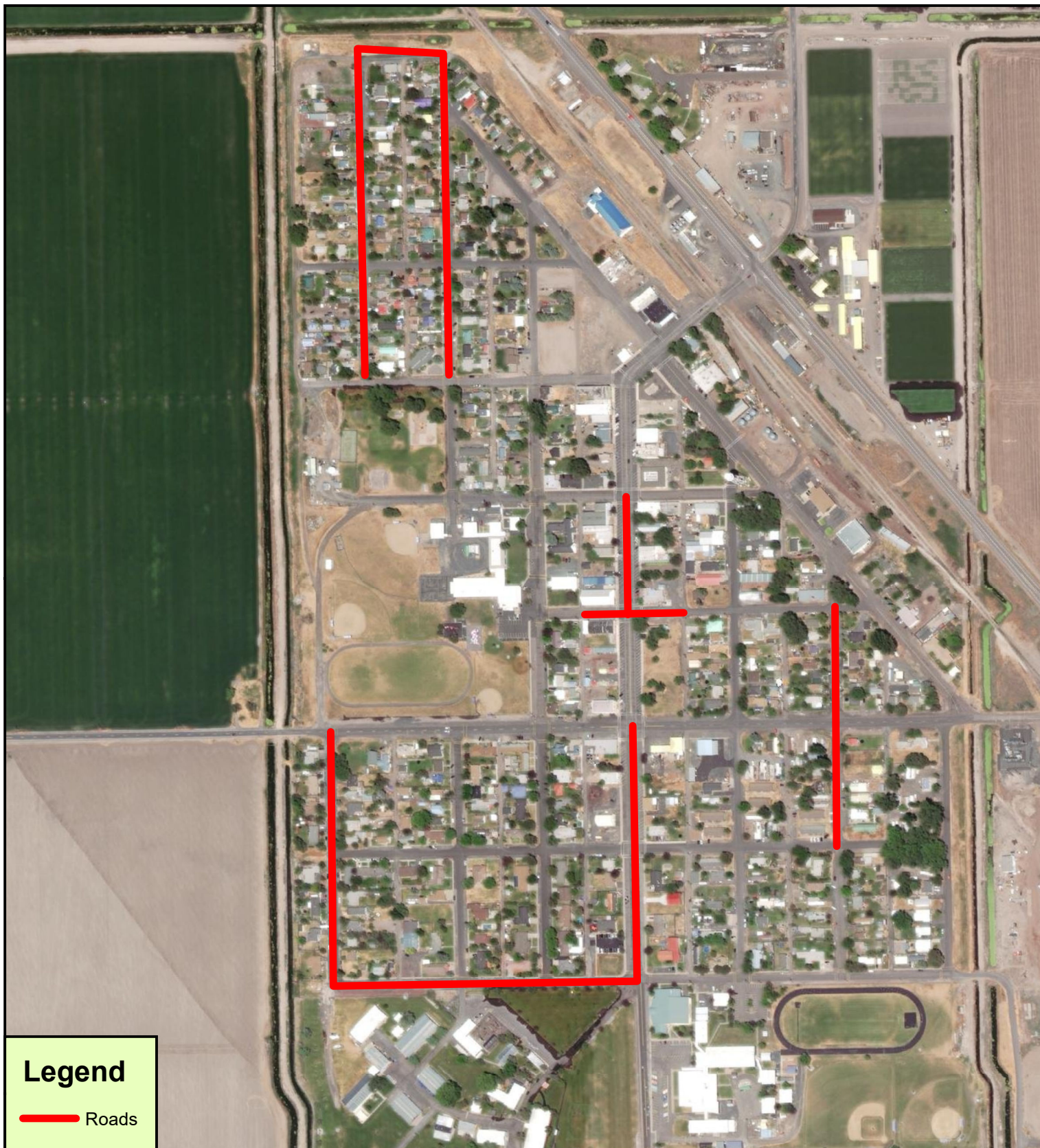
Wild Earth Guardians. (n.d.). *Columbian sharp-tailed grouse*. Retrieved 2021, from

<https://wildearthguardians.org/wildlife-conservation/endangered-species-list/birds/columbian-sharp-tailed-grouse/#:~:text=Columbian%20sharp%2Dtailed%20grouse%20use,brushy%20grasslands%2C%20and%20riparian%20areas.&text=Although%20millions%20of%20Columbian%20sharp,in%20the%20United%20States%20today>


APPENDIX

APPENDIX A- Project Area





Legend

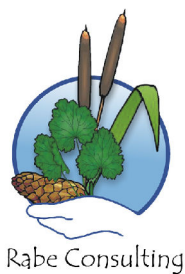
 Roads

Project Name

Figure #2: Aerial

Created By: M. Solus

Created On: December 2020



N

0 125 250 500 750 1,000
Feet

Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2016. GPS plots and polygons acquired using an Ashtech MobileMapper 10 GPS unit with submeter accuracy. Reproduced by Rabe Consulting for the purpose of this document.

APPENDIX B- Agriculture and Forestry Resources (WSS)



