



City of Arcata
Arcata Ridge Trail - Fickle Hill Segment

California Environmental Quality Act
Initial Study & Negative Declaration



January 8, 2021



California Environmental Quality Act Initial Study & Negative Declaration

Arcata Ridge Trail - Fickle Hill Segment Project APN 500-022-004

Prepared for:

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Acronyms and Abbreviations

ACF	Arcata Community Forest
AG	Agriculture General
APN	Assessor's Parcel Number
FHS	Fickle Hill Segment
B	Special Building Site
BACT	Best Available Control Technology
BMPs	Best Management Practices
C	Candidate
CA	California
CARB	California Air Resource Board
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRHR	California Register of Historic Resources
CWA	Clean Water Act
CWQ	Clean Water Act
D	Delisted
E	Endangered
EFH	Essential fish habitat
ESA	Environmental Site Assessment
ESD	City of Arcata Environmental Service Department
F	Federal

FEMA	Federal Emergency Management Act
FPA	Forest Protection Act
FR	Forest Recreation
GPS	Geographical Positioning Systems
IS	Initial Study
MBTA	Migratory Bird Treaty Act
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NCAB	North Coast Air Basin
NCIC	North Coastal Information Center
NCRWQCB	North Coast Regional Water Quality Control Board
NCUAQMD	North Coast Unified Air Quality Management District
ND	Negative Declaration
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NPPA	California Native Plant Protection Act
NRHP	National Register of Historic Places
NR-TP	Natural Resources-Timber Production
NSO	Northern Spotted Owl
NSR	New Source Review
NWIC	Northwest Information Center
PM	Particulate Matter
PSD	Prevention of Significant Deterioration
R-1	Residential One-Family
RCEA	Redwood Coast Energy Association
RUSLE	Revised Universal Soil Loss Equation
RWQCB	Regional Water Quality Control Board

SWRCB	State Water Resource Control Board
T	Threatened
THP	Timber Harvest Plan
THPO	Tribal Historic Preservation Officer
TPZ	Timberland Production
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
USLE	Universal Soil Loss Equation

Project Overview

1. **Project Title:** Arcata Ridge Trail - Fickle Hill Segment
2. **Lead Agency:**
City of Arcata
Community Development Department
736 F Street
Arcata, CA 95521
3. **Contact Person:**
David Loya 707-822- 5955
dloya@cityofarcata.org
4. **Project Location:**
The project is located in the Arcata Community Forest Sunny Brae Tract, immediately south of Fickle Hill Road, on the east side of the City of Arcata in Humboldt County, California. The project site is within parcel APN 500-022-004, a 6.17-acre parcel owned by the City of Arcata. The parcel is in Section 34, Township 6N, Range 1E, Humboldt Basin Meridian, of the Arcata South California USGS 7.5-minute quadrangle map.
5. **Applicant's Name and Address:**
City of Arcata
736 F Street
Arcata, CA 95521
6. **General Plan Designation**
The current General Plan Designation is Natural Resource.
7. **Zoning**
The current zoning for the sites is Natural Resources-Timber Production (NR-TP). Based on the current zoning and the general plan designation, recreational trails are a principally permitted use.
8. **Project Description**
The current project proposes to construct approximately 1,600 linear feet of recreational trail. The project involves construction, use, and maintenance of the recreational trail segment. The project also includes a crossing of Fickle Hill Road to facilitate recreational use connectivity. The trail segment connects two tracts that are part of the greater Arcata Community Forest and is part of the Arcata Ridge Trail.
9. **Surrounding land use**
The parcels immediately surrounding the property on the east and west are located within the RE 2.5-5 (Residential Estates) district. Uses for these include residential dwellings, general agriculture, and timber production. Immediately

adjacent to the project to the north and south is the 704-acre Arcata Community Forest Tract and Arcata Forest Sunny Brae Tract (330 acres). These public forest lands as well as the project site lands are within the City limits and are zoned Natural Resources--Timber Production (NR-TP).

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.

The City of Arcata, as the lead agency for the proposed project, has discretionary authority over the primary project proposal. To implement this project, the City will obtain a grading permit from the City of Arcata. The project will also require an encroachment permit from the County of Humboldt for crossing Fickle Hill Road, installing improvements in the County right-of-way, and tree removal and vegetation clearing within the County road right-of-way.

Tribal Consultation: Tribal consultation pursuant to AB 52 was initiated with the Bear River Band of Rohnerville Rancheria, the Blue Lake Rancheria, and the Wiyot Tribe on May 8th, 2019. The Initial Study determination reflects the results of AB 52 consultation with the Tribes.

1. INTRODUCTION

1.1 Introduction and Regulatory Guidance

This document is an Initial Study (IS) that summarizes the technical studies prepared for the proposed Arcata Ridge Trail-Fickle Hill Segment (Fickle Hill Segment) and provides evidence to support adoption of a Negative Declaration (ND). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sec. 21000 et seq., and the State CEQA Guidelines, CCR Sec. 15000 et seq. The purpose of this document is to evaluate the potential environmental impacts of the proposed Fickle Hill Segment project.

1.2 Purpose and Need

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. An Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant impact on the environment. If the agency finds that the proposed project may have a significant impact on the environment, but that these impacts will be reduced to a less than significant level through revisions to the project and/or implementation of specific mitigation measures, a Mitigated Negative Declaration shall be prepared.

This Initial Study/Negative Declaration (IS/ND) is a public information document that describes the proposed project, existing environmental setting at the project site, and potential environmental impacts of construction and operation of the proposed project. It is intended to inform the public and decision-makers of the proposed project's potential environmental impacts and to document the lead agency's compliance with CEQA and the State CEQA Guidelines.

1.3 Public Review Process

This IS/ND will be circulated for local, responsible, and trustee agencies, interested organizations and individuals who may wish to review and provide comments on the project description or other aspects of the report. The City will circulate the IS/ND to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a 30-day review period. The publication will commence the 30-day public review period per CEQA Guidelines §15105(b).

During the review period, written comments or questions regarding the draft ND should be submitted to:

David Loya
Community Development Director
City of Arcata
736 F Street
Arcata, CA 95521

707822-5955
dloya@cityofarcata.org

The proposed IS/ND, along with any comments, will be considered by the City of Arcata City Council decision on the project.

1.4 Project Location and Biological Setting

1.4.1 Location

The trail project is located in the City of Arcata, Humboldt County, California. The proposed project site is on a 6.17-acre property with assessor's parcel number (APN) 500-022-004. The parcel is in Section 34, Township 6N, Range 1E, Humboldt Baseline & Meridian, of the Arcata South California USGS 7.5-minute quadrangle map (Figure 1). The parcel centroid location is latitude 40.8657 and longitude -124.0518. The property is part of a larger 330-acre community forest tract south of Fickle Hill Road owned by the City of Arcata and managed for public access, timber production, wildlife habitat, and open space.

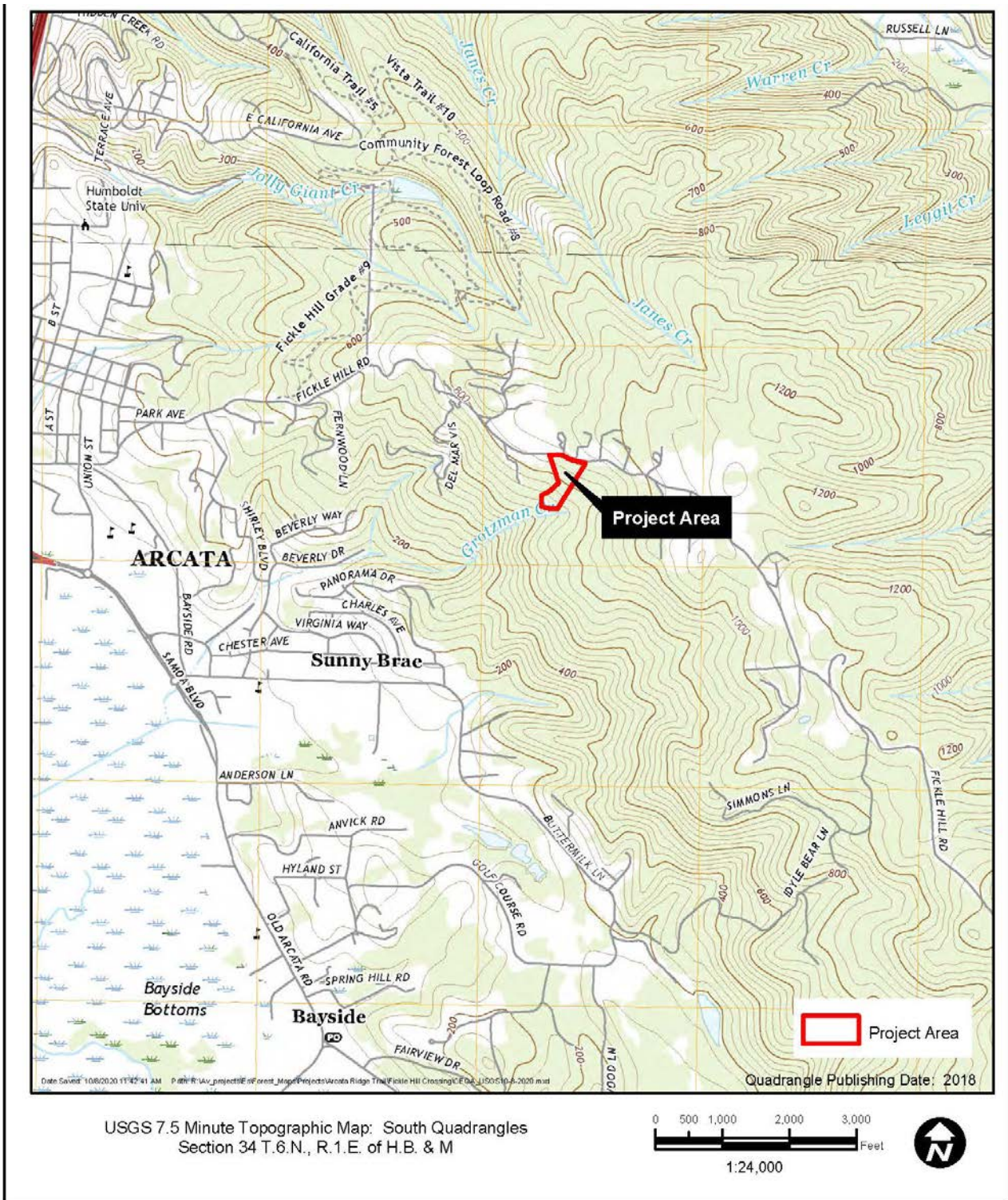


Figure 1. Map showing location of the project parcel (APN 500-022-004).

1.4.2 Climate

The climate of the project area is Mediterranean, with virtually all precipitation falling as rain from October to June. The elevation of the project location is approximately 400-800 feet, so

little to no snowfall occurs annually. The average annual amount of precipitation for Arcata is 49.2 inches (Figure 2) (Weatherbase, 2020). The month with the most precipitation on average is December with 8.4 inches of precipitation; summer months usually experience less than 1.0 inch of precipitation (Figure 2).

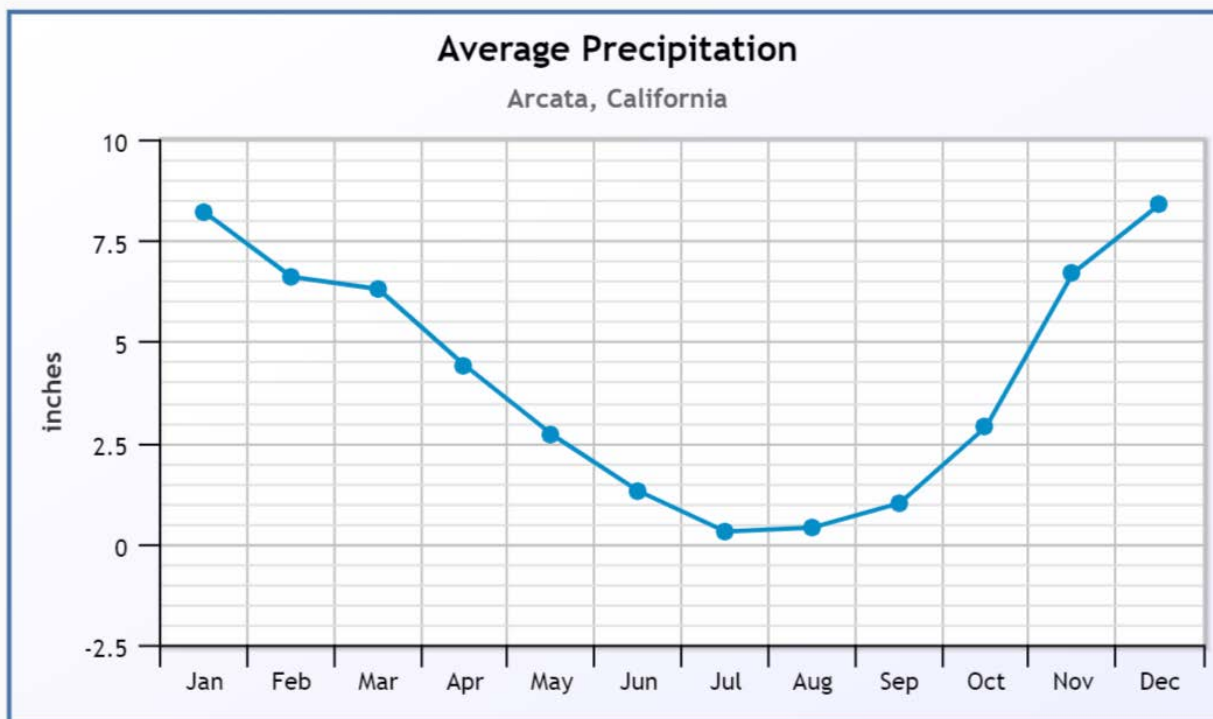


Figure 2. Monthly precipitation averages for Arcata, CA.

The average temperature for the year in Arcata is 51.1°F (10.6°C). The warmest month, on average, is August with an average temperature of 56.6°F (13.7°C). The coolest month on average is December, with an average temperature of 46.4°F (8.0°C). The highest recorded temperature in Arcata is 85.0°F (29.0°C). The lowest recorded temperature in Arcata is 26.0°F (Weatherbase, 2020).

1.4.3 Biological Setting

The project area consists primarily of North Coastal Coniferous Forest (Griffin & Critchfield, 1976) that is actively managed as multi-use including forestry. The canopy is mostly dense and consists of 80-90% *Sequoia sempervirens* (Coast redwood) and *Pseudotsuga menziesii* (Douglas-fir). Wet areas are dominated by herbs and *Alnus rubra* (Red alder). The understory consists of shrubs and herbs, namely *Vaccinium ovatum* (Huckleberry), *Rubus spectabilis* (Salmonberry), *Athyrium filix-femina* (Lady fern), *Polystichum munitum* (Sword fern), and *Claytonia perfoliata* (Miner's lettuce). In addition to this brief summary, a complete list of plant species observed in the project area (TransTerra Consulting, 2019) is provided in Table 3 below (see section 2.1.4 on

Biological Resources). Nomenclature follows the most current scientific names in The Jepson Manual of Higher Plants of California Second Edition (Baldwin et al., 2012) to the greatest degree feasible.

The project area comprises a portion of the upper watershed for Grotzman Creek that drains to Beith Creek then to Arcata Bay, via Gannon Slough, and eventually into Humboldt Bay and the Pacific Ocean. Grotzman and Beith creeks support anadromous populations of Coho salmon, steelhead trout, and coastal cutthroat trout in their lower reaches.