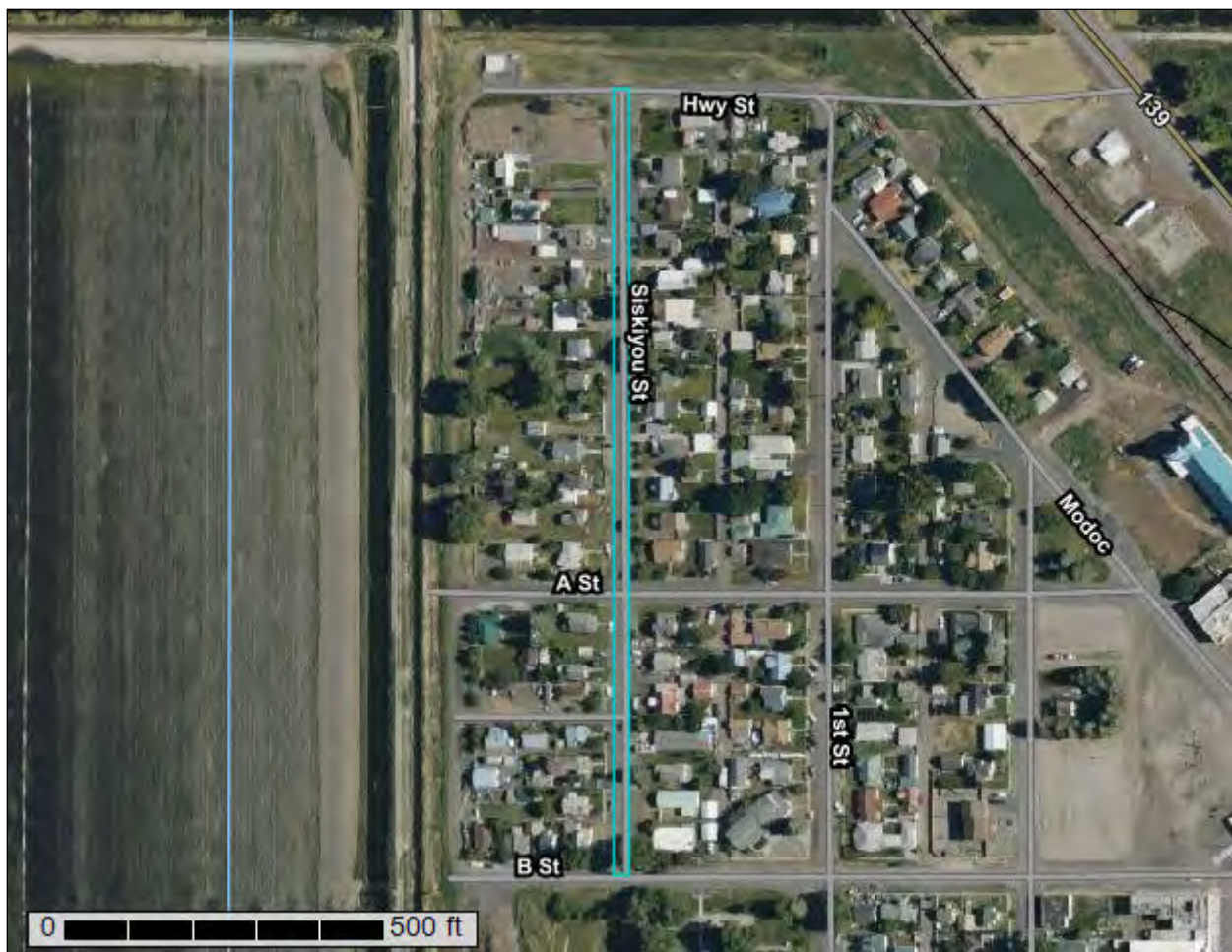
United States
Department of
Agriculture

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 Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties



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

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	12
Map Unit Descriptions.....	12
Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties.....	14
185—Tulebasin mucky silty clay loam.....	14
References	16

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

Custom Soil Resource Report

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



Custom Soil Resource Report

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: Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties
Survey Area Data: Version 15, Jun 1, 2020

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

Date(s) aerial images were photographed: Jun 9, 2019—Jun 14, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

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
185	Tulebasin mucky silty clay loam	0.7	100.0%
Totals for Area of Interest		0.7	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.

Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties

185—Tulebasin mucky silty clay loam

Map Unit Setting

National map unit symbol: jbdf
Elevation: 4,030 to 4,050 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 48 degrees F
Frost-free period: 65 days
Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Tulebasin and similar soils: 85 percent
Minor components: 14 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tulebasin

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from igneous and sedimentary rock

Typical profile

H1 - 0 to 14 inches: mucky silty clay loam
H2 - 14 to 32 inches: silty clay
H3 - 32 to 60 inches: silty clay, silty clay loam
H3 - 32 to 60 inches:

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 8.0
Available water capacity: Very high (about 35.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: Yes

Minor Components

Poe

Percent of map unit: 5 percent

Hydric soil rating: No

Laki

Percent of map unit: 5 percent

Hydric soil rating: No

Tulana

Percent of map unit: 2 percent

Landform: Basin floors

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Capjac

Percent of map unit: 2 percent

Landform: Basin floors

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

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>

Custom Soil Resource Report

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



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 Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties



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

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	12
Map Unit Descriptions.....	12
Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties.....	14
185—Tulebasin mucky silty clay loam.....	14
References	16

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

Custom Soil Resource Report

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: 1:533 if printed on A landscape (11" x 8.5") sheet.

0 5 10 20 30 Meters

0 25 50 100 150 Feet

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

Custom Soil Resource Report

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: Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties

Survey Area Data: Version 15, Jun 1, 2020

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

Date(s) aerial images were photographed: Jun 9, 2019—Jun 14, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

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
185	Tulebasin mucky silty clay loam	0.1	100.0%
Totals for Area of Interest		0.1	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.

Butte Valley-Tule Lake Area, California, Parts of Siskiyou and Modoc Counties

185—Tulebasin mucky silty clay loam

Map Unit Setting

National map unit symbol: jbdf
Elevation: 4,030 to 4,050 feet
Mean annual precipitation: 11 inches
Mean annual air temperature: 48 degrees F
Frost-free period: 65 days
Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Tulebasin and similar soils: 85 percent
Minor components: 14 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tulebasin

Setting

Landform: Basin floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Lacustrine deposits derived from igneous and sedimentary rock

Typical profile

H1 - 0 to 14 inches: mucky silty clay loam
H2 - 14 to 32 inches: silty clay
H3 - 32 to 60 inches: silty clay, silty clay loam
H3 - 32 to 60 inches:

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 8.0
Available water capacity: Very high (about 35.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C
Hydric soil rating: Yes

Minor Components

Poe

Percent of map unit: 5 percent

Hydric soil rating: No

Laki

Percent of map unit: 5 percent

Hydric soil rating: No

Tulana

Percent of map unit: 2 percent

Landform: Basin floors

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Capjac

Percent of map unit: 2 percent

Landform: Basin floors

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

References

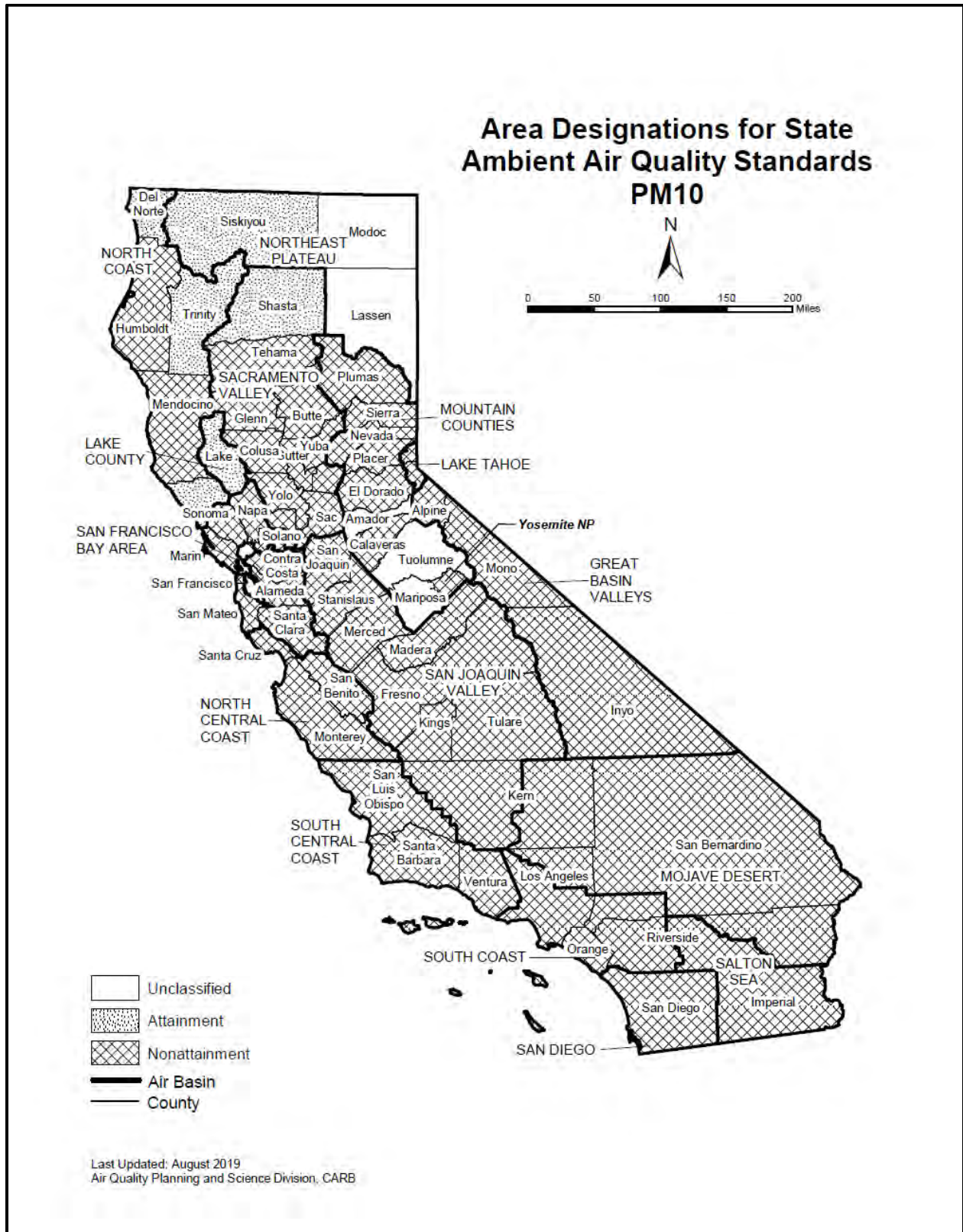
- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. 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=stelpdb1043084>

Custom Soil Resource Report

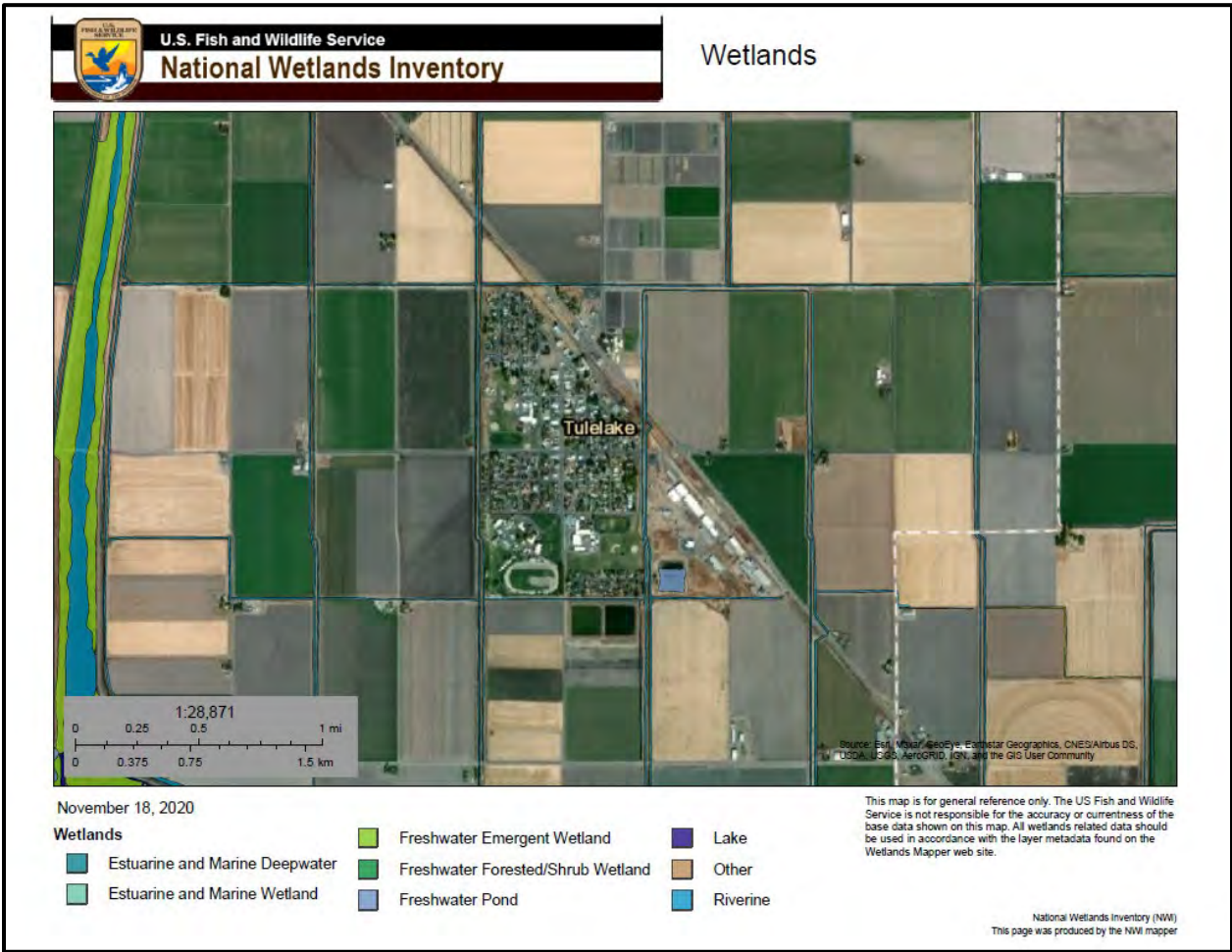
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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



APPENIDX D- Biological Resources/ NWI





United States Department of the Interior

FISH AND WILDLIFE SERVICE
Klamath Falls Fish And Wildlife Office
1936 California Avenue
Klamath Falls, OR 97601
Phone: (541) 885-8481 Fax: (541) 885-7837



In Reply Refer To:
Consultation Code: 08EKLA00-2021-SLI-0018
Event Code: 08EKLA00-2021-E-00035
Project Name: Tulelake Street Project

November 18, 2020

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as designated and proposed 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.*). For anadromous fish species (i.e., salmon), please contact the National Marine Fisheries Service at http://www.westcoast.fisheries.noaa.gov/protected_species/species_list/species_lists.html.