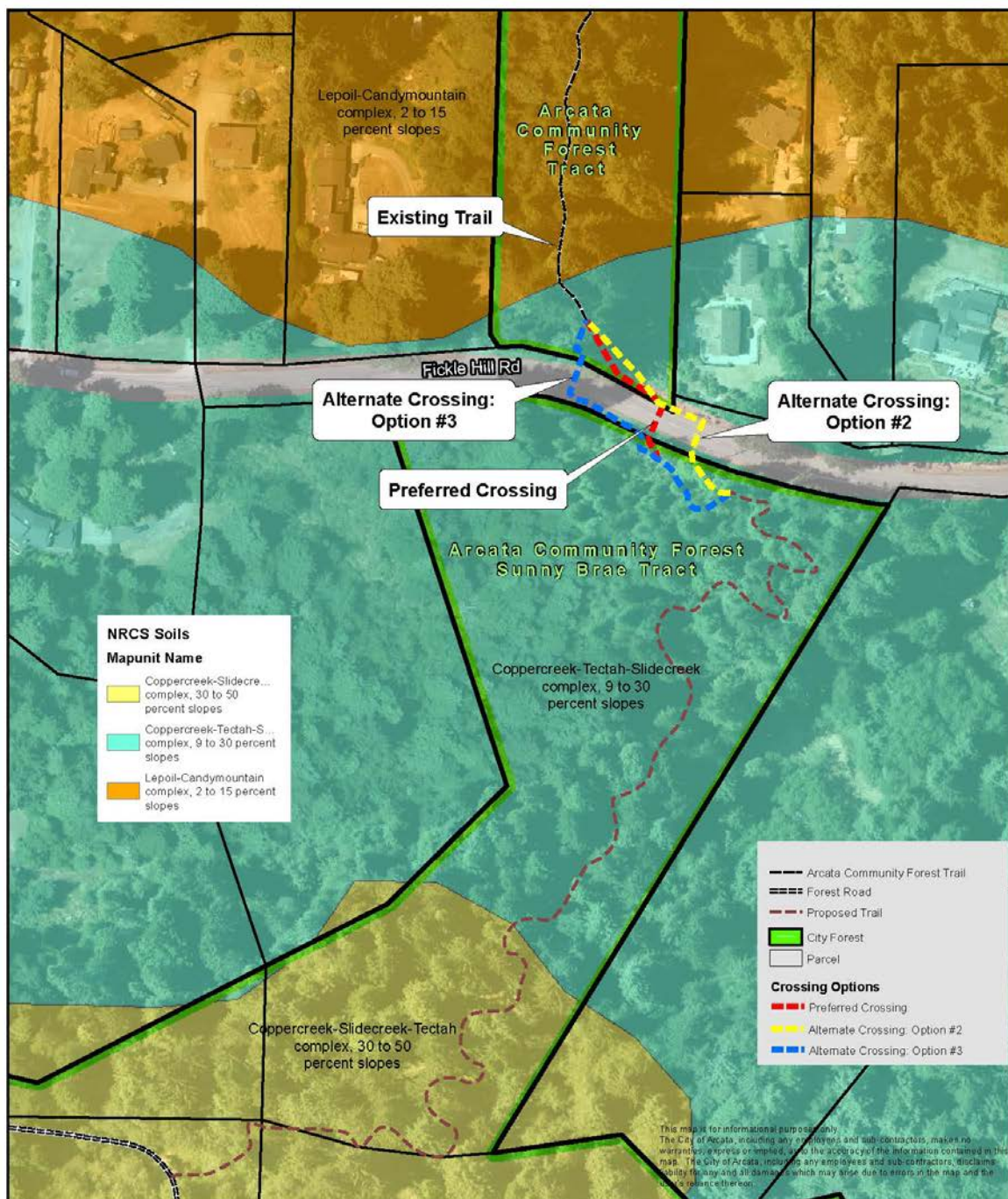
Two soil types are mapped within the project area from the Web Soil Survey (NRCS, 2020): the Coppercreek-Tectah-Slidecreek complex, 9-30 percent slopes (map unit 580), and the Coppercreek-Slidecreek-Tectah complex 30-50 percent slopes (map unit 581) (Figure 3). These soils are not considered hydric and consist of very deep, moderately well drained soils formed in colluvium and residuum from various rock types including schist, sandstone, and mudstone. Each of these soil types are associated with mean annual temperature and precipitation of 52 degrees F and 85 inches, respectively.


The Coppercreek series consists of very deep, well drained soils that formed in colluvium and residuum from schist, sandstone, and mudstone. Coppercreek soils are found on mountain slopes and broad ridge tops with slope gradients of 9 to 75 percent. This series is found at elevations of approximately 50 to 2,850 feet with medium to high runoff and produces moderately high saturated hydraulic conductivity.

The Tectah series consists of very deep, well drained soils formed in colluvium and residuum derived from sandstone, mudstone, and metasedimentary rocks. Tectah soils are found on broad ridges and mountain sides with slopes of 0 to 50 percent. They are found at elevations of 80 to 2,300 feet medium to exceedingly high runoff and moderately low to low saturated hydraulic conductivity.

The Slidecreek series consists of very deep, well drained soils that formed in colluvium and residuum weathered from sandstone and mudstone. Slidecreek soils are found on mountain sides at elevations of 80 to 2,500 feet and in highly dissected terrain with slopes of 9 to 75 percent. This series has high to exceedingly high runoff with moderately high to moderately low saturated hydraulic conductivity.

Figure 3. Soil map for the proposed project area showing the dominant soil types (580: Coppercreek-Tectah-Slidecreek complex; 581: Coppercreek-Slidecreek-Tectah complex).



 <p>City of Arcata Environmental Services</p> <p>726 F Street Arcata, California 95521 T 707 822-4184 F 707 825-2116 Email: eservices@cityofarcata.org Web: https://www.cityofarcata.org</p>	<p>0 50 100 Feet</p> <p>1:1,700</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet</p>	<p><i>Fickle Hill Segment</i></p> <p>Natural Resources Conservation Service (NRCS) - Soil Survey Geographic Database (SSURGO)</p> <p>NRCS Soils Map</p>	<p>Sheet 1 of 1</p> <p>Date: 1/4/2021</p>
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1.5 Project Description

The trail project proposes to construct 1,600 linear feet of recreational trail to connect existing parts of the Arcata Ridge Trail (Figure 4; Appendix A). This project is located within the Arcata City limits and within the City of Arcata's Sunny Brae Forest Tract, just south of the Arcata Community Forest Tract. The project includes a trail crossing at Fickle Hill Road approximately 1.5 miles east of the intersection of Fickle Hill Road and Park Avenue, and about two miles from the nearest Highway 101 off ramp. In the project location, Fickle Hill Road is a County road, and the City of Arcata owns the property on either side of the road (to the north and south) where the proposed crossing is to be located.

The project involves construction, operation, and maintenance of an unpaved all-season recreational trail. The non-motorized multi-use trail will include hiking, horseback riding, and mountain biking. This trail segment will provide a public access link connection from the Arcata Community Forest Tract lands on the north side of Fickle Hill Road to Community Forest Sunny Brae Tract located to the south. All Community Forest property is within the Arcata City limits. The proposed project links the larger five-mile long Arcata Ridge Trail network as well as other existing community forest trails. This project will provide connectivity to existing public trails and it will be used by the immediate residential neighborhood as well as the community at large. The project will help disperse recreational use throughout the city forest with a potential to decrease congestion in some areas.

The project includes the removal of trees near the road right-of-way. Three Sitka spruce trees with an average diameter at breast height (DBH), which is measured approximately 54" above the ground, of 8" will be removed. All of the Sitka spruce are currently suppressed. Eight redwood trees with an average DBH of 14.8" will be removed for traffic visibility and are part of "stump clumps". The trees are either suppressed or have been previously topped for utility clearance. Trees within the clumps will be preserved and remain alive and intact.

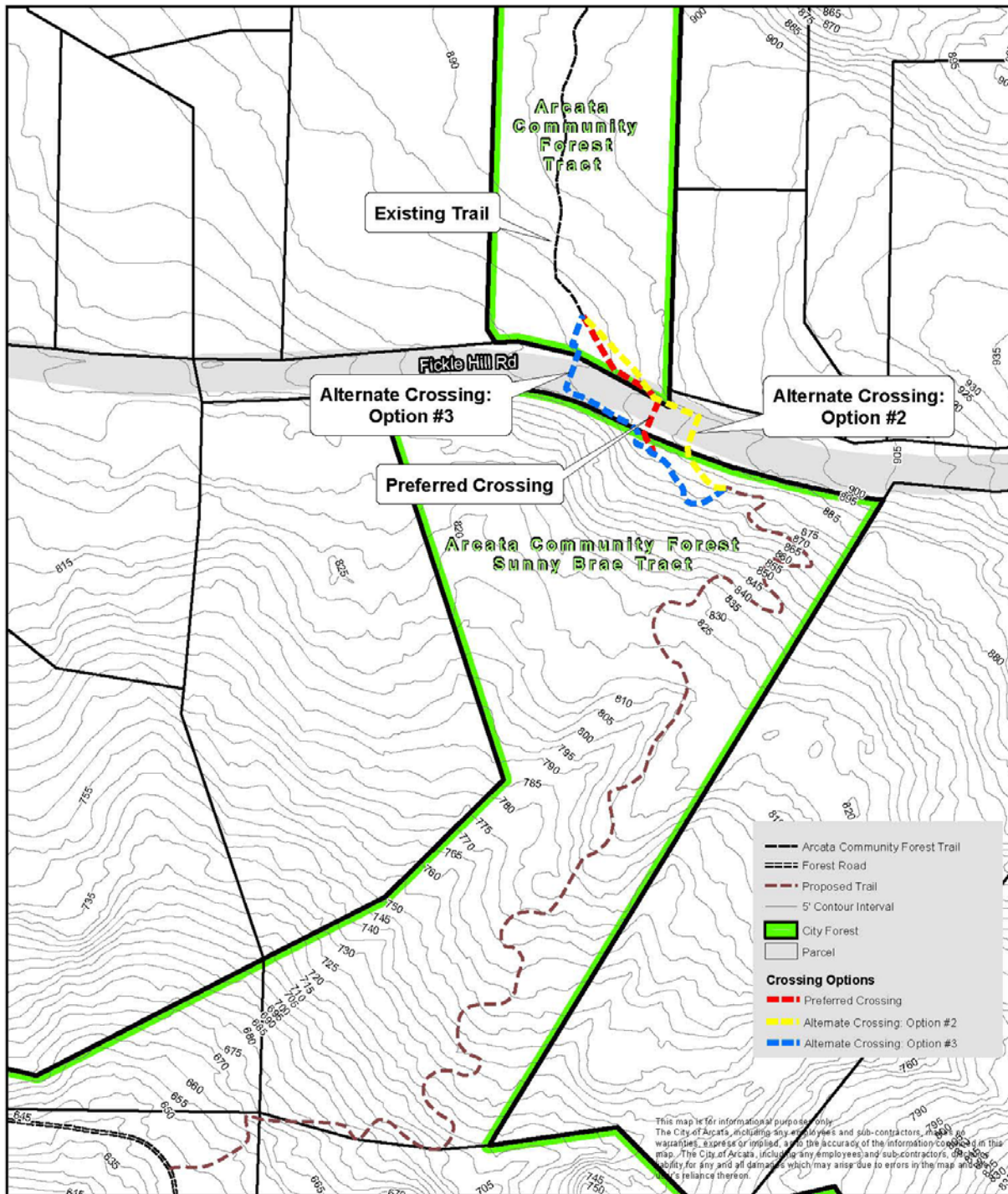
The County of Humboldt, City of Arcata, and the California Wildlife Conservation Board contributing funding for the acquisition of lands on the north side of Fickle Hill Road to enable a public access via public trail. Lands were also purchased on the south side of Fickle Hill Road with funding from the California Wildlife Conservation Board to provide for public access and a public trail, to maintain a working forest and to protect forested habitat for wildlife.


Currently there are several non-sanctioned trespass trails that have existed in the area for decades. One of the project goals is to provide a designed and sanctioned public trail to reduce the nuisance illegal trail use that involves trespass across private properties to get to the public lands.

Three viable options for the crossing location on Fickle Hill Road within the Humboldt County right-of-way are analyzed in this IS/ND. The proposed alignment, labeled the Preferred Crossing in Figure 4, minimizes trail tread within the watershed drainage area contributing runoff to a

watercourse that drains to downstream domestic water creek diversions. This option also avoids steeper side hillslopes adjacent to the county road shoulder. It provides adequate traffic visibility and requires less road bank grading on the north side of Fickle Hill Road compared to Option #2, which is east of the proposed alignment. The proposed alignment requires less material and a retaining structure on the south side of county road that would be necessary with Option #3 to the west of the proposed alignment.

Figure 4. Fickle Hill Trail Segment the proposed new trail route.



 <p>City of Arcata Environmental Services 236 E Street Arcata, California 95521 1707 822-8134 F 707 826-2116 Email: eservices@cityofarcata.org Web: https://www.cityofarcata.org</p>	<p>0 50 100 Feet</p> <p>1:1,700</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California 1 FIPS 0401 Feet</p>	<p>Fickle Hill Segment</p> <p>Proposed Trail Map</p>	<p>Sheet 1 of 1</p> <p>Date: 1/4/2021</p>
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1.6 Project Construction

Information below is based off the project description for the Arcata Ridge Trail—Fickle Hill Segment provided by The City of Arcata (ESD, 2019).

The project requires an encroachment permit from the County of Humboldt for the work within the County road and road right-of-way and a grading permit from the City of Arcata. The County has been a cooperator on the project having provided funding support for real property on the north side of Fickle Hill Road and on-site analysis for locating a crossing within the county right-of-way. The project is consistent with the Arcata 2010 Bike and Pedestrian Master Plan (City of Arcata Public Works Department, 2010) and City Capital Improvement Project #87-0002 Arcata Ridge Trail Development (City of Arcata Engineering Division, 2020). Many forest trails in the Arcata Community Forest are subject to periodic disturbance during timber harvest activities. That will be the case with this trail segment with the exception of the improvements within the County road right-of-way and within the vicinity of any known domestic water sources. Currently no parking is allowed on Fickle Hill Road within one-half mile west and east of the proposed road crossing location (ESD, 2019a).

The trail will be unpaved and two to three feet wide, constructed to standards contained in the *USDA Forest Service Trail Construction and Maintenance Notebook* (USDA Forest Service, 2007), California State Parks trail Manual as well as the International Mountain Bicycling Association Trail Solutions guide (IMBA, 2004). The trail primarily follows existing logging skid trails and previously disturbed areas. No tree removal will occur except for traffic visibility requirements at the Fickle Hill Road crossing area. Much of the proposed trail route is within areas that had timber harvest operations conducted in 2012 under Timber Harvesting Plan 1-08-166 HUM.

Protecting existing domestic surface water systems and facilitating a safe crossing of Fickle Hill Road are of the high priorities for this connector trail segment. The segment has been designed and located as far as feasible from known domestic surface water sources (and appurtenant structures) mapped and located in the field with Geographical Positioning Systems (GPS). Six parcels are apparently using a surface water source (tributary to Grotzman Creek) that originates in the project vicinity. Several other parcels (including the project property) also have rights to access a “spring” described on property deeds and title reports. No domestic water use is currently being used at the mapped “spring” locations specified on the deeds and title reports that were reviewed by the City land Surveyor and City Environmental Services staff.

Traffic safety is a factor in the placement of the trail road crossing across Fickle Hill Road. The final placement for the crossing will be that which achieves maximum line of sight visibility for trail users. The County and City will install devices such as signage and striping. The City plans to locate a solar battery-powered radar speed limit sign periodically at this location, upon

approval. On-trail warning signs will be installed informing users of the nearing roadway crossing that will require bike riders and equestrians to dismount.

While no heavy equipment will be used, construction and development of the trail will include the use of hand tools and gasoline powered power tools to convert the existing logging skid road by minor grading and applying surface rock to allow for drainage and maintaining a year-round durable surface. Power tools for construction include, chain saws, brush cutters and vibratory plate compactors to compact gravel on the trail tread.

Following installation of the trail and safety requirements, the trail will be maintained by the City of Arcata Natural Resources Division. The forest property at this location is owned by the City and managed by the City's Environmental Services Department. A volunteer Forest Management Committee advises staff and the City Council on forest policy matters. The Committee consists of seven members with backgrounds and expertise in botany, forest ecology, wildlife, fisheries, geology, recreation, and forestry. All committee meetings are public meetings whereby the public is encouraged to attend and participate.

2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This section identifies the environmental impacts of this project by addressing each of the environmental issues listed on the CEQA Guidelines Appendix G Checklist. The environmental factors checked below are considered to be potentially affected by the project as explained in the following sections.

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

For the evaluation of potential impacts, each question in the Checklist is provided an answer based on the project-specific elements of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

No Impact: The development will not have any measurable impact on the environment.