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. These provisions apply to non-Federal lands when there is a Federal nexus (e.g., funding or permits).

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 threatened, endangered, proposed, 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.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*; <http://www.fws.gov/midwest/eagle/protect/laws.html>). The Service developed the National Bald Eagle Management Guidelines (<http://www.fws.gov/northeast/ecologicalservices/eaglenationalguide.html>) to provide guidance on measures that may be used to avoid and minimize adverse impacts to bald eagles. Projects affecting bald or golden eagles may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds, including bald and golden eagles, and bats.

The Migratory Bird Treaty Act (16 U.S.C. 703-712; <http://www.fws.gov/midwest/eagle/protect/laws.html>) implements protections for migratory birds. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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

For projects in California, the office shown in the letterhead may not be the lead office for your project. Table 1 below provides lead Service field offices by county and land ownership/project type for northern California. Please refer to this table when you are ready to contact the field office corresponding to your project; a map and contact information for the Pacific Southwest Region field offices is located here: <http://www.fws.gov/cno/es/>.

Table 1: Lead Service offices by County and Ownership/Program in Northern California

County	Ownership/Program	Office Lead*
Lassen	Modoc National Forest	KFFWO
	Lassen National Forest	SFWO
	Toiyabe National Forest	RFWO
	BLM Surprise and Eagle Lake Resource Areas	RFWO
	BLM Alturas Resource Area	KFFWO
	Lassen Volcanic National Park	SFWO
	All other ownerships	By jurisdiction

		(see map)
Modoc	Modoc National Forest	KFFWO
	BLM Alturas Resource Area	KFFWO
	Klamath Basin National Wildlife Refuge Complex	KFFWO
	BLM Surprise and Eagle Lake Resource Areas	RFWO
	All other ownerships	By jurisdiction
		(see map)
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	YFWO
	Hat Creek Ranger District	SFWO
	Whiskeytown National Recreation Area	YFWO
	BLM Alturas Resource Area	KFFWO
	Caltrans	SFWO/ AFWO
	Ahjumawi Lava Springs State Park	SFWO
	All other ownerships	By jurisdiction
		(see map)
Siskiyou	Klamath National Forest (except Ukonom District)	YFWO
	Six Rivers National Forest and Ukonom District of Klamath National Forest	AFWO
	Shasta Trinity National Forest	YFWO
	Lassen National Forest	SFWO
	Modoc National Forest	KFFWO

	Lava Beds National Volcanic Monument	KFFWO
	BLM Alturas Resource Area	KFFWO
	Klamath Basin National Wildlife Refuge Complex	KFFWO
	All other ownerships	By jurisdiction (see map)
All	FERC-ESA	By jurisdiction (see map)

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

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:

Klamath Falls Fish And Wildlife Office

1936 California Avenue

Klamath Falls, OR 97601

(541) 885-8481

Project Summary

Consultation Code: 08EKLA00-2021-SLI-0018

Event Code: 08EKLA00-2021-E-00035

Project Name: Tulelake Street Project

Project Type: TRANSPORTATION

Project Description: Rehabilitation of existing roads

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.955891659079384N121.47769091755258W>



Counties: Siskiyou, CA

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

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

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

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

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

Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Lost River Sucker <i>Deltistes luxatus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5604	Endangered
Shortnose Sucker <i>Chasmistes brevirostris</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7160	Endangered

Flowering Plants

NAME	STATUS
Greene's Tuctoria <i>Tuctoria greenei</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1573	Endangered
Slender Orcutt Grass <i>Orcuttia tenuis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31

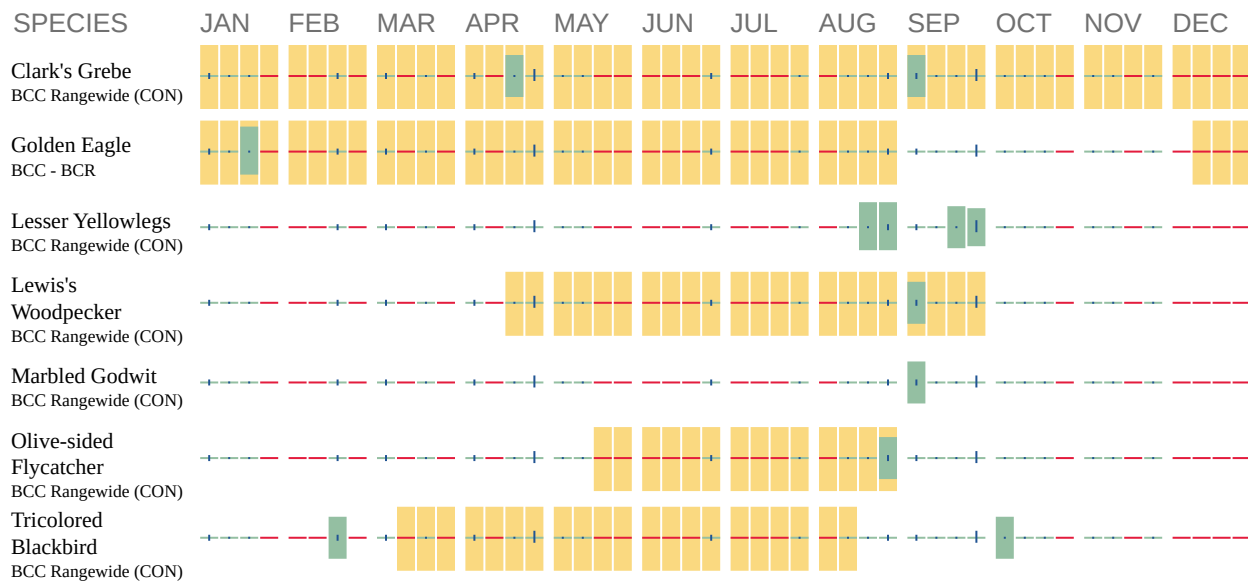
NAME	BREEDING SEASON
Golden Eagle <i>Aquila chrysaetos</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Lewis's Woodpecker <i>Melanerpes lewis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Tricolored Blackbird <i>Agelaius tricolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
 2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
 3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).
-

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

CNDBB Report

Element Type	Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CA Rare Status	Habitat	Present in Project Area
Animals - Birds	<i>Aquila chrysaetos</i>	golden eagle	None	None	FP; WL	-	Golden eagles inhabit a variety of habitats including forests, canyons, shrub lands, grasslands, and oak woodlands.	No
Animals - Birds	<i>Buteo swainsoni</i>	Swainson's hawk	None	Threatened	-	-	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves.	No
Animals - Birds	<i>Charadrius alexandrinus nivosus</i>	western snowy plover	Threatened	None	SSC	-	Snowy Plovers inhabit barren to sparsely vegetated flats and along shores of alkaline and saline lakes, reservoirs, ponds, braided river channels, agricultural wastewater ponds, and salt evaporation ponds.	No
Animals - Birds	<i>Falco mexicanus</i>	prairie falcon	None	None	WL	-	Inhabit open terrain for foraging; nests in open terrain with canyons, cliffs, escarpments, and rock outcrops.	No
Animals - Birds	<i>Antigone canadensis tabida</i>	greater sandhill crane	None	Threatened	FP	-	Greater sandhill cranes spend most of their lives in freshwater wetlands, including marshes, wet grasslands and river basins.	No
Animals - Birds	<i>Progne subis</i>	purple martin	None	None	SSC	-	Inhabits old-growth, multi-layered, open forest and woodland with snags in breeding season. Forages over riparian areas, forest, and woodland. Found in a variety of open habitats in migration	No
Animals - Birds	<i>Riparia riparia</i>	bank swallow	None	Threatened	-	-	Requires vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, and the ocean for nesting. Feeds primarily over grassland, shrubland, savannah, and open riparian areas during breeding season and over grassland, brushland, wetlands, and cropland during migration.	No
Animals - Birds	<i>Agelaius tricolor</i>	tricolored blackbird	None	Threatened	SSC	-	Seeks cover in emergent wetland vegetation, especially cattails and tules; also in trees and shrubs. Roosts in large flocks in emergent wetland or in trees.	No
Animals - Birds	<i>Chlidonias niger</i>	black tern	None	None	SSC	-	Inhabit fresh emergent wetlands, lakes, ponds, moist grasslands, and agricultural fields. In migration, some take coastal routes and forage offshore.	No

Animals - Birds	Larus californicus	California gull	None	None	WL	-	Adults roost in large concentrations along shorelines, landfills, pastures, and on islands. Young require protective cover from wind and heat. Requires undisturbed, isolated islands for nesting. Food supplies must be close to nesting areas.	No
Animals - Birds	Pelecanus erythrorhynchos	American white pelican	None	None	SSC	-	Rests in day and roosts at night along edge of water, on beaches, sandbars, or old driftwood, but never in trees. Nests at large freshwater and salt water lakes, usually on small islands or remote dikes. Nest-site must be flat or gently sloping, lacking shrubs or other obstructions that would impede taking flight, free of human disturbance, and usually with loose earth suitable for nest-mounds.	No
Animals - Birds	Centrocercus urophasianus	greater sage-grouse	None	None	SSC	-	Inhabits sagebrush stands exclusively during winter and spring, but highly dependent upon meadows for green forbs and insects in summer.	No
Animals - Birds	Tympanuchus phasianellus columbianus	Columbian sharp-tailed grouse	None	None	SSC	-	Columbian sharp-tailed grouse use a variety of habitats, including sagebrush steppe, meadows, mountain shrubs, brushy grasslands, and riparian areas.	No
Animals - Birds	Numenius americanus	long-billed curlew	None	None	WL	-	Upland shortgrass prairies and wet meadows are used for nesting; coastal estuaries, open grasslands, and croplands are used in winter.	No
Animals - Birds	Asio flammeus	short-eared owl	None	None	SSC	-	Found in open, treeless areas with elevated sites for perches, and dense vegetation for roosting and nesting.	No
Animals - Birds	Plegadis chihi	white-faced ibis	None	None	WL	-	Roosts amidst dense, freshwater emergent vegetation such as bulrushes, cattails, reeds or low shrubs over water. Prefers to nest in dense marsh vegetation near foraging areas in shallow water or muddy fields.	No
Animals - Fish	Chasmistes brevirostris	shortnose sucker	Endanger ed	Endanger ed	FP	-	The preferable habitat for the shortnose sucker is a turbid, shallow, somewhat alkaline, well-oxygenated lake that is cool, but not cold in the summer season.	No
Animals - Fish	Deltistes luxatus	Lost River sucker	Endanger ed	Endanger ed	FP	-	Adult Lost River sucker inhabit deeper water of lakes and reservoirs, and spawn tributary rivers of their home lake.	No

Animals - Fish	<i>Gila coerulea</i>	blue chub	None	None	SSC	-	Blue Chubs are primarily found in shallow warm water lakes, though they also occur in small streams and deep lakes. Favorable habitat includes small, shallow, weedy sections of quiet large rivers.	No
Animals - Insects	<i>Bombus crotchii</i>	Crotch bumble bee	None	Candidate Endangered	-	-	Crotch's bumblebee inhabits grasslands and shrublands and requires a hotter and drier environment than other bumblebee species.	No
Animals - Mammals	<i>Ovis canadensis nelsoni</i>	desert bighorn sheep	None	None	FP	-	Prefer open areas of low-growing vegetation for feeding, with close proximity to steep, rugged terrain for escape, lambing, and bedding, an adequate source of water, and travel routes linking these areas.	No
Animals - Mammals	<i>Canis lupus</i>	gray wolf	Endangered	Endangered	-	-	Suitable habitat consists of shrublands, brushy and open-canopied forests, interspersed with riparian areas, providing water.	No
Animals - Mammals	<i>Taxidea taxus</i>	American badger	None	None	SSC	-	Suitable habitat for badgers is characterized by herbaceous, shrub, and open stages of most habitats with dry, friable soils.	No
Animals - Mammals	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	-	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. Prefers mesic habitats. Gleans from brush or trees or feeds along habitat edges.	No
Plants - Vascular	<i>Allium punctum</i>	dotted onion	None	None	-	2B.2	Sandy, rocky, or clay soils on open slopes and flats; found in Oregon, Nevada, and California.	No
Plants - Vascular	<i>Rorippa columbiae</i>	Columbia yellow cress	None	None	-	1B.2	Columbia yellow cress is native to the western United States from central Washington to northeastern California, where it grows in moist to wet, sandy habitat types, such as playas (dry lakes).	No
Plants - Vascular	<i>Potentilla newberryi</i>	Newberry's cinquefoil	None	None	-	2B.3	Newberry's cinquefoil grows in moist habitat, particularly drying areas such as receding vernal pools and evaporating puddles. It is a dominant plant in many kinds of local habitat, such as sagebrush and juniper woodlands.	No

APPENDIX E- Cultural Resources

December 20, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

RE:

Notification of Project
Tulelake Street Project
Tulelake (Siskiyou County), California
Section 35, Township 48N, Range 4E

Conference

Dear Ms. Polanco:

The City of Tulelake is seeking financial assistance from the California Department of Transportation (CalTrans) under its State Transportation Improvement Program (STIP) for the Tulelake Road Rehabilitation Project. The City of Tulelake proposes to rehabilitate ten streets within the city limits of Tulelake, California by grinding and inlaying of existing pavement. The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk.