Less Than Significant Impact: The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

Potentially Significant Impact Unless Mitigation Incorporated: The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

Potentially Significant Impact: The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

All answers must consider the whole action involved, including potential off- and on-site, indirect, direct, construction, and operation, except as provided for under State *CEQA Guidelines* Section 15183 and State *CEQA Statute* Section 21083. For each environmental issue described below, the Checklist points are addressed in detail to support the conclusions of the environmental analysis and any recommendations for applicable mitigation measures.

Determination (to be completed by the Lead Agency on the basis of this initial evaluation):

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

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

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



DAVID LOYA

January 8, 2021

David Loya
City of Arcata
Community Development Department City of Arcata

Date

2.1.1 Aesthetics

Would the project: Except as provided in Public Resources Code Section 21099, Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

The project area is located in Arcata, California. It is comprised of a North Coast coniferous forest dominated by coast redwood trees. The understory is moderately dense to dense with various native and non-native species. The area is sloped and the line-of-sight distance from the street and through the forest is a maximum of approximately a few hundred feet. Neighboring parcels include rural residences (Figure 5), but these are not clearly visible from the project area. The road crossing has the most visibility of surrounding properties. The County has not designated specific scenic vistas in the project area and there are no designated state scenic highways or scenic highway corridors in the vicinity of the project (Caltrans, 2020). Figures 6-7 show roadside views near the proposed trail crossing on Fickle Hill Road.



Figure 5. Aerial image showing the project parcel (APN 500-022-004) and neighboring residences (Google, 2019).

Discussion:

Explanation of findings for items a-d in the **Aesthetics checklist** (above):

- a) No Impact. The project is not associated with scenic vistas, defined as expansive views of highly valued landscapes from publicly accessible viewpoints. Example scenic vistas include views of distinctive topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures of historical significance.
- b) Less Than Significant Impact. Project development would have minimal short- or long-term visual effects on the immediate area surrounding the areas of development, because the project area is buffered by existing vegetation consisting of dense North Coast coniferous forest. The project includes the removal of trees near the road right-of-way. Three Sitka spruce trees with an average DBH of 8" will be removed. All of the Sitka spruce are currently suppressed. Eight redwood trees with an average DBH of 14.8" will be removed for traffic visibility and are part of "stump clumps". The trees are either suppressed or have been previously topped for utility clearance. Trees within the



Figure 6. Visual setting of proposed trail entrance facing west (1013-30 M. McDowall)

Figure 7. Visual setting of proposed trail entrance facing east (Google Maps, n.d.)

clumps will be preserved and remain alive and intact. The proposed trail route primarily follows an existing skid road where larger vegetation has already been cleared, and additional vegetation removal will be minimal because of the narrow route needed for the trail. There are no historic buildings on or near this property.

- c) No Impact. The project is not associated with scenic vistas, defined as expansive views of highly valued landscapes from publicly accessible viewpoints. Example scenic vistas include views of distinctive topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures of historical significance.
- d) Less Than Significant Impact. Project development would have minimal short- or long-term visual effects on the immediate area surrounding the areas of development, because the project area is buffered by existing vegetation consisting of dense North Coast coniferous forest. The project includes the removal of trees near the road right-of-way. Three Sitka spruce trees with an average DBH of 8" will be removed. All of the Sitka spruce are currently suppressed. Eight redwood trees with an average DBH of 14.8" will be removed for traffic visibility and are part of "stump clumps". The trees are either suppressed or have been previously topped for utility clearance. Trees within the clumps will be preserved and remain alive and intact. The proposed trail route primarily follows an existing skid road where larger vegetation has already been cleared, and additional vegetation removal will be minimal because of the narrow route needed for the trail. There are no historic buildings on or near this property.
- e) Less Than Significant Impact. The proposed project is designed to follow a preexisting skid road in a forested area of the property. The loss of surrounding trees or other vegetation would be minimal. The project would not conflict with any applicable zoning or regulations governing scenic quality.
- f) No Impact. Light pollution occurs when nighttime views of the stars and sky are diminished by an over-abundance of light coming from the ground. The project does not include any lighting on the trail or any new source of substantial light or glare that would affect views in the area. The Arcata Community Forest (ACF) is closed from dusk to dawn as stated in the Arcata Municipal Code (ESD, 2019a).

Findings: In the course of the above evaluation, impacts associated with Aesthetic Resources were found to be less than significant. The project does not propose significant impacts to existing vegetation, and although the trail crosswalk and associated signage will be visible from the road, they are similar to other signage and crossing in the area and will not diminish the visual aesthetics of the Fickle Hill Road corridor. The Fickle Hill Road corridor does not have notable or significant aesthetic character or qualities in the project vicinity. The project will have a less than significant effect on aesthetic resources.

Mitigation Measures: None required.

Documentation:

Caltrans. (2020). Scenic Highways | Caltrans. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

Google. (2019). Google Earth Pro (Version 7.3) [Computer software].
<https://www.google.com/earth/>

Google Maps. (n.d.). [Street view of Fickle Hill Road at proposed crossing of Arcata Ridge Trail, looking west]. Retrieved 3/1/2020 from <https://www.google.com/maps> [Map].

Google Maps. (n.d.). [Street view of Fickle Hill Road at proposed crossing of Arcata Ridge Trail, looking east]. Retrieved 3/1/2020 from <https://www.google.com/maps> [Map].

2.1.2 Agricultural and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<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 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

d) Result in the loss of 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"/>

Setting: The City's Zoning Classification of the parcel is Natural Resources - Timber Production (NR-TP) (2008a). Previous use of the land consists of timber harvest. A Timber Harvest Plan (THP) for the property was prepared in 2008 (Timberland Resource Consultants, 2008). The project plan was designed to comply with the Forest Practice Act of 1973 (FPA), Board of Forestry and Fire Protection Rules. The Timber Harvest Plan was executed by the City Environmental Services Department in 2012 and the plan has since expired. The City is in the process of amending this property into its Non-Industrial Timber Management Plan (1-99-033NTMP HUM) to allow for selective timber harvest and recreational use as compatible activities.

Discussion:

Explanation of findings for items a-e in the **Agricultural and Forest Resources checklist** (above).

- a) No Impact. The proposed site is not underlain by soils that are considered 'prime' for agricultural production. Further, the site is not located within an area of Prime Farmland as identified by the California Department of Conservation's *Important Farmland Series Mapping and Monitoring Program*.
- b) No Impact. The proposed site is not under a current Williamson Act contract, nor is it zoned specifically for agricultural use.
- c) No Impact. Under the current *City of Arcata and Natural Resources-Timber Production (NR-TP)* zoning of the property, recreational trails are a permitted use of this area. Therefore, if proper requirements are followed, the construction of recreational trails would not conflict with any of the current zoning, or cause rezoning of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
- d) No Impact. The proposed trail route primarily follows an old skid road that was previously cleared of trees and vegetation, and therefore a minimal loss of approximately 1/10 acre of additional forest understory vegetation is expected to be required to install the trail. The project is compatible the City's Non-industrial Timber Management Plan (NTMP) (1-99NTMP-033 HUM), once amended, which conforms with the Rules and Regulations of the Board of Forestry as well as the Z'berg-Nejedly Forest Practice Act of 1973. These practices are in place to protect the health of the forest and

would allow the timber harvest and recreational use to exist cohesively. Therefore, forest land would not be converted, or lose designated uses. Numerous Community Forest recreational trails utilize existing logging skid trails that are only used for timber harvest every 15-20 years or so.

- e) **No Impact.** This project is zoned NR-TP. Historical imagery from Google Earth Pro (2019) shows some evidence for tree harvesting. Images dating back to 1989 show land disturbances and clearing but use for logging may have occurred before this time period. For example, a THP was approved in 2009 to allow for timber harvesting of the parcel that occurred in 2012 (Timberland Resource Consultants, 2008). Using this area as a recreational trail site will not affect the use as a forest resource due to the trail placement. The proposed project would not result in the conversion of Farmland to non-agricultural use. Growth and management of timber on the property will continue to occur. Trails, or trail sections, are temporarily closed or detours are established for the public during timber harvest activities. Trail use would not impact timber operations in any way. The next timber harvest operations planned for the vicinity of the project is likely 15 to 25 years in the future. (personal communication City Forester RPF Mark Andre).

Findings: Based on information provided by the City and project description, existing information available via the City of Arcata Zoning Map (2008a), and observations made on the project site and in the vicinity, the following findings can be made: the area would be used for forest recreation with recreational trails installed, consistent with current zoning. Project implementation would not result in conflicts with existing zoning, as recreational use is a permitted use under the NR-TP zone. Based on the City's forest management practices, which the Sunny Brae forest will be subject to, the project will have no impact on agricultural or forest resources.

Mitigation Measures: None required.

Documentation:

Google. (2019). Google Earth Pro (Version 7.3) [Computer software].
<https://www.google.com/earth/>

Humboldt County. (2017). Humboldt County General Plan. Humboldt County, CA - Official Website. <https://humboldt.gov/205/General-Plan>

City of Arcata. (2008a). Zoning Map.
<https://www.cityofarcata.org/DocumentCenter/View/4000/Arcata-Zoning-Map>

Timberland Resource Consultants. (2008). Schmidbauer Timber Harvest Plan.

Personal Communication, 2020 Mark Andre, City Forester RPF #2391

2.1.3 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting:

The project is located in Humboldt County, which is a part of the North Coast Air Basin (NCAB). The NCAB extends for 250 miles south to north from Sonoma County to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces (NCUAQMD, 2020a). The climate is moderate with the predominant weather factor being moist air masses from the ocean. Average annual rainfall in the area is approximately 49.2 inches with most precipitation occurring in December (Weatherbase, 2020).

Air quality in the City of Arcata is regulated by the North Coast Unified Air Quality Management District (NCUAQMD). This district currently meets all federal air quality standards but is classified as non-attainment (exceeding maximum limits) for California Ambient Air Quality Standards for airborne particles that are ten microns in diameter and smaller (PM-10). As required by the California Clean Air Act, the NCUAQMD adopted an attainment plan in 1995 to identify major PM-10 sources and develop and implement control measures to meet state ambient air quality standards. The NCUAQMD's attainment plan established goals to reduce PM-10 emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use, and burning. Control measures for these areas are included in the Attainment Plan and have also been incorporated in the Arcata General Plan: 2020.

NCUAQMD, it is understood that particulate matter can travel from other areas into Humboldt County and affect air quality. In the NCUAQMD, particulate matter in the Eureka area of Humboldt County has been determined to be primarily from vehicles, with the largest source of fugitive dust emissions from vehicular traffic on unpaved roads, open burning of vegetation (both residential and commercial), residential wood stoves, and stationary industrial sources (factories).

In determining whether a project has significant air quality impacts on the environment, agencies often apply their local air district's thresholds of significance to the project in the review process. The District has not formally adopted specific significance thresholds, but rather utilizes the Best Available Control Technology (BACT) emissions rates for stationary sources as defined and listed in the NCUAQMD Rule and Regulations, Rule 110 - New Source Review (NSR) and Prevention of Significant Deterioration (PSD), Section 5.1- BACT (pages 8-9) (NCUAQMD, 2020b).

Sensitive receptors (e.g., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses associated with sensitive receptors include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. The nearest sensitive receptor to the project site is the Sunny Brae Middle School in Sunny Brae (1.05 miles).

Discussion:

Explanation of findings for items a-e in the **Air Quality checklist** (above).

- a) No Impact. Humboldt County is nonattainment for state air quality PM10 standard, and therefore the project is subject to and will conform with the NCUAQMD Draft Particulate Matter Attainment Plan, May 1995.
- b) Less Than Significant Impact. While the proposed project is subject to the NCUAQMD Draft Particulate Matter Attainment Plan, it is not expected to have a significant impact on air quality nor violate any standards of ozone thresholds or particulate matter due to the scale of the project. Vehicle use during operation of the project would be limited to light duty vehicles and truck traffic for construction and maintenance purposes, primarily operated on paved roads. Vehicle traffic associated with the project is not expected to generate dust emissions that would cause a substantial increase in PM10 within Humboldt County or the NCUAQMD as Fickle Hill Road is paved. The traffic and vehicle use of the project construction and trail use would be similar to pre-existing ambient conditions in the area, as there will be limited parking and most use of the trail section would be from pedestrians and bicyclists.
- c) Less than significant impact. Sensitive receptors are typically defined as the segment of the population most susceptible to air quality effects including children, the elderly, and the sick, as well as land uses such as schools, hospitals, parks, and residential communities.

There are residences located near the trail crossing and below the trail. Trail construction activities will be short-term, and the pollutant concentrations from the minimal use of gas powered hand tools will not constitute “substantial concentrations”. While small off-road engines are known to contribute substantially emissions statewide, average grams per day of individual 4- and 2-stroke engines, similar to those proposed for the project, contribute very small concentrations of pollutants (CARB 2020). The individual unit averages are well below significance thresholds for NO_x, CO₂, CO, and PM. The project will not significantly impact sensitive receptors beyond ambient levels of air pollution caused by traffic and home maintenance.

- d) No Impact. The primary odor of the proposed project would be due to fumes from power tools such as chainsaws and gasoline powered compactors during construction. Potential odors will not be any different from the odor produced by motor vehicles or small equipment in use throughout the City, and impacts associated with construction will be temporary. Any odors from construction would be expected to be noticeable only within the immediate vicinity of project activities, therefore will not affect substantial numbers of people and would not result in an impact.

Findings: Due to the size and nature of the project, and existing ambient conditions, particulate emissions and other pollutants will have a less than significant impact from construction and ongoing maintenance activities. Trail use will result in no emissions since the trail is a non-motorized trail.

Mitigation Measures: None required.

Documentation:

CARB. (2020). 2020 Emissions Model for Small Off-Road Engines – SORE2020. California Air Resources Board.

NCUAQMD. (2020a). Air Quality. North Coast Unified Air Quality Management District. <http://www.ncuaqmd.org/index.php?page=air.quality>.

NCUAQMD. (2020b). District Rules and Regulations. North Coast Unified Air Quality Management District. <http://www.ncuaqmd.org/index.php?page=rules.regulations>

Weatherbase. (2020). Arcata, California. Weatherbase.Com. <http://www.weatherbase.com/weather/weather.php3?s=64537&cityname%20=Arcata-California-United-States-of-America&units=us>.

2.1.4 Biological Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting: The project is situated on lands that have been used historically for timber management. The primary habitat type throughout the property consists of North Coast coniferous forest areas. The site is occupied by wildlife and numerous rare species have been documented in the Eureka Plain Watershed. The project area is approximately 720-880 feet in elevation and does not contain serpentine or volcanic soils or other unique geological features. There are small seeps and overland surface flow as well as domestic water sources on the far western edge of the property.

Federal Regulatory Requirements

Federal Endangered Species Act

Section 9 of the federal Endangered Species Act of 1973, as amended (FESA), prohibits acts of disturbance that result in the "take" of threatened or endangered species. As defined by the ESA, "endangered" refers to any species that is in danger of extinction throughout all or a significant portion of its current range. The term "threatened" is applied to any species likely to become endangered within the foreseeable future throughout all or a significant portion of its current range. Take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Sections 7 and 10 of the ESA provide a method for permitting an action that may result in "incidental take" of a federally listed species. Incidental take refers to take of a listed species that is incidental to, but not the primary purpose of, an otherwise lawful activity. Incidental take is permitted under Section 7 for projects on federal land or involving a federal action, while Section 10 provides a method for permitting incidental take resulting from state or private action.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance essential fish habitat (EFH) for those species regulated under a federal fisheries management plan. The MSA requires federal agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agencies that may adversely affect EFH (MSA section 305[b][2]).

The EFH mandate applies to all species managed under a fisheries management plan. For the Pacific coast (excluding Alaska), there are three fisheries management plans covering groundfish, coastal pelagic species, and Pacific salmon.

Federal Clean Water Act Section 404

The objective of the Clean Water Act (CWA, 1977, as amended) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In 1987, the U.S. Army Corps of Engineers (USACE) published a manual standardizing the manner in which wetlands were to be delineated nationwide. An updated manual focusing on western states in the U.S. was published in 2010 (USACE, 2010). To determine whether areas that appear to be wetlands are subject to USACE jurisdiction (i.e., are "jurisdictional" wetlands), a wetlands delineation must be performed that maps the areas meeting the three-parameter wetland definition (i.e., presence of dominant hydrophytic vegetation, hydric soils, and wetland hydrology) and the resulting map of the wetland boundaries verified in writing by the USACE (compared to the one-parameter wetland definition under the California Coastal Act Section 2.2.6 below). Wetlands generally include riparian, swamps, marshes, bogs, and similar areas.