The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot.

See Attachment 1 for Project map.

Section I: General Information about the Undertaking:

CalTrans has elected to fund this application, and therefore it is an undertaking subject to cultural resource review and consultation as part of the California Environmental Quality Act (CEQA) compliance process. The project is located in Tulelake (Siskiyou County), California (latitude 36.088243, longitude, -119.240297).

Section II: Contact Information:

Rabe Consulting is representing the City of Tulelake. Should you have any questions, please contact Andréa Rabe at 541-891-2137, via email at andrea@rabeconsulting.com, or by mail at 421 Commercial Street, Klamath Falls, Oregon 97601.

Section III: Description of the Undertaking and Area of Potential Effects:

The proposed project will include grinding and inlaying of existing pavement. The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk. The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot (see Attachments).

The proposed project is located on ten streets within the city limits of Tullake (Siskiyou County), California. The project area is within Section 35, Township 48N, Range 4E. The following streets are to be repaved:

- Siskiyou Street, from B Street north to Highway Street;
- First Street, from B Street north to Highway Street;
- Main Street, from D Street north to C Street;
- Intersection of Main Street and D Street;
- Fifth Street, from E Street north to D Street;
- Fifth Street, from F Street north to E Street;
- Main Street, from G Street north to E Street;
- Park Street, from G Street north to E Street; and
- G Street, from Park Street east to Main Street.

The City of Tullake proposes that the area of potential effects (APE) for the referenced project consists of approximately 1.48 miles in Tullake (Siskiyou County), California (see attached map).

Section IIIA: Ground-Disturbing Activity

The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. Total disturbance will not exceed 1 ft in depth. All ground disturbing activity will occur in the current sidewalk, curb, gutter and roadway footprints. No new areas will be disturbed.

Project construction is anticipated during 2021.

Section IV: Identification of Historic Properties:

The City of Tullake has notified and is seeking information about possibly affected historic properties in the APE from the following Indian tribes – Klamath Tribes (Klamath and Modoc). This list of relevant Tribes was obtained from the Native American Heritage Commission (NAHC). Letters were sent to the relevant Tribes and the Tribes were given 30 days to respond. After 30 days, follow-up emails were sent to the relevant Tribes. One response was received from the Klamath Tribes, requested monitors during ground disturbance.

Please review the project and enclosed map. After completing your review, please provide the City of Tullake with your recommendation(s) about whether or not study of the APE is needed

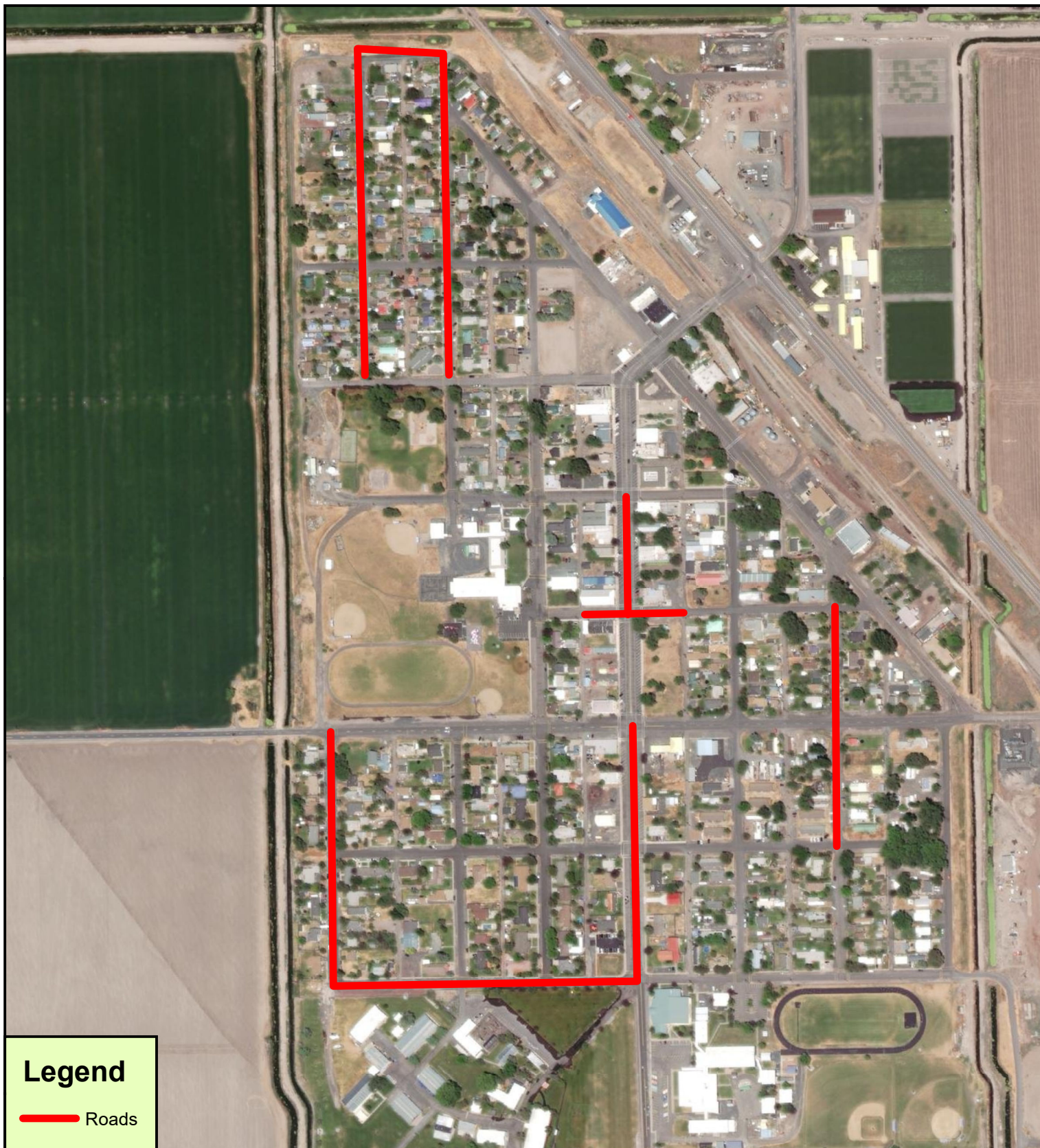
to identify affected historic properties. If you recommend study, please explain the nature and scope of the proposed investigation specifically.

Section V: Finding of Effect:

The City of Tulelake is proposing a finding of “No Effect” on cultural resources from implementation of this project.

Conclusion:

Submit your recommendations within thirty (30) days of your receipt of this request to Andréa Rabe at 541-891-2137 or via email at andrea@rabeconsulting.com. If no timely response is received, the City of Tulelake will proceed with the project. Should you have any questions, please contact Andréa Rabe at 541-891-2137 or via email at andrea@rabeconsulting.com.

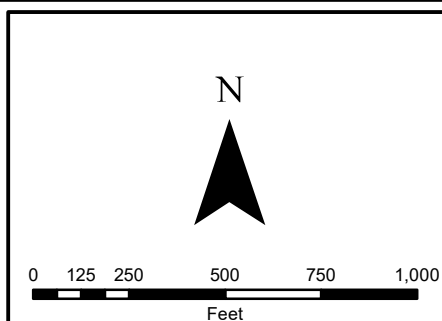
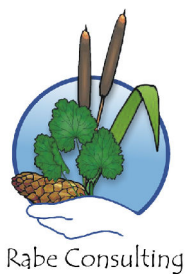


Project Name

Figure #2: Aerial

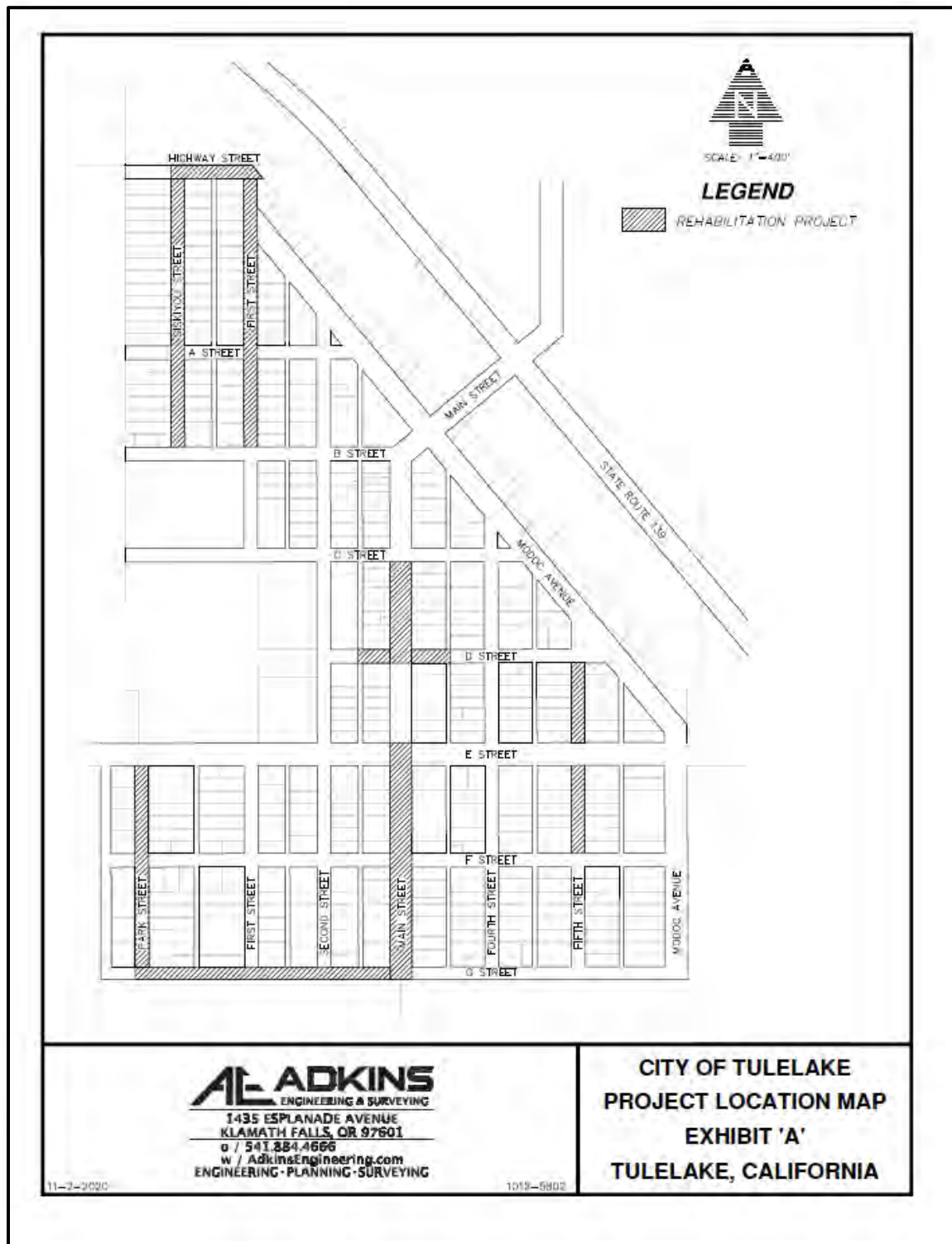
Created By: M. Solus

Created On: December 2020



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2016. GPS plots and polygons acquired using an Ashtech MobileMapper 10 GPS unit with submeter accuracy. Reproduced by Rabe Consulting for the purpose of this document.

Tulelake Street Project



Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission

1550 Harbor Blvd, Suite 100

West Sacramento, CA 95691

916-373-3710

916-373-5471 – Fax

nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Tulelake Street Project

County: Siskiyou

USGS Quadrangle Name: Tulelake

Township: 48N Range: 4E Section(s): 35

Company/Firm/Agency: Rabe Consulting

Street Address: 421 Commercial Street

City: Klamath Falls **Zip:** 97601

Phone: 541-891-2137

Fax: _____

Email: andrea@rabeconsulting.com

Project Description:

The project consists of repaving streets.

Streets being repaved include:

Siskiyou Street, from B street north to Highway Street;

First street, from B Street north to Highway Street;

Main Street, from D Street north to C Street;

Intersection of Main Street and D Street

Fifth Street, from E Street north to D Street;

Fifth Street, from F Street north to E Street;

Main Street, from G Street north to E Street;

Park Street, from G Street north to E Street;

G Street, from Park Street east to Main Street

NATIVE AMERICAN HERITAGE COMMISSION

November 25, 2020

Andrea Rabe

Rabe Consulting

Via Email to: andrea@rabeconsulting.com

Re: Tulelake Street Project, Siskiyou County

Dear Ms. Rabe:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,



Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
Siskiyou County
11/25/2020**

Klamath Tribe

Gary Frost, P.O. Box 436 Chiloquin, OR, 97624 Phone: (541) 783 - 2029	Klamath Modoc
--	------------------

Modoc Tribe of Oklahoma

Blake Follis, 22 North Eight Tribes Trail Miami, OK, 74354 Phone: (918) 542 - 1190 Fax: (918) 542-5415	KonKow
--	--------

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Tulelake Street Project, Siskiyou County.