In addition to verifying wetlands for potential jurisdiction, the USACE is responsible for the issuance of permits for projects that propose the filling of wetlands. Any permanent loss of a jurisdictional wetland as a result of project construction activities is considered a significant

impact. Permits under Section 404 of the CWA, as amended, are required for the placement of dredged or fill materials into all waters of the United States, including wetlands and "other waters." Projects are permitted under either individual or general (e.g., nationwide) permits.

Federal Clean Water Act Section 401

The California Regional Water Quality Control Board (RWQCB), North Coast Region, is responsible for enforcing water quality criteria and protecting water resources in the project area. The RWQCB is responsible for controlling discharges to surface waters of the state by issuing waste discharge requirements.

Section 401 of the CWA requires that a project proponent obtain a water quality certification or a waiver for projects requiring a federal permit to allow for discharges of dredged or fill material (i.e., CWA Section 404 permits).

Federal Migratory Bird Treaty Act

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

Executive Order 11990 (Wetlands)

Executive Order 11990 is an overall wetlands policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state or local projects. It requires federal agencies to follow avoidance, mitigation, and preservation procedures with public input before proposing new construction in wetlands. This project will not be able to completely avoid impacts to wetlands and a Wetlands Only Practicable Alternative Finding is provided in Section 4.1.3.1.

Executive Order 13112 (Invasive Species)

Executive Order 13112 directs federal agencies to use relevant programs and authorities to: prevent the introduction of invasive species; detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; monitor invasive species populations accurately and reliably; provide for restoration of native species and habitat conditions in ecosystems that have been invaded; conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; promote public education on invasive species and the means to address them; and not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, In accordance with guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential

harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

Executive Order 11988 (Floodplain Management)

Executive Order 11988 requires federal agencies to avoid the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and avoid direct and indirect support of floodplain development.

California Regulatory Requirements

Department of Fish and Game Code Section 2081, California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA), a permit from CDFW is required for projects that could result in the “take” of a plant or animal species that is listed by the state as threatened or endangered. Under CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a species, but the CESA definition of take does not include “harm” or “harass,” like the ESA definition does. As a result, the threshold for take is higher under CESA than under ESA. Authorization for take of state-listed species can be obtained through a California Fish and Game Code Section 2081 incidental take permit.

California Native Plant Protection Act (NPPA) of 1977

The NPPA (Fish and Game Code, Sections 1900-1913) prohibits importation of rare and endangered plants into California, take of rare and endangered plants, and sale of rare and endangered plants. The CESA defers to the NPPA, which ensures that state-listed plant species are protected when state agencies are involved, and projects are subject to CEQA. In this case, plants listed as rare under the NPPA are not protected under CESA, but rather may receive protection in response to potentially significant impacts, in accordance with CEQA

California Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests because of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs and/or young.

Department of Fish and Game Code Section 3513, Migratory Birds

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

Section 3513 the CDFW may consider impacts similar to those described above under the MBTA a significant impact. Implementation of the measures identified in Section 4.3.12.3 will ensure compliance with Fish and Game Code Section 3513.

Department of Fish and Game Code, “Fully Protected” Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code describe the take prohibitions for fully protected birds, mammals, reptiles and amphibians, and fish. Species listed under these statutes may not be taken or possessed at any time and no incidental take permits can be issued for these species except for scientific research purposes or for relocation to protect livestock.

Department of Fish and Game Code Section 1600, Lake or Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- substantially divert or obstruct the natural flow of, or substantially change or use any material from a bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any action that would result in an impact on a river, stream, or lake.

Required Permits

No discretionary permits are required for the project except for a City of Arcata grading permit. The project is located outside of the Coastal Zone and therefore does not require a Coastal Development Permit from the California Coastal Commission (CCC) or City of Arcata (City). No state or federally listed species are known to exist within the project area or will be impacted by the project. The project does not involve dredging, filling, or discharging to waters of the US or Waters of the State and is therefore not subject to a Section 404 or 401 Water Quality Certification. It does not alter the stream bed, bank, or channel and is therefore not subject to a Lake and Streambed Alteration Agreement.

Discussion: Information on special-status plant species was compiled through a review and database searches. The CDFW and the CNPS recommend an assessment area for a project be a minimum of nine USGS quadrangles with the project located in the central quad. The assessment area was defined as the USGS 7.5' minute quadrangles in which the project is located and the surrounding quadrangles. The following sources were reviewed to determine which special-status natural communities, plant species, or wildlife species have been documented in the vicinity of the project alignment:

- A Manual of California Vegetation Second Edition (Sawyer et al., 2009)
- California Natural Diversity Database records (CNDDDB) (CDFW, 2020)
- CNPS Inventory of Rare and Endangered Vascular Plants (CNPS, 2020)

The following findings are based on a field review by the City of Arcata Environmental Services Department and other agency staff, information provided by the applicant, existing information available to the Environmental Services Department, and observations made on the project site and in the vicinity. The botanical survey was conducted by Arcata Natural Resource Technician Michael McDowall and was conducted during the appropriate blooming period for all special status, plant species with potential to be present in the biological survey area.

A Biological Report was prepared for the project by TransTerra Consulting (2020b). The evaluation found that the project area contains the North Coast coniferous forest dominated by Coast redwood and Seep habitat.

Potential habitat for Threatened, Endangered, or Sensitive (TES) wildlife and plants were addressed throughout the property (Tables 1 and 2) (TransTerra Consulting, 2019). From the results of the CNDDDB and CNPS inventory searches, the likelihood that various TES plants and animals would be present on the property based on suitable habitat in the area rated as one of the following: "None", "Low", "Moderate", or "High".

Table 1. CNPS Rare Plant Inventory nine-quad search results with habitat suitability

Scientific Name	Common Name	Lifeform	CRPR	Habitat	Potential for Occurrence in the Project Area
Abronia umbellata var. breviflora	pink sand-verbena	perennial herb	1B.1	Coastal dunes	None - no coastal dunes on-site
Angelica lucida	sea-watch	perennial herb	4.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt)	None - no coastal dunes, scrub, or bluff scrub on-site
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	perennial herb	1B.2	Coastal dunes (mesic), Coastal scrub, Marshes and swamps (coastal salt, streamsides)	None - no coastal dunes/scrub or Marshes and swamp habitat on-site
Astragalus rattanii var. rattanii	Rattan's milk-vetch	perennial herb	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest	Low - habitat type not present on-site
Astragalus umbraticus	Bald Mountain milk-vetch	perennial herb	2B.3	Cismontane woodland, Lower montane coniferous forest	Low - habitat type not present on-site
Bryoria pseudocapillaris	false gray horsehair lichen	fruticose lichen (epiphytic)	3.2	Coastal dunes (SLO Co.), North Coast coniferous forest (immediate coast)	Low - North Coast coniferous forest present but not immediate coast
Bryoria spiralifera	twisted horsehair lichen	fruticose lichen (epiphytic)	1B.1	North Coast coniferous forest (immediate coast)	Low - North Coast coniferous forest present but not immediate coast
Cardamine angulata	seaside bittercress	perennial herb	2B.2	Lower montane coniferous forest, North Coast coniferous forest	Moderate - North coniferous forest present on-site
Carex arcta	northern clustered sedge	perennial herb	2B.2	Bogs and fens, North Coast coniferous forest (mesic)	Moderate - North coniferous forest present on-site
Carex leptalea	bristle-stalked sedge	perennial rhizomatous herb	2B.2	Bogs and fens, Meadows and seeps (mesic), Marshes and swamps	Low - habitat type not present on-site but some seepy areas
Carex lyngbyei	Lyngbye's sedge	perennial rhizomatous herb	2B.2	Marshes and swamps (brackish or freshwater)	Low - habitat type not present on-site
Carex praticola	northern meadow sedge	perennial herb	2B.2	Meadows and seeps (mesic)	Low - habitat type not present on-site but some seepy areas

Scientific Name	Common Name	Lifeform	CRPR	Habitat	Potential for Occurrence in the Project Area
Castilleja ambigua var. humboldtensis	Humboldt Bay owl's-clover	annual herb (hemiparasitic)	1B.2	Marshes and swamps (coastal salt)	None - habitat type not present on-site
Castilleja litoralis	Oregon coast paintbrush	perennial herb (hemiparasitic)	2B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub	None - habitat type not present on-site
Chloropyron maritimum ssp. palustre	Point Reyes bird's-beak	annual herb (hemiparasitic)	1B.2	Marshes and swamps (coastal salt)	None - habitat type not present on-site
Chrysosplenium glechomifolium	Pacific golden saxifrage	perennial herb	4.3	North Coast coniferous forest, Riparian forest	Moderate - North coniferous forest present on-site
Collinsia corymbosa	round-headed Chinese-houses	annual herb	1B.2	Coastal dunes	None - habitat type not present on-site
Coptis laciniata	Oregon goldthread	perennial rhizomatous herb	4.2	Meadows and seeps, North Coast coniferous forest (streambanks)	High - North Coast coniferous forest present on-site with streambanks
Epilobium oreganum	Oregon fireweed	perennial herb	1B.2	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	Low - habitat type not present on-site while some seepy areas are present on-site
Epilobium septentrionale	Humboldt County fuchsia	perennial herb	4.3	Broadleafed upland forest, North Coast coniferous forest	Moderate - North Coast coniferous forest present on-site
Erysimum menziesii	Menzies? wallflower	perennial herb	1B.1	Coastal dunes	None - habitat type not present on-site
Erythronium oregonum	giant fawn lily	perennial bulbiferous herb	2B.2	Cismontane woodland, Meadows and seeps	Low - some seepy areas are present on-site
Erythronium revolutum	coast fawn lily	perennial bulbiferous herb	2B.2	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest	High - North Coast coniferous forest present on-site
Fissidens pauperculus	minute pocket moss	moss	1B.2	North Coast coniferous forest (damp coastal soil)	High - North Coast coniferous forest present on-site and observations in the database have been made within one mile of the parcel

Scientific Name	Common Name	Lifeform	CRPR	Habitat	Potential for Occurrence in the Project Area
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	annual herb	1B.2	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland	None - habitat type not present on-site
<i>Gilia millefoliata</i>	dark-eyed gilia	annual herb	1B.2	Coastal dunes	None - habitat type not present on-site
<i>Glehnia littoralis</i> ssp. <i>leiocarpa</i>	American glehnia	perennial herb	4.2	Coastal dunes	None - habitat type not present on-site
<i>Hesperervax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	annual herb	1B.2	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie	None - habitat type not present on-site
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	perennial herb	1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub	None - habitat type not present on-site
<i>Lathyrus japonicus</i>	seaside pea	perennial rhizomatous herb	2B.1	Coastal dunes	None - habitat type not present on-site
<i>Lathyrus palustris</i>	marsh pea	perennial herb	2B.2	Bogs and fens, Coastal prairie, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Layia carnosa</i>	beach layia	annual herb	1B.1	Coastal dunes, Coastal scrub (sandy)	None - habitat type not present on-site
<i>Lilium kelloggii</i>	Kellogg's lily	perennial bulbiferous herb	4.3	Lower montane coniferous forest, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Lilium occidentale</i>	western lily	perennial bulbiferous herb	1B.1	Bogs and fens, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest (openings)	Moderate - North Coast coniferous forest habitat present on-site with observations recorded in the databases within one mile of the parcel
<i>Listera cordata</i>	heart-leaved twayblade	perennial herb	4.2	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site

Scientific Name	Common Name	Lifeform	CRPR	Habitat	Potential for Occurrence in the Project Area
<i>Lycopodium clavatum</i>	running-pine	perennial rhizomatous herb	4.1	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)	High -North Coast coniferous forest habitat present on-site with observations recorded in the databases within one mile of the parcel. Observed by City of Arcata staff historically in project vicinity.
<i>Mitellastrum caulescens</i>	leafy-stemmed mitrewort	perennial rhizomatous herb	4.2	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Monotropa uniflora</i>	ghost-pipe	perennial herb (achlorophyllous)	2B.2	Broadleafed upland forest, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Montia howellii</i>	Howell's montia	annual herb	2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools	Moderate - North Coast coniferous forest habitat present on-site
<i>Nocca fendleri</i> ssp. <i>californica</i>	Kneeland Prairie pennycress	perennial herb	1B.1	Coastal prairie (serpentinite)	None - habitat type not present on-site
<i>Oenothera wolfii</i>	Wolf's evening-primrose	perennial herb	1B.1	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane coniferous forest	Low - habitat type not present on-site
<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	perennial rhizomatous herb	2B.2	Coastal scrub, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Piperia candida</i>	white-flowered rein orchid	perennial herb	1B.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Pityopus californicus</i>	California pinefoot	perennial herb (achlorophyllous)	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Pleuropogon refractus</i>	nodding semaphore grass	perennial rhizomatous herb	4.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	Moderate - North Coast coniferous forest habitat present on-site

Scientific Name	Common Name	Lifeform	CRPR	Habitat	Potential for Occurrence in the Project Area
<i>Ribes laxiflorum</i>	trailing black currant	perennial deciduous shrub	4.3	North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	perennial herb	4.2	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	Moderate - North Coast coniferous forest habitat present on-site
<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Siskiyou checkerbloom	perennial rhizomatous herb	1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	perennial herb	1B.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Silene scouleri</i> ssp. <i>scouleri</i>	Scouler's catchfly	perennial herb	2B.2	Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	None - habitat type not present on-site
<i>Spergularia canadensis</i> var. <i>occidentalis</i>	western sand-spurrey	annual herb	2B.1	Marshes and swamps (coastal salt)	None - habitat type not present on-site
<i>Tiarella trifoliata</i> var. <i>trifoliata</i>	trifoliate laceflower	perennial rhizomatous herb	3.2	Lower montane coniferous forest, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Trichodon cylindricus</i>	cylindrical trichodon	moss	2B.2	Broadleafed upland forest, Meadows and seeps, Upper montane coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Usnea longissima</i>	Methuselah's beard lichen	fruticose lichen (epiphytic)	4.2	Broadleafed upland forest, North Coast coniferous forest	Moderate - North Coast coniferous forest habitat present on-site
<i>Viola palustris</i>	alpine marsh violet	perennial rhizomatous herb	2B.2	Bogs and fens (coastal), Coastal scrub (mesic)	Low - habitat type not present on-site

Table 2. CNDDDB Nine-quad Search Results with Habitat Suitability

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Accipiter cooperii</i>	Cooper's hawk	N	N	Woodland, chiefly of open, interrupted, or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Low - canopy primarily closed and dominated by Redwood and Douglas fir
<i>Accipiter striatus</i>	sharp-shinned hawk	N	N	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas.	North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	Low - some watercourses present on-site with primarily southern-facing slopes
<i>Acipenser medirostris</i>	green sturgeon	T	N	These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, Klamath, & Trinity Rivers.	Spawns at temps between 8-14 C. Preferred spawning substrate is large cobble but can range from clean sand to bedrock.	None - no rivers present on-site
<i>Anodonta californiensis</i>	California floater	N	N	Freshwater lakes and slow-moving streams and rivers. Taxonomy under review by specialists.	Generally, in shallow water.	None - habitat type not present on-site
<i>Aplodontia rufa humboldtiana</i>	Humboldt mountain beaver	N	N	Coast Range in southwestern Del Norte County and northwestern Humboldt County.	Variety of coastal habitats, including coastal scrub, riparian forests, typically with open canopy and thickly vegetated understory.	Moderate - coastal forested areas present on-site with observations recorded in the database within one mile of the parcel
<i>Aquila chrysaetos</i>	golden eagle	N	N	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	None - habitat type not present on-site. No cliff-walled canyons or large open areas

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Arborimus albipes</i>	white-footed vole	N	N	Mature coastal forests in Humboldt and Del Norte counties. Prefers areas near small, clear streams with dense alder and shrubs.	Occupies the habitat from the ground surface to the canopy. Feeds in all layers and nests on the ground under logs or rock.	Moderate - North Coast coniferous forest habitat present on-site, while lacking dense alder and shrub layers near streams
<i>Arborimus pomo</i>	Sonoma tree vole	N	N	North coast fog belt from Oregon border to Sonoma County. In Douglas-fir, redwood & montane hardwood-conifer forests.	Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock, or spruce.	Moderate - North Coast coniferous forest present on-site with observations recorded in the databases within one mile of the parcel
<i>Ardea alba</i>	great egret	N	N	Colonial nester in large trees.	Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	None - No marshes or rookery sites located on-site
<i>Ardea herodias</i>	great blue heron	N	N	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes.	Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	None - No marshes or rookery sites located on-site
<i>Ascaphus truei</i>	Pacific tailed frog	N	N	Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats.	Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.	Moderate - North Coast coniferous forest present on-site
<i>Bombus caliginosus</i>	obscure bumble bee	N	N	Coastal areas from Santa Barbara county to north to Washington state.	Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Moderate - site is within habitat range with observations recorded in the databases within one mile of the parcel

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Bombus occidentalis</i>	western bumble bee	N	N	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.		High - site is within habitat range with observations recorded in the databases within one mile of the parcel
<i>Brachyramphus marmoratus</i>	marbled murrelet	T	E	Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz.	Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	Moderate - North Coast coniferous forest present on-site within 6 miles of the coast, however no old-growth is present.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	T	N	Sandy beaches, salt pond levees & shores of large alkali lakes.	Needs sandy, gravelly, or friable soils for nesting.	None - no salt ponds or sandy beach habitat present on-site
<i>Charadrius montanus</i>	mountain plover	N	N	Short grasslands, freshly plowed fields, newly sprouting grain fields, & sometimes sod farms.	Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.	Low - habitat on-site primarily North Coast coniferous forest with tall shrub layers
<i>Cicindela hirticollis gravida</i>	sandy beach tiger beetle	N	N	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico.	Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	None - no coastal dunes on-site
<i>Circus hudsonius</i>	northern harrier	N	N	Coastal salt & freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas.	Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	None - no Coastal salt & freshwater marsh on-site

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	N	N	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	None - no preferential habitat present on-site
<i>Coturnicops noveboracensis</i>	yellow rail	N	N	Summer resident in eastern Sierra Nevada in Mono County.	Freshwater marshlands.	None - no freshwater marshlands on-site
<i>Egretta thula</i>	snowy egret	N	N	Colonial nester, with nest sites situated in protected beds of dense tules.	Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	None - no preferential habitat present on-site including Marsh & swamp or Meadow & seep
<i>Elanus leucurus</i>	white-tailed kite	N	N	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	None - no Rolling foothills and valley margins with scattered oak present on-site
<i>Emys marmorata</i>	western pond turtle	N	N	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Moderate - larger stream areas present adjacent to parcel, while no grassy open fields or sandy banks present on-site with observations recorded in the databases within one mile of the parcel

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Entosphenus tridentatus</i>	Pacific lamprey	N	N	Found in Pacific Coast streams north of San Luis Obispo County, however regular runs in Santa Clara River. Size of runs is declining.	Swift-current gravel-bottomed areas for spawning with water temps between 12-18 C. Ammocoetes need soft sand or mud.	Moderate -larger stream areas present adjacent to parcel, while it may be too warm and/or slow with observations recorded in the databases within one mile of the parcel
<i>Erethizon dorsatum</i>	North American porcupine	N	N	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.	Wide variety of coniferous and mixed woodland habitat.	Moderate - North Coast coniferous forest present on-site with observations in the database within one mile of the parcel
<i>Eucyclogobius newberryi</i>	tidewater goby	E	N	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River.	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	None - no brackish waters present on-site
<i>Haliaeetus leucocephalus</i>	bald eagle	D	E	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Low - no large body of water for feeding near site but larger live trees present on-site
<i>Margaritifera falcata</i>	western pearlshell	N	N	Aquatic.	Prefers lower velocity waters.	Moderate - lower velocity waters present on-site
<i>Martes caurina humboldtensis</i>	Humboldt marten	N	E	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County.	Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	Moderate - North Coast coniferous forest present on-site in coastal redwood zone

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Myotis evotis</i>	long-eared myotis	N	N	Found in all brush, woodland, and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests.	Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Moderate - coniferous forest habitat present on-site with snags
<i>Northern Coastal Salt Marsh</i>	Northern Coastal Salt Marsh	N	N			Not present on-site
<i>Northern Foredune Grassland</i>	Northern Foredune Grassland	N	N			Not present on-site
<i>Nycticorax nycticorax</i>	black-crowned night heron	N	N	Colonial nester, usually in trees, occasionally in tule patches.	Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Low - some watercourses present on-site with forested habitat, while no marsh areas present on-site
<i>Oncorhynchus clarkii clarkii</i>	coast cutthroat trout	N	N	Small coastal streams from the Eel River to the Oregon border.	Small, low gradient coastal streams and estuaries. Needs shaded streams with water temperatures <18C, and small gravel for spawning.	Low - watercourse on property connects to small stream adjacent to parcel with observations recorded in the databases within one mile of the parcel
<i>Oncorhynchus kisutch pop. 2</i>	coho salmon - southern Oregon / northern California ESU	T	T	Federal listing refers to populations between Cape Blanco, Oregon and Punta Gorda, Humboldt County, California.	State listing refers to populations between the Oregon border and Punta Gorda, California.	Low - watercourse likely too shallow on-site with observations recorded in the databases within one mile of the parcel
<i>Oncorhynchus mykiss irideus pop. 16</i>	steelhead - northern California DPS	T	N	Coastal basins from Redwood Creek south to the Gualala River, inclusive. Does not include summer-run steelhead.		Low - watercourse likely too shallow on-site

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Oncorhynchus mykiss irideus pop. 36</i>	summer-run steelhead trout	N	N	No. Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS & No. Calif DPS.	Cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer.	Low - watercourse likely too shallow on-site
<i>Pandion haliaetus</i>	osprey	N	N	Ocean shore, bays, freshwater lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Moderate - parcel within 15 miles of fish-producing body of water with trees for nesting with observations recorded in the databases within one mile of the parcel
<i>Pekania pennanti</i>	fisher - West Coast DPS	N	T	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure.	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Moderate - North Coast coniferous forest present
<i>Phalacrocorax auritus</i>	double-crested cormorant	N	N	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state.	Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	Low - coast is likely too far from parcel
<i>Plethodon elongatus</i>	Del Norte salamander	N	N	Old-growth associated species with optimum conditions in the mixed conifer/hardwood ancient forest ecosystem.	Cool, moist, stable microclimate, a deep litter layer, closed multi-storied canopy, dominated by large, old trees.	Moderate - moist, deep littered layers with large forest growth present on-site
<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	E	E	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay.	Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottomed sloughs.	None - no Brackish marsh or marshy areas present on-site

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat	Potential for Occurrence in the Project Area
<i>Rana aurora</i>	northern red-legged frog	N	N	Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover.	Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	Moderate - damp forests and watercourses present on-site with observations recorded in the databases within one mile of the parcel
<i>Rana boylei</i>	foothill yellow-legged frog	N	C T	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Moderate - damp forests and watercourses present on-site with observations recorded in the databases within one mile of the parcel
<i>Rhyacotriton variegatus</i>	southern torrent salamander	N	N	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest.	Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rocks within trickling water.	Moderate - coastal redwood areas with damp, splash zone areas present on-site with observations recorded in the databases within one mile of the parcel
<i>Riparia riparia</i>	bank swallow	N	T	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	None - no sandy banks or cliffs present on-site
<i>Spirinchus thaleichthys</i>	longfin smelt	C	T	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column.	Prefer salinities of 15-30 ppt but can be found in completely freshwater to almost pure seawater.	None - no estuaries present on-site
<i>Thaleichthys pacificus</i>	eulachon	T	N	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries.	Spawn in lower reaches of coastal rivers with moderate water velocities and bottom of pea-sized gravel, sand, and woody debris.	None - watercourses on-site not within low reach or coastal river

Table 3. Plant Species Observed in Project Area

Scientific Name 1993 Jepson	Scientific Name 2012 Jepson	Common Name
<i>Abies grandis</i>	<i>Abies grandis</i>	Grand fir
<i>Acer macrophyllum</i>	<i>Acer macrophyllum</i>	Bigleaf maple
<i>Actaea rubra</i>	<i>Actaea rubra</i>	Red baneberry
<i>Adiantum aleuticum</i>	<i>Adiantum aleuticum</i>	Five-finger fern
<i>Alnus rubra</i>	<i>Alnus rubra</i>	Red alder
<i>Anthoxanthum odoratum</i>	<i>Anthoxanthum odoratum</i>	Sweet vernal grass
<i>Asarum caudatum</i>	<i>Asarum caudatum</i>	Longtail wild ginger
<i>Athyrium filix-femina</i> var. <i>cyclosum</i>	<i>Athyrium filix-femina</i> var. <i>cyclosum</i>	Lady fern
<i>Bellis perennis</i>	<i>Bellis perennis</i>	English daisy
<i>Berberis nervosa</i>	<i>Berberis nervosa</i>	Dwarf Oregon-grape
<i>Blechnum spicant</i>	<i>Blechnum spicant</i>	Deer fern
<i>Briza maxima</i>	<i>Briza maxima</i>	Rattlesnake grass
<i>Briza minor</i>	<i>Briza minor</i>	Small quaking grass
<i>Bromus</i> sp.	<i>Bromus</i> sp.	Brome grass
<i>Bromus vulgaris</i>	<i>Bromus vulgaris</i>	Columbia brome
<i>Campylopus</i> sp.		
<i>Cardamine oligosperma</i>	<i>Cardamine oligosperma</i>	Western bittercress
<i>Cardamine pachystigma</i> var. <i>dissectifolia</i>	<i>Cardamine californica</i>	Milk maids
<i>Carex deweyana</i> subsp. <i>leptopoda</i>	<i>Carex leptopoda</i>	Slender-footed sedge
<i>Carex gynodynema</i>	<i>Carex gynodynema</i>	Wonder-woman sedge
<i>Carex obnupta</i>	<i>Carex obnupta</i>	Slough sedge
<i>Cirsium vulgare</i>	<i>Cirsium vulgare</i>	Bull thistle
<i>Cladonia</i> sp.		
<i>Claytonia perfoliata</i>	<i>Claytonia perfoliata</i>	Miner's lettuce
<i>Claytonia sibirica</i>	<i>Claytonia sibirica</i>	Candy flower
<i>Clintonia andrewsiana</i>	<i>Clintonia andrewsiana</i>	Bead lily
<i>Cortaderia selloana</i>	<i>Cortaderia selloana</i>	Pampas grass
<i>Cotoneaster pannosa</i>	<i>Cotoneaster pannosus</i>	Silverleaf cotoneaster
<i>Cytisus scoparius</i>	<i>Cytisus scoparius</i>	Scotch broom
<i>Dactylis glomerata</i>	<i>Dactylis glomerata</i>	Orchard grass

Scientific Name 1993 Jepson	Scientific Name 2012 Jepson	Common Name
<i>Daucus carota</i>	<i>Daucus carota</i>	Queen Anne's lace
<i>Dendroalsia sp.</i>		
<i>Disporum hookeri</i>	<i>Prosartes hookeri</i>	Drops of gold
<i>Epilobium angustifolium</i> subsp. <i>circumvagum</i>	<i>Chamerion angustifolium</i> subsp. <i>circumvagum</i>	Fireweed
<i>Equisetum telmateia</i> subsp. <i>braunii</i>	<i>Equisetum telmateia</i> subsp. <i>braunii</i>	Giant horsetail
<i>Fragaria vesca</i>	<i>Fragaria vesca</i>	Wood strawberry
<i>Galium aparine</i>	<i>Galium aparine</i>	Goose grass
<i>Galium sp.</i>	<i>Galium sp.</i>	Bedstraw
<i>Gaultheria shallon</i>	<i>Gaultheria shallon</i>	Salal
<i>Genista monspessulana</i>	<i>Genista monspessulana</i>	French broom
<i>Hedera helix</i>	<i>Hedera helix</i>	English ivy
<i>Hierochloe occidentalis</i>	<i>Anthoxanthum occidentale</i>	California sweet grass
<i>Holcus lanatus</i>	<i>Holcus lanatus</i>	Common velvet grass
<i>Holodiscus discolor</i>	<i>Holodiscus discolor</i>	Oceanspray
<i>Hydrophyllum tenuipes</i>	<i>Hydrophyllum tenuipes</i>	Pacific waterleaf
<i>Hypochaeris radicata</i>	<i>Hypochaeris radicata</i>	Rough cat's-ear
<i>Ilex aquifolium</i>	<i>Ilex aquifolium</i>	English holly
<i>Iris douglasiana</i>	<i>Iris douglasiana</i>	Douglas Iris
<i>Juncus effusus</i>	<i>Juncus effusus</i>	Soft or lamp rush
<i>Juncus patens</i>	<i>Juncus patens</i>	Spreading rush
<i>Lathyrus vestitus</i>	<i>Lathyrus vestitus</i>	Pacific pea
<i>Lepraria sp.</i>		
<i>Leucanthemum vulgare</i>	<i>Leucanthemum vulgare</i>	Ox-eye daisy
<i>Lonicera ciliosa</i>	<i>Lonicera ciliosa</i>	Orange honeysuckle
<i>Lupinus rivularis</i>	<i>Lupinus rivularis</i>	Riverbank lupine
<i>Lysichiton americanum</i>	<i>Lysichiton americanum</i>	Skunk cabbage
<i>Myosotis latifolia</i>	<i>Myosotis latifolia</i>	Broadleaved forget-me-not
<i>Myrica californica</i>	<i>Morella californica</i>	Wax myrtle
<i>Neckera sp.</i>		
<i>Oemleria cerasiformis</i>	<i>Oemleria cerasiformis</i>	Oso berry
<i>Oenanthe sarmentosa</i>	<i>Oenanthe sarmentosa</i>	Pacific water-parsley
<i>Osmorhiza chilensis</i>	<i>Osmorhiza berteroi</i>	Sweet-cicely

Scientific Name 1993 Jepson	Scientific Name 2012 Jepson	Common Name
<i>Oxalis oregana</i>	<i>Oxalis oregana</i>	Redwood sorrel
<i>Petasites frigidus</i> var. <i>palmatum</i>	<i>Petasites frigidus</i> var. <i>palmatum</i>	Western sweet coltsfoot
<i>Plantago lanceolata</i>	<i>Plantago lanceolata</i>	English plantain
<i>Polystichum munitum</i>	<i>Polystichum munitum</i>	Western sword fern
<i>Prunella vulgaris</i>	<i>Prunella vulgaris</i>	Common self-heal
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	Douglas-fir
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	<i>Pteridium aquilinum</i> var. <i>pubescens</i>	Western bracken fern
<i>Ranunculus repens</i>	<i>Ranunculus repens</i>	Buttercup
<i>Rhamnus purshiana</i>	<i>Frangula purshiana</i>	Cascara
<i>Rhododendron macrophyllum</i>	<i>Rhododendron macrophyllum</i>	California rhododendron
<i>Ribes menziesii</i>	<i>Ribes menziesii</i>	Menzie's gooseberry
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	<i>Ribes sanguineum</i> var. <i>glutinosum</i>	Red-flowering currant
<i>Rubus discolor</i>	<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rubus parviflorus</i>	<i>Rubus parviflorus</i>	Thimbleberry
<i>Rubus spectabilis</i>	<i>Rubus spectabilis</i>	Salmonberry
<i>Rumex crispus</i>	<i>Rumex crispus</i>	Curly dock
<i>Sambucus racemosa</i> var. <i>microbotrys</i>	<i>Sambucus racemosa</i> var. <i>racemosa</i>	Red elderberry
<i>Scoliopus bigelovii</i>	<i>Scoliopus bigelovii</i>	Slink-pod
<i>Scrophularia californica</i> subsp. <i>californica</i>	<i>Scrophularia californica</i>	California figwort
<i>Sequoia sempervirens</i>	<i>Sequoia sempervirens</i>	Coast redwood
<i>Solanum</i> sp.	<i>Solanum</i> sp.	Nightshade
<i>Stachys ajugoides</i>	<i>Stachys ajugoides</i>	Hedge-nettle
<i>Tellima grandiflora</i>	<i>Tellima grandiflora</i>	Fringe cups
<i>Tolmiea menziesii</i>	<i>Tolmiea diplomenziesii</i>	Pig-a-back plant
<i>Trientalis latifolia</i>	<i>Trientalis latifolia</i>	Western starflower
<i>Trifolium albopurpureum</i>	<i>Trifolium albopurpureum</i>	Indian clover
<i>Trifolium campestre</i>	<i>Trifolium campestre</i>	Hop clover
<i>Trillium ovatum</i>	<i>Trillium ovatum</i>	Western trillium
<i>Urtica dioica</i> subsp. <i>holosericea</i>	<i>Urtica dioica</i> subsp. <i>holosericea</i>	Hoary nettle
<i>Vaccinium ovatum</i>	<i>Vaccinium ovatum</i>	California huckleberry
<i>Vancouveria planipetala</i>	<i>Vancouveria planipetala</i>	Redwood ivy
<i>Viola sempervirens</i>	<i>Viola sempervirens</i>	Evergreen violet

Discussion:

Explanation of findings for items a-f in the **Biological Resources checklist** (above).

- a) Less Than Significant Impact. Multiple special status wildlife species that were identified as having potential to occur within the nine-quad search were determined to be unlikely to occur in the project area upon review of species range and occurrence records (TransTerra Consulting, 2020b). Other species will not likely be impacted as their habitat would not be affected by the proposed project. (Tables 1, 2)

Project implementation will include ground disturbance to construct the trail on the former skid trail, , vegetation removal, and once the trail is built, increased human activity, which could result in the disturbance of individuals and reduced breeding productivity of certain species. Various mammal species including fisher and Humboldt marten and other carnivores are known to forage and or den in habitats present on-site. Bats, voles, ungulates, and other mammals also occupy habitat in the area, and many are special-status species. Minimal tree removal is proposed for approximately (8) Coast redwood trees (ranging from 5" to 24" Diameter) immediately adjacent to Fickle Hill Road for traffic safety visibility. The trees slated for removal have been topped periodically by Pacific Gas and Electric Company. Annual Northern Spotted Owl surveys with the most current USFWS protocol were conducted in the area (which include and cover the project area) in accordance with the City's NTMP (1-99NTMP-033 HUM). These surveys have been conducted annually in the project area since 2007 and have had no detections of spotted owls. Additionally, no spotted owl detections have been observed on the property as per California Natural Diversity Database.

The area contains suitable nesting and/or foraging habitat for several raptor species, and other special status bird species. All of these species are fully protected under California Fish and Game Code described above. Project implementation associated with potential impacts to habitat and vegetation removal could disturb nesting birds if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of trail sites, and use of trail could result in increased noise and visual disturbance to nesting birds. Pre-construction surveys for nesting birds are standard in the City of Arcata prior to undertaking work to reduce any potential impacts to avian species.

The project includes the removal of trees near the road right-of-way. Three Sitka spruce trees with an average DBH of 8" will be removed. All of the Sitka spruce are currently suppressed. Eight redwood trees with an average DBH of 14.8" will be removed for traffic visibility and are part of "stump clumps". The trees are either suppressed or have been previously topped for utility clearance. Trees within the clumps will be preserved and remain alive and intact. Active nests or burrows were not observed in the trees

proposed for clearing and they did not appear to have adequate structure for sensitive species.

In summary, no special status species were identified in the area during the most recent Biological Resource Assessment (TransTerra Consulting, 2019), nor in any previous studies in the area. Therefore, substantial adverse effects to sensitive species **are not expected**.

- b) Less Than Significant Impact. Riparian areas are those vegetated areas adjacent to rivers, streams, and lakes with specific overstory and/or understory plant species that meet the definition of riparian by the CDFW. Vegetated areas (scrub, woodland, and forest) adjacent to streams as well as isolated wetland areas can be considered riparian. These areas are important habitat for many species as well as for water quality protection.

Riparian forests in California often lie outside the plain of ordinary high water regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland. However, riparian forests are frequently included within CDFW regulatory jurisdiction under Section 1602 of the California Fish and Game Code.

Local policies and ordinances protecting biological resources that are applicable to the project are found in The City of Arcata's General Plan Resource and Conservation Element. They are as follows:

RC-1a Maintain biological and ecological integrity.

Policy RC-1a(4) states that, "Ecological systems and natural processes are not to be disrupted by land use activities to a significant degree (e.g., a culvert or other drainage device that blocks fish passage). The project does not impact the existing ecological system and natural process and is therefore consistent with this general plan policy.

RC-1c Habitat value protection.

Policy RC-1c, Habitat Value Protection, mandates that Environmentally Sensitive Habitat Areas (ESHA) be protected against any significant disruption of their habitat values. The project seeks to protect the existing ESHA by locating the trail segment away from perennial watercourses and wetlands and is therefore consistent with this general plan policy. Although short term impacts may occur during construction, these impacts will be minimized through implementation of BMPs and adherence to permit requirements.

RC-2c & RC-3d Allowable uses and activities in Environmental Buffer Area

Construction and maintenance of foot trails for public access is an allowable compatible use and activity within an ESHA.

The CDFW jurisdictional limits are not as clearly defined by regulation as those of the USACE. They include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFW extends jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater.

There is no proposed development or impact to riparian habitats proposed in the project. Since there are several seasonal streams near the trail project, best management practices are standard operations in the City of Arcata to prevent any modification to hydrology or increase erosion that could indirectly affect riparian habitat. There are currently no proposed stream or wetland crossings that could affect riparian species or habitat. Based upon this information there will be less than significant impact on riparian areas.

- c) Less Than Significant Impact. A jurisdictional wetland delineation, performed for this assessment by TransTerra Consulting, identified 0.23 acres that met the criteria for Palustrine Forested Wetland (Cowardin et al., 1979). It is likely that the wetland is hydrologically connected to the unnamed tributaries flowing into Grotzman Creek. The wetland may have previously been associated with the headwaters of a Class III drainage which was subsequently cut or filled during legacy logging operations. Drainage in the wetland area is restricted by an impervious clay layer approximately 16-20" below the surface. A small undeveloped trespass trail currently bisects the wetland area. As currently designed, the trail alignment is approximately 23.5 feet from the wetland area and 14.5 feet from the observable channel of the watercourse. (TransTerra, 2020a). Trails are permitted within in creek and wetland setbacks per the Arcata General Plan and Land Use Code. The majority of the proposed trail is on existing logging skid trails that are located a minimum of 25' from any Class III (seasonal) water course and 75' from any Class II watercourse (perennial) (per the Arcata Forest Management Plan 1994).

Straw wattles, and or coir fiber rolls and other items will be installed prior to construction to ensure that watercourses and wetland areas are not intentionally or accidentally impacted during construction.

The discharge of dredged or fill material into "Waters of the United States" including wetlands will be avoided (this also includes waters not subject to USACE jurisdiction, but subject to CDFW and RWQCB jurisdiction).

There are various streams located throughout the property with a few near the project area. The project does not propose direct removal, filling, hydrological interruption, or other means appearing to not have a substantial adverse effect on federally protected

wetlands as defined by Section 404 of the Clean Water Act. Therefore, the project will have less than significant impact on wetland resources.

- d) Less than significant impact. Wildlife movement corridors are areas that connect suitable wildlife habitat areas. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals and facilitate the exchange of genetic traits between populations. The project does not include any features that would 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. The project would not preclude wildlife mobility, breeding, or reproduction. Following construction, the proposed project would not create an impediment to wildlife movement. No operational impact would occur. The proposed project is located within forested areas except for the crossing of the county road. Deer, foxes, birds, amphibians, insects, and other wildlife currently use the forest for feeding and habitat. Many forest mammals are nocturnal and will not be affected by the trails use as the forest is close from sunset to sunrise. The total area of the proposed trail is 0.11 acres which is unlikely to significantly impact wildlife movement within the 2,445-acre Arcata Community Forest. This project is not expected to impact wildlife corridors or mobility.

Migratory birds are protected under the Migratory Bird Treaty Act, which makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory birds listed in 50 CFR Part 10. Loss of fertile eggs or migratory birds, or any activities resulting in migratory bird nest abandonment, would be an adverse effect. Construction and maintenance activities associated with the project may affect migratory birds. Therefore, pre-construction surveys are recommended to avoid impacts to nesting birds. If nesting birds are found, they will be avoided and work that could impact the nests will not commence until all young have fledged. This would ensure any potential impacts to these species would be avoided.

- e) No Impact. The project would not conflict with applicable City of Arcata General Plan Resources Conservation or Open Space Element policies, Arcata Forest Management Plan standards and guidelines pertaining to biological impacts, and Arcata Bike and Pedestrian Master Plan objective protecting biological resources. The project does not conflict with any local policies or ordinances protecting biological resources. The project proposes minimal disturbance to construct the proposed trail, but disturbance would be on such a small scale that there would be a less than significant impact and conversion from forested to non-forested habitat will not occur.
- f) No Impact. Currently there are no adopted Habitat Conservation Plans, Natural Community Conservation Plan, Safe Harbor Agreement or other approved local, regional, or state habitat conservation plans that cover the project area. The City of

Arcata has submitted a draft Safe Harbor Agreement for Northern Spotted Owl, which is still in the approval process with the US Fish and Wildlife Service and has not yet been issued.

Findings Based upon project areas surveys, and in the course of the above evaluation, impacts associated with Biological Resources were found to be less than significant because of the location, habitat present, adjacent land uses, project size and intensity, and proposed project plan, with standard BMPs incorporated.

Foot trails for public access is an allowable use under the following policy: Arcata General Plan Policy as follows:

RC-2c(1f): Allowable uses and activities in streamside protection areas - Outside the coastal zone.

Forest Management plan Standards and Guidelines:

- S) Design trail system alignments within sensitive riparian and other natural areas to minimize impacts and enhance the environment. All new trail segments must be surveyed for sensitive plants.

RC-2c Allowable uses and activities in Environmental Buffer Areas:

Forest management practices as permitted by the State of California or Arcata's Forest Management Plan: construction and maintenance of foot trails for public access.

Mitigation Measures: None required.

Documentation:

CDFW. (2020). California Natural Diversity Database (CNDDDB). California Department of Fish and Wildlife. <https://wildlife.ca.gov/Data/CNDDDB>

CNPS. (2020). Inventory of Rare and Endangered Plants of California. California Native Plant Society. <http://www.rareplants.cnps.org/>

Cowardin, L. M., Carter, V., Golet, F. C., & LaRoe, E. T. (1979). Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. <https://www.fws.gov/wetlands/Documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States.pdf>

Sawyer, J., Keeler-Wolf, T., & Evens, J. (2009). A Manual of California Vegetation, Second Edition. California Native Plant Society. <https://store.cnps.org/products/a-manual-of-california-vegetation-second-edition>

TransTerra Consulting. (2019). *Biological Assessment Report for APN 500-022-004*.

TransTerra Consulting. (2020a). Jurisdictional Wetland Delineation for Arcata Ridge Trail Project

TransTerra Consulting. (2020b). Biological Assessment Report for APN 500-022-004.

USACE. (2010). Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (ERDC/EL TR-10-3; Wetlands Regulatory Assistance Program, p. 153). U.S. Army Corp of Engineers.

2.1.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting: The federal National Register of Historic Places (NRHP), federal *National Environmental Policy Act* (NEPA), and *California Environmental Quality Act* (CEQA) legislation all contain the same general policy: to preserve the quality of our historic and cultural environment by ensuring that cultural resources are given adequate consideration throughout the course of an undertaking and by providing significant cultural resources with the best protection possible. CEQA Section 15064.5(a) defines the term “historical resources.” In addition, the following efforts or policies have been enacted to protect cultural resources in the project area.

An Archaeological Survey and report were prepared as part of the Schmidbauer THP in 2008, which did not disclose any historic or prehistoric sites or artifacts (Robinson, 2008).

Additionally, an Archaeological Survey Report was prepared by the City of Arcata, of Environmental Services Department in October 2019 (ESD, 2019b). On October 30th, 2019, Magdalena Martinez, Project Archaeologist for the City of Arcata, conducted a pedestrian survey of the project area. A 30 ft buffer on either side of the proposed trail, a total of 2.5 acres, was surveyed for potential affects. Conditions for the survey were good with sunny weather and fair ground-surface visibility. Evidence of historic camping by loggers was present within the project area, but not in the immediate vicinity of the proposed trail and did not fall under regulations for a historical resource as defined in CEQA Guidelines. No artifacts, sites, or other cultural materials were found.

The City of Arcata’s archaeological analysis also included a search of existing records and Tribal consultation. An initial records search of the project area was requested from the Northwest Information Center (NWIC) at Sonoma State in 2019. This request resulted in no documents of known archaeological sites but included a recommendation for an archaeological survey due to the proximity of the project area to the known *Trinity and Klamath trail*, now known as Fickle

Hill Road. Requests for archaeological information were submitted to the Tribal Historic Preservation Officers (THPO) of the Wiyot Tribe, Bear River Tribe, and Blue Lake Rancheria for the project area in 2008 and 2019. The Bear River Tribe and Blue Lake Rancheria expressed no knowledge or concern of cultural resources within the project area but recommended Inadvertent Archaeological Discovery protocol. The Wiyot Tribe expressed no knowledge of cultural resources within the project area but did express the potential for cultural use and resources and requested targeted efforts to survey areas of high potential near Grotzman Greek, south facing slopes, and ridge tops near the known Trinity Klamath trail.

Discussion:

Explanation of findings for items a-c in the **Cultural Resources checklist** (above).

- a) No Impact. There are no National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR) sites located at the project, or within close proximity of the site.
- b) No Impact. The cultural resources review completed for the project did not find any archaeological site that could be impacted by this project. With minimal plans for clearing, grading, or digging, it is unlikely that unknown buried archeological resources will be uncovered or harmed. If any resources are found during ground disturbing activities of the proposed project, work will stop, and the inadvertent discovery protocol will be followed.
- c) No Impact. There are no known human remains on the proposed project site. Should human remains be uncovered, State law requires that the County Coroner be contacted immediately per. California Health and Safety Code Section 7050.5 Should the Coroner determine that the remains are likely those of a Native American, the California Native Heritage Commission must be contacted. The Heritage Commission consults with the most likely Native American descendants to determine the appropriate treatment of the remains

Findings: No prehistoric or historic resources were located, and no pre-existing resources have been recorded on the property. No known resources will be impacted by this project if monitoring and heightened inadvertent discovery protocols recommendations are followed.

PROTOCOLS FOR INADVERTENT DISCOVERIES

Inadvertent Discovery of Cultural Resources

While the likelihood of an archaeological discovery during project implementation is low in this project setting, the following provides means of responding to the circumstance. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional

archaeologist, who meets the Secretary of the Interior's Standards and Guidelines Archeology and Historic Preservation, has evaluated the materials, and offered recommendations for further action.

Inadvertent Discovery of Human Remains

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

Mitigation Measures: None required.

Documentation:

ESD. (2019b). Archaeological Survey Report: City of Arcata Addition to Arcata Ridge Trail, Pedestrian Survey, Humboldt County, California, Magdalena Martinez, PI. (p. 30). City of Arcata Environmental Services Department.

Robinson, N. (2008). An Archaeological Survey Report for the Schmidbauer THP Timber Harvest Plan Humboldt County 2008.

2.1.6 Energy

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Setting: The proposed project is located up Fickle Hill Road in a forested area. No lighting or constant energy used is currently proposed for the installment of the recreational trail.

Discussion:

Explanation of findings for items a-b in the **Energy checklist** (above).

- a) No Impact. Implementation of project activities would not result in the development or ongoing use of electricity or natural gas utility services. Therefore, project-level activities would result in no environmental impact due to wasteful, inefficient, or unnecessary consumption of electricity and natural gas resources. Trail construction small power tools such as viber plates and chain saws will require minor consumption of petroleum-based fuels and small amounts of petroleum-based fuels for vehicles and support equipment (ESD, 2019a).
- b) No impact. Project-level activities proposed project would not increase the use of electricity or natural gas utilities and would result in only a minor increase in the consumption of petroleum-based fuels for vehicles and equipment. These activities would not conflict with or obstruct any renewable energy or energy efficiency plan. There would be no impact.

Findings: No impacts to energy resources or renewable energy plans are expected as no lighting or equivalent service is proposed for the project.

Mitigation Measures: None required.

Documentation:

ESD. (2019a) *Arcata Ridge Trail Fickle Hill Road: Draft Summary for Encroachment permit*.
City of Arcata Environmental Services Department..

2.1.7 Geology and Soils

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

Setting: Humboldt County is located within a seismically active region in which large earthquakes are possible. Strong seismic shaking is a regional hazard and is not particular to the project site. The extent of ground-shaking during an earthquake is controlled by the earthquake magnitude and intensity, distance to the epicenter, and the geologic conditions in the area.

A central database for active earthquake faults in California is maintained by the California Geological Survey (CGS, 2018, 2020) in keeping with the requirements of the Alquist-Priolo

Earthquake Fault Zoning Act of 1994. Slope stability and seismic hazards data from the National Earthquake Hazards Reduction Program (NEHRP) (BSSC, 2003; FEMA, 2015) are accessed via the Humboldt GIS Portal (Humboldt County, 2020). The data show moderate to high slope instability on the project parcel, and no known faults or landslides within the property (Figure 8).

Local faults, geology, and landslides in and near the project area were evaluated by SHN Consulting Engineers in 2008 for the Schmidbauer Timber Harvest Plan (THP) (SHN, 2008). The proposed trail segment runs through a small portion of the area studied in that report. SHN's results show the project area east of the Fickle Hill thrust fault zone, identified by older rocks of the Franciscan Complex being emplaced above the younger Falor formation rocks. Elsewhere the hillslopes in the Schmidbauer THP area are covered in a veneer of Pleistocene and Holocene age colluvium of varying thicknesses and are underlain by Franciscan rock units. Areas of mass wasting (slumps or slides) were observed within the overall THP area, including one small area near the southern portion of the proposed trail alignment.

Two soil types are mapped within the project area from the Web Soil Survey (NRCS, 2020): the Coppercreek-Tectah-Slidecreek complex, 9-30 percent slopes (580), and the Coppercreek-Slidecreek-Tectah complex 30-50 percent slopes (581) (Figure 3). Expanded descriptions of the soils on the property are provided in Section 1.4.3.

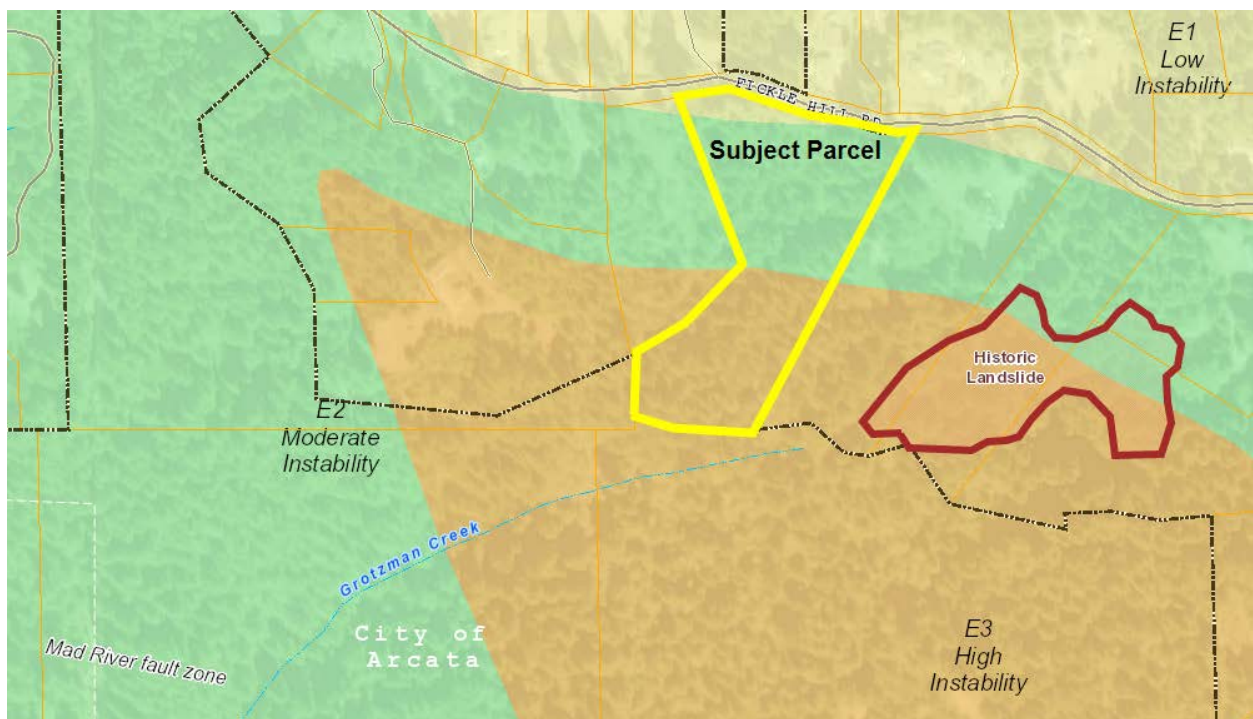
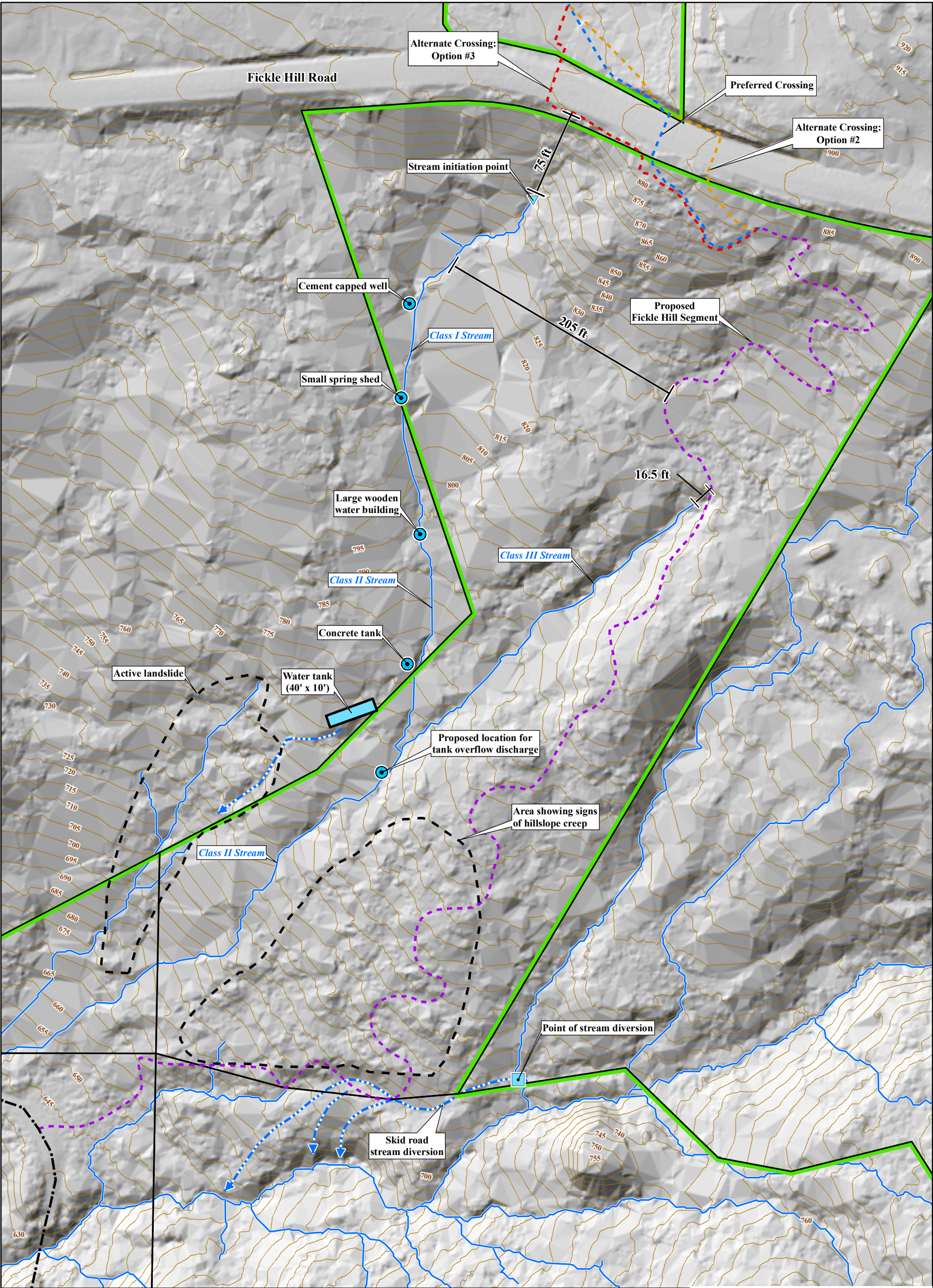


Figure 8. Humboldt County GIS layer showing seismic safety.

On October 16, 2020 technical staff from PWA assessed the 6.17-acre project site (Project) and scoped the Fickle Hill Segment trail alignment and Fickle Hill Road crossing alternatives to identify environmental factors potentially affecting: a) geology and soils and b) hydrology and water quality. PWA staff returned to the site on November 6, 2020 and assessed the trail alignment, mapped geomorphic features, and surveyed distances to streams, wetlands, and a domestic water intake using a topographic LiDAR hillshade base map. These features were incorporated into the project base map for use in the trail and crossing assessment (Figure 8).



	Domestic water infrastructure		Preferred Crossing		Contributing area
	Point of stream diversion		Alternate Crossing: Option #2		Unstable area
	Stream initiation point		Alternate Crossing: Option #3		Water tank (40' x 10')
	Stream		Proposed Fickle Hill Segment		Parcel boundary
	Gully		Existing trail		City of Arcata - community forest

City of Arcata provided a 1-ft DEM which was used to derive hillshade, contours and streams
Parcel boundary data: City of Arcata

0 37.5 75 150 Feet

Scale 1:900 1 inch = 75 feet
Contour interval: 5 foot

Prepared November 2020 by:
Pacific Watershed Associates
www.pacificwatershed.com

Revised by City of Arcata 1/4/2021

Figure 9. Arcata Ridge Trail - Fickle Hill Segment Geology and Hydrology

Discussion:

Explanation of findings for items a-f in the **Geology and Soils checklist** (above).

- a) Trail construction and use will increase human exposure to geological features of the project area but is not expected to involve substantial adverse effects.
 - i. Less Than Significant Impact. The Project is located within the Coast Ranges Geomorphic Province, north of the Mendocino Triple Junction, California's most seismically active region. Although no faults have been documented within the immediate vicinity (50-ft) of the Project, this site is located within the fold and thrust belt of the Cascadia subduction zone. There are active seismic sources regionally which have the potential to produce strong ground shaking capable of inducing slope movements. Large to very large >8.0 magnitude earthquakes can originate from compressional faults located within the North American plate such as faults within the Mad River fault zone (MRFZ) and the Little Salmon fault zone (LSFZ). The MRFZ is generally considered to consist of the Fickle Hill fault, Mad River fault, McKinleyville fault, Blue Lake fault, Trinidad fault, Big Lagoon fault, and numerous smaller faults within the area. The Project lies within the MRFZ and is located on the upthrown block of the Fickle Hill fault. The Fickle Hill fault is the closest potential seismic source to the Project and the Fickle Hill fault Alquist-Priolo earthquake fault zone is mapped approximately 0.7 miles to the west of the Project (PWA, 2020).
 - ii. Less Than Significant Impact. Strong seismic shaking is a regional hazard that is not particular to the project site and may be expected to occur at unpredictable times. Projections for severity of seismic shaking are based on the National Earthquake Hazards Reduction Program (NEHRP) Soil unit classifications (BSSC, 2003; FEMA, 2015, 2020) accessed through the Humboldt GIS Web Portal (Humboldt County, 2020). The project area is rated as NEHRP Soil Unit C indicating "very dense soil and soft rock" with moderate seismic wave velocities. Construction of the trail segment will not affect the severity of seismic ground shaking in the project area from local or regional events. Human exposure may increase due to trail use; however, baseline conditions include unauthorized historic use of the skid trail. Trail use will expose users to minimal risk of injury if a fault rupture or ground shaking occurs during trial use.
 - iii. Less Than Significant Impact. Seismic-related ground failure: The property is mapped as having moderate to high instability due to seismic activity (Figure 8) (Humboldt County, 2020). This designation is common throughout Northern California. Use of the project area is not expected to cause a significant increase in risk exposure to seismic-related ground failure. In the event of a major earthquake, a number of potential impacts could happen region-wide, include seismic ground shaking, damage to structures, rupture of utilities, and

earthquake induced-flooding and landslides. Trails users would be exposed to potential impacts, but seismic events are impossible to predict and impact large areas. The Project is a natural surface trail, and there are no structures or utilities. Trails users would not be exposed to an increased level of danger in the event of an earthquake. The impact is considered to be less than significant.

- iv. Less Than Significant Impact. Landslides: The project is primarily on areas with slopes ranging from 10 to 30 percent. No large historical landslides are mapped on the property (Figure 8). A large historical landslide is mapped on a neighboring property, but it does not intersect the project parcel and is not expected to affect the project stability (Humboldt County, 2020). A small ¼ acre of unstable area of “irregular and broken ground” was mapped by SHN consulting engineers during the preparation of Timber Harvest Plan (THP) 1-08-166 HUM in the southern area of the property. The report states that the area appears to have experienced movement historically. SHN recommended single-tree selection harvest in the unstable area but did not recommend limiting skid trails and heavy equipment in that area. CAL FIRE (lead agency for the THP review) and the California Geological Survey who reviewed the THP did not indicate that selection logging with heavy equipment would cause a significant impact. Therefore, a trail situated on a portion of that “managed landslide” and constructed with hand tools with minimal ground disturbance is not likely to induce a significant environmental impact related to landsliding.
- v. Less Than Significant Impact. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on the percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Erosion factor Kw (whole soil) indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments. The project area has a Kw value of 0.24, meaning it is moderately susceptible to water erosion (NRCS 2020). The abundance of trees and vegetation present on the property soil reduces the likelihood of the soil to erode. The small clearings made for the trail would represent less than significant impacts to soil erosion.
- vi. Less Than Significant Impact. Previous work in the area by SHN Consulting (SHN 2008) showed areas of instability in the vicinity, but no large historical landslides identified within the project area. The project area is rated as having moderate to high slope instability (Humboldt County 2020), which is common for hillslopes in coastal Humboldt County, and comparable to other areas traversed by Community Forest trails. Moderate slopes and dense soil types in the project area may contribute to fewer landslides, and liquefaction does not apply to the area.

- vii. Less Than Significant Impact. Expansive soils are generally high in certain clay types and are prone to large volume changes that are related to changes in water content. Soils along the project alignment are generally clay loam (NRCS 2020) and are very deep, moderately well drained soils which have low potential for significant expansion.
- viii. No Impact. The project does not involve the construction or use of septic systems or an onsite wastewater disposal system.
- ix. No Impact. Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. No paleontological resources or unique geologic features have been identified on the proposed project site, and the potential for their occurrence is considered low.

Findings: As proposed, the project does not entail significant earth moving, excavation/cutting, filling/loading, lateral destabilization, vegetation removal, altering surface runoff drainage patterns, or directing runoff onto existing landslide features, structural fillslopes, or embankment. The proposed trail segment crosses hillslopes with evidence of past hillslope creep, but construction, use, and maintenance of the trail as proposed will not significantly further impact hillslope stability. The project trail route generally crosses slopes that are less than 45% in steepness and is aligned around large trees and old growth stumps which provide root strength to soils and assist in hillslope stabilization. Based upon the review of the information above, the implementation of the project will have a less than significant impact with respect to Geology and Soils (PWA, 2020).

As proposed, the Project will not result in significant impact to site soils, soil stability, or topsoil resources and characteristics. Minimization of the trail width (two to four feet wide), trail surfacing with rock aggregate, and installation of rolling dip drainage structures in accordance with best-management-practice standards will be sufficient to minimize surface erosion of trail and off-trail soils (PWA, 2020 - Appendix B). To the north, in the Arcata Community Forest recently completed trail projects demonstrate that with proper design, construction, and maintenance, the region's soil offers adequate stability for building excellent, highly sustainable trail networks (PWA, 2020).

The following best management practice measures will be included as part of the project design to avoid impacts to geology.

- The project trail should be constructed with an average 5% outslope and as stated in the project description and guidelines in PWA Report, Appendix B, without the use of heavy machinery and minimizing excavation/cutting or filling.

As proposed, limit grading for trail construction to work that can be completed with hand labor.

- Avoid trail building on steep landslide scarps and over-steepened road fills.
- Rock the trail surface where located in soft soil or wet terrain, or on-trail segments that exceed 5 to 7% in steepness to reduce deformation of the trail surface, erosion from concentrated surface runoff, and pulverization by trail usage. Ensure that rock surfacing is adequate for all designed shared-use modes, including bicycle and equestrian usage.

Mitigation Measures: None required.

Documentation:

CGS - California Geological Survey. (2018). Earthquake Fault Zones—A Guide for Government Agencies, Property Owners / Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California (2018) (Special Publication 42; p. 93). California Geological Survey.

CGS - California Geological Survey. (2020). Alquist-Priolo Earthquake Fault Zones. California Department of Conservation. <https://www.conservation.ca.gov/cgs/alquist-priolo>

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

FEMA. (2015). *NEHRP Recommended Seismic Provisions for New Buildings and Other Structures Volume I: Part 1 Provisions, Part 2 Commentary* /. WBDG - Whole Building Design Guide. <https://www.wbdg.org/ffc/dhs/criteria/fema-p-1050-vol-1>

FEMA. (2020). Hazus Program and Software. Federal Emergency Management Agency. <https://www.fema.gov/HAZUS>

Humboldt County. (2020). Humboldt GIS Portal, Geographic Information System (GIS) Web Applications. Humboldt County, California's Redwood Coast. <https://humboldt.gov/1357/Web-GIS>

NRCS - Natural Resources Conservation Service. (2020). Web Soil Survey. United States Department of Agriculture. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

PWA. (2020). Evaluation of Fickle Hill Road Trail Crossing options and CEQA Initial Study for a new segment of the Arcata Ridge Trail, Humboldt County, CA

SHN. (2008). Geologic evaluation of site-specific areas within the Schmidbauer Timber Harvesting Plan, Humboldt County. SHN Consulting Engineers and Geologists, Inc.

2.1.8 Greenhouse Gas Emissions

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

Setting: The area for assessment of greenhouse Gas (GHG) impacts is statewide. Under CEQA guidelines developed by the Office of Planning & Research, lead agencies must determine if a project will emit GHGs, determine the significance of the emission, and develop mitigations. CEQA Guidelines define greenhouse gases to include CO₂, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The Energy Resources Management Element in the Arcata General Plan includes policies to reduce and mitigate greenhouse gas emission including encouragement of appropriate energy alternatives, encouragement of energy efficiency conservation, promotion of energy efficiency in transportation, and restoration for greenhouse gases absorption (2008). The Community Greenhouse Gas Reduction Plan outlines action areas to promote the reduction of greenhouse gas emissions, focusing on energy efficiency, renewable energy, sustainable transportation, waste and consumption reduction, carbon sequestration and other methods, and cross-cutting approaches (City of Arcata 2006). This plan meets various goals outlined in the Arcata General Plan. In 2000, the City also joined the International Council on Local Environmental Initiatives Cities for Climate Protection campaign which helps to reduce greenhouse gas emissions at the community level.

Discussion:

Explanation of findings for items a-b in the **Greenhouse Gas Emissions checklist** (above).

Greenhouse gases are a contributor to climate change, sea level rise, ocean acidification, and endangerment of sensitive organisms. Climate, unlike weather, refers to the overall trends of temperature, rainfall, and other atmospheric conditions. The contribution of gases from products of combustion (such as compounds present in automotive exhaust) and other sources have resulted in an influx of NO_x, O₃, CO₂, and CH₄ which has led to an increase in global temperatures. These gases allow visible and ultraviolet light from the sun to penetrate the atmosphere but then prevent them from escaping. This increase in temperature melts polar ice caps which increases sea levels, impacting a countless number of species directly, including humans.

California passed Assembly Bill 32, which mandates a reduction in greenhouse gas (GHG) emissions, and Senate Bill 97 which requires that GHG be evaluated and addressed under CEQA. On April 13, 2009, the Governor's Office of Planning and Research (OPR) submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for GHG emission, as required by Senate Bill 97 {Chapter 185, 2007} and they became effective March 18, 2010. As a result of these revisions to the CEQA Guidelines, lead agencies are obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effect.

In 2006, the California Global Warming Solutions Act (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (Health & Safety Code §38500 et seq.), including setting a target of reducing GHG emissions to 1990 levels by 2020. AB 32 requires local governments to take an active role in addressing climate change and reducing GHG emissions. Recommendations to reduce GHG emissions include promoting energy efficiency in new development and improved coordination of land use and transportation planning on the city, county and sub regional level, and other measures to reduce automobile use.

The California Air Resources Board (CARB) announced in July 2018 that the State has already met the AB 32 goal of reducing emissions to 1990 levels by 2020, approximately four years early (CARB, 2018). As stated in the Executive Summary of the 2018 Edition of the California Greenhouse Gas Emissions Inventory: 2000-2016:

"The inventory for 2016 shows that California's GHG emissions continue to decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million metric tons of CO₂ equivalent (MMTCO₂e), 12 MMTCO₂e lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million metric tons. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the state remains on track to meet its climate targets in 2020 and beyond."

The project is subject to state regulations applicable to project design and construction that would reduce GHG emissions and provide compliance with the California Air Resources Board (CARB) Climate Change Scoping Plan (CARB, 2018). The ACF program (timber and trails) we are sequestering 15,000 metric tons of CO₂ per year (personal communication City Forester RPF Mark Andre, 2020). The State of California has the most comprehensive GHG regulatory requirements in the United States, with laws and regulations requiring reductions that affect project emissions. Legal mandates to reduce GHG emissions from vehicles, for example, reduce project-related vehicular emissions. Legal mandates to reduce GHG emissions from the energy production sector that will serve the proposed project would also reduce project related GHG

emissions from electricity consumption. Legal mandates to reduce per capita water consumption and impose waste management standards to reduce methane and other GHGs from solid wastes, are all examples of mandates that reduce GHGs. The proposed project will not surpass any of these mandates. Due to the size and location of the project GHGs will be less than significant.

- a) Less Than Significant Impact. The project proposed is a non-motorized, multi-use trail that will involve minimal consumption of petroleum-based fuels due to the use of small power tools, such as compaction plates, chain saws, support equipment, and vehicles (ESD 2019a). While directly off of a main paved road, Fickle Hill Road, this location may minimally contribute to emissions due to the steep incline of the road leading to the project site. Despite this, the primary access point for the project during construction will be from the lower, southern portion. Following construction, GHG emissions due to the project could occur from the following sources: emissions from on-road vehicles transporting maintenance employees to and from the trail and fuel combustion related to periodic maintenance, repair, and improvement of the trail system.

No GHG emissions are expected for light use on the project as the project does not propose the use of any light sources. It is anticipated that the limited amount of greenhouse gas emissions generated through the development of this project will be sequestered along with those generated offsite by area traffic and other activities. Based upon a negligible contribution to overall emissions, consistency with adopted air quality regulations for vehicle emissions, it is anticipated that this project will have a less than significant impact on greenhouse gas emissions.

- b) No Impact. The proposed project involves the construction and maintenance of a multi-use non-motorized recreational trail. It does not conflict with any applicable plan or policy to reduce GHG emissions. The project is located within the community forest and one of the forest management plans goals is to increase terrestrial carbon stocks by growing larger and older trees. Project activities would be temporary and minor, and therefore have minimal effects on AB 32 greenhouse gas emission reduction goals.

Findings: Because of the periodic and varying nature of these activities, the emissions from such sources are not quantifiable. Due to the small size of the proposed project, it is unlikely to have a major contribution to GHGs. The proposed project does not conflict with any plan, policy or regulations involving GHGs and will have a less than significant impact.

Mitigation Measures: None required.

Documentation:

City of Arcata. (2006). Community Greenhouse Gas Reduction Plan.

<https://www.cityofarcata.org/231/Energy-Program>

City of Arcata. (2008). *Arcata General Plan: 2020*. <https://www.cityofarcata.org/160/General-Plan>

CARB. (2018). *California Greenhouse Gas Emissions for 2000 to 2016: Trends of Emissions and Other Indicators* (p. 20). California Air Resources Board.
https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_trends_00-16.pdf

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

Personal Communication, 2020 Mark Andre, City Forester RPF #2391

2.1.9 Hazards and Hazardous Materials

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

Setting: The construction activities of recreational trails will involve a minor use of hazardous materials including fuels and lubricants for power tool use. While commonly used in construction and upkeep, even small quantities of these materials can introduce potential hazards to the environment. However, numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials if required. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations. The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials having a less than significant impact.

This Phase I ESA (Environmental Site Assessment) was completed for the subject property (Amicus, 2012). The property was inspected for the presence of features associated with historic use or current practices representative of releases or potential releases of hazardous substances or petroleum products. A database of governmental records (Standard Environmental Record Sources) was obtained and reviewed during ESA research. No condition indicative of a release of hazardous substances or petroleum products was observed during the conduct of the Phase I ESA.

Discussion:

Explanation of findings for items a-g in the **Hazards and Hazardous Materials checklist** (above).

- a) Less than significant impact. Small amounts of potentially hazardous substances (e.g., fuels and other chemicals used to maintain vehicles and equipment) would be used at the project site. This includes vehicles and equipment used during construction and development of the project. Regular transport of such materials to and from the project alignment during construction could result in an incremental increase in the potential for accidents. Compliance with standard transport and handling procedures provided by chemical manufacturers should be used during project activities. Refueling staging areas will be situated away from waterways, dry or wet, and equipment will be stored and maintained within properly cleared areas.
- b) Less than significant impact. The proposed project is a small-scale recreational trail development. Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain equipment) would be used at the proposed project site, particularly during the construction phase. Accidental releases of these substances could potentially contaminated soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Spill kits will be onsite to clean up any small spills that could occur, Compliance with standard safety procedures and regulations regarding handling of hazardous materials would ensure a less than significant impact to the public or environment.

- c) No impact. The proposed project would not emit hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d) No impact. The proposed project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. It would not create a significant hazard to the public or the environment.
- e) No impact. The proposed project is not located within an airport land use plan, a non-adopted airport land use plan area, or within two miles of a public airport or public use airport.
- f) No impact. The project is in a remote location and will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project will not include development that would increase the number of people exposed to emergencies and would not include uses that would require an amendment of a locally adopted emergency plan.
- g) Less than significant impact. The proposed project is primarily located in a forested area. The Arcata Community Forest (ACF) area is mapped as having a high fire hazard severity (CAL FIRE FRAP, 2020). Any development or structures on the project site will comply with State Fire Safe Standards for protection of life and property from wildfires through clearing vegetation; locating appropriately sized water storage facilities in strategic locations; and undertaking other actions required for fire protection/suppression as determined by the County or CALFIRE. With implementation of fire safety standards, the project will not represent a significant risk of damage from wildfire, would not cause significant wildfire risk to the area from project related activities, and would follow the Humboldt County General Plan Safety Element. While any wildfire has the potential to spread to nearby residential developments, the potential for a fire from this project site to spread to adjacent residential developments is small. The project will have a less than significant impact on wildfire in urban areas.

Findings: With the proper storage, application, and disposal of potentially hazardous chemicals, there will be a less than significant impact from project activities. Additionally, project compliance with fire safety and prevention standards will result in less than significant impacts.

Mitigation Measures: None Required.

Documentation:

Amicus. (2012) Schmidbauer Property-Arcata Community Forest Project: Phase I Environmental Site Assessment.

GHD. (2018). *Humboldt Bay Trail South: Initial Study and Proposed Mitigation Negative Declaration*. <https://humboldt.gov/Archive/ViewFile/Item/1251>

Humboldt County. (2019). *Humboldt County Community Wildfire Protection Plan | Humboldt County, CA*. <https://humboldtgov.org/2431/CWPP-2019>

Humboldt County. (2020). *Humboldt GIS Portal, Geographic Information System (GIS) Web Applications*. Humboldt County, California's Redwood Coast. <https://humboldtgov.org/1357/Web-GIS>

CAL FIRE FRAP. (2020). California Department of Forestry and Fire Protection. Fire and Resource Assessment Program (FRAP) <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>

2.1.10 Hydrology and Water Quality

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 or 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 implementations of water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting: The property is situated on public lands in the Grotzman Creek Watershed, within the Eureka Plain Watershed. Grotzman Creek lies approximately 150 ft southwest of the project area (Figure 9). The National Wetlands Inventory (NWI) (USFWS, 2020) and Humboldt GIS Web Portal show no wetlands on the property. However, a total of 0.23 acres of wetlands were mapped on the project parcel as part of a detailed wetland delineation survey by Trans Terra Consultants in March 2020. No stream crossings are proposed for the project.

Impacts to water quality associated with recreational trail development activities proposed by the project are regulated by agencies such as the North Coast Regional Water Quality Control Board (RWQCB) or other regulations of the State Water Resources Control Board (SWRCB). There are a number of practices in place by the City of Arcata to protect water quality, such as with developments and projects that would directly or indirectly discharge runoff into storm drains, creeks, streams, rivers, the ocean, or other receiving water bodies in Arcata. These practices or “best management practices” (BMPs), provide appropriate framework for protecting water quality. These practices are implemented through policies within the Arcata General Plan, Land Use Code, and the City’s BMP Manual which includes policies to minimize and identify potential pollutants entering the waterways.

Streams

Headwater Class I (domestic water sources), II, and III streams are present and have been disturbed historically by logging and skid trail construction (Figure 9). Historic timber harvest has affected the hydrology, infiltration rate, and rate of water delivery to streams through changes in the permeability of the soil and by changes in the drainage network. (PWA, 2020)

Diverted stream

A lower portion of the new Fickle Hill Segment is aligned upslope of an abandoned skid trail with an active diversion gully from a Class III stream channel diverted on an adjacent private ownership to the east (Figure 9). The stream catchment is ell-defined and is approximately 2.15-acres in area. The watercourse is diverted onto the abandoned road downslope of the project trail for a length of approximately 225-ft and has eroded at least three gullies into the outboard fillslope. (PWA, 2020)

Water quality

The project area and proposed trail additions are located within second growth redwood forest with a closed canopy, with thick organic litter and little exposed mineral soil visible. Water quality sampling conducted by the City of Arcata on December 17, 2019 identified the presence of total coliforms and *E. Coli* at the large wooden water building associated with the water diversion system (Figure 9). (PWA, 2020)

Groundwater

The water table is expected to be seven feet or more below the ground surface. Groundwater depth varies by location and fluctuates with variations in rainfall, runoff, and other changes in hydrologic conditions. At localized areas, such as springs or seeps, groundwater is shallow and emerges where it intersects the ground surface. (PWA, 2020)

Domestic water intakes and storage structures

There is a series of in-stream domestic water diversion and storage infrastructure downslope of Fickle Hill Road to the west of the proposed new trail (Figure 9). The proposed Fickle Hill Segment is not in the same headwater drainage basin area or catchment that the observed domestic water infrastructure is located (Figure 9). An approximately 18 ft-wide wooden water building is the active surface water intake and diversion structure (Figure 9). This is located 140 to 160-ft to the west of the new proposed Fickle Hill Segment alignment. A legacy cement capped domestic water intake (personal communication City Forester RPF Mark Andre, 2020) is located upstream of the active surface water intake and diversion structure (Figure 9).

The domestic water area is comprised of a series of buildings, pump house, and water storage structures that culminate in a large cylindrical metal water tank (40-ft long by 10-ft diameter). They are located both on and just outside to the west of the cities APN 500-022-004 boundary and used to store domestic water diverted from a watercourse within the adjacent parcel (Figure 9). Active overflow from the tank was observed to be flowing down a legacy skid road, eroding a gully through the skid road fill, and discharging onto an active landslide (Figure 9). The toe or the downslope extent of the large active landslide feature is located within the parcel owned by the City of Arcata. The poorly-located overflow drainpipe may be contributing to the slope instability.(PWA, 2020)

Discussion:

Explanation of findings for items a-e in the **Hydrology and Water Quality checklist** (above).

- a) Less Than Significant Impact. The project does not involve any waste-water systems or have any present on the property. Because the project will not generate or discharge wastewater or industrial flows to wetlands, creeks or waters of the US, the project will not violate any water quality standards or waste discharge requirements and therefore impacts will be less than significant to surface or groundwater quality.
- b) Less Than Significant Impact. The Project will construct a 1,600 ft-long by 2- to 4-ft wide shared