December 8, 2020

FROM: City of Tulelake
591 Main Street
Tulelake, California 96134

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014).
Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code § 21080.3.1 (hereafter PRC).

Dear Chair Gentry:

The City of Tulelake has decided to undertake the following project: Tulelake Street Project.

Below please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to PRC § 21080.3.1 (d).

The City of Tulelake proposes to rehabilitate ten streets within the city limits of Tulelake, California by grinding and inlaying of existing pavement.

The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk.

The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot.

The proposed project is located on ten streets within the city limits of Tulelake (Siskiyou County), California. The project area is within Section 35, Township 48N, Range 4E.

The following streets are to be repaved:

Siskiyou Street, from B Street north to Highway Street;

First Street, from B Street north to Highway Street;

Main Street, from D Street north to C Street;

Intersection of Main Street and D Street;

Fifth Street, from E Street north to D Street;

Fifth Street, from F Street north to E Street;

Main Street, from G Street north to E Street;

Park Street, from G Street north to E Street; and

G Street, from Park Street east to Main Street.

If you have questions regarding this project, please direct them to Andréa Rabe at 541-891-2137 or andrea@rabeconsulting.com.

Pursuant to PRC § 21080.3.1 (b), the Klamath Tribes have 30 days from the receipt of this letter to request consultation, in writing, with The City of Tulelake by contacting Rabe Consulting at 421 Commercial Street, Klamath Falls, Oregon 97601 or via email at andrea@rabeconsulting.com.

Very Respectfully,

A handwritten signature in dark ink, appearing to read 'Andrea Rabe', is written over a horizontal line.

Andréa Rabe
Senior Environmental Consultant
Rabe Consulting
andrea@rabeconsulting.com

FW: Tulelake Street Project

Perry Chocktoot <perry.chocktoot@klamathtribes.com>

Mon 12/14/2020 2:18 PM

To: Nettie Pitman <nettie@rabeconsulting.com>

Cc: Les Anderson <les.anderson@klamathtribes.com>; Joseph Allen <joseph.allen@klamathtribes.com>; Jennifer Vigil <jennifer.vigil@klamathtribes.com>

 1 attachments (158 KB)

Klamath Tribes- Tulelake Street Project.pdf;

Consider this official comment from the Culture and Heritage Department of the Klamath Tribes of Oregon.

All projects that have the ability to disturb the ground need Cultural Resource Surveys completed by a qualified Archaeologist. No Cultural Resource Surveys older than 5 years can be used to diagnose cultural sites as too much time has elapsed and the cultural site has likely changed and cannot be used anymore for identification.

All cultural sites need to be flagged and avoided, any ground disturbing activities in or around significant areas need to be culturally monitored. Protections should include the protection of culturally significant botanicals also.

Areas such as streets and sidewalks that are to be replaced or removed in a culturally significant area will need to have a qualified archaeologist on site while ground disturbances are taking place or a cultural monitor will need to be present while all ground disturbances are taking place. Tule Lake California sits in the middle of a very culturally significant area for the Klamath Tribes and will need special attention to all ground disturbances.

During the recording of significant areas there will be a need to record negative impacts to the cultural viewshed. If there are any questions or concerns please feel free to contact me for guidance. Thank you.

Perry Chocktoot
Culture and Heritage
Klamath Tribe
541-783-2764 x 107

From: Nee Pitman [mailto:onee@rabeconsulting.com]

Sent: Monday, December 14, 2020 1:45 PM

To: Don Gentry <don.gentry@klamathtribes.com>

Cc: Perry Chocktoot <perry.chocktoot@klamathtribes.com>

Subject: Tulelake Street Project

Good Afternoon,

Rabe Consulting has been contracted to perform a California Environmental Quality Act (CEQA) compliance study for the Tulelake Street Project in Siskiyou County, Tulelake, Oregon. As part of the CEQA compliance report, Rabe Consulting performs an environmental review of the proposed project which includes tribal notification related to cultural resources.

Attached is the Tribal Notification for this project.

Thank you,

Nettie

December 8, 2020

FROM: City of Tulelake
591 Main Street
Tulelake, California 96134

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014).
Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code § 21080.3.1 (hereafter PRC).

Dear Chair Follis:

The City of Tulelake has decided to undertake the following project: Tulelake Street Project.

Below please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to PRC § 21080.3.1 (d).

The City of Tulelake proposes to rehabilitate ten streets within the city limits of Tulelake, California by grinding and inlaying of existing pavement.

The existing road surfaces are currently paved, and the existing pavement is 3 inches thick. The roadways are 20 feet in width. The road surfaces will be rehabilitated through grinding and inlaying of existing pavement. In some areas, the existing subsurface base rock will be replaced. The existing base rock is in the nine inches below the pavement. Some sections of street will have a replacement of curb gutter and sidewalk.

The total length of roadways included in the project is approximately 1.48 miles. The total depth of rehabilitation is 1 foot.

The proposed project is located on ten streets within the city limits of Tulelake (Siskiyou County), California. The project area is within Section 35, Township 48N, Range 4E.

The following streets are to be repaved:

Siskiyou Street, from B Street north to Highway Street;

First Street, from B Street north to Highway Street;

Main Street, from D Street north to C Street;

Intersection of Main Street and D Street;

Fifth Street, from E Street north to D Street;

Fifth Street, from F Street north to E Street;

Main Street, from G Street north to E Street;

Park Street, from G Street north to E Street; and

G Street, from Park Street east to Main Street.

If you have questions regarding this project, please direct them to Andréa Rabe at 541-891-2137 or andrea@rabeconsulting.com.

Pursuant to PRC § 21080.3.1 (b), yModoc Tribe of Oklahoma has 30 days from the receipt of this letter to request consultation, in writing, with The City of Tulelake by contacting Rabe Consulting at 421 Commercial Street, Klamath Falls, Oregon 97601 or via email at andrea@rabeconsulting.com.

Very Respectfully,

A handwritten signature in dark ink, appearing to read 'Andrea Rabe', is written over a horizontal line.

Andréa Rabe
Senior Environmental Consultant
Rabe Consulting
andrea@rabeconsulting.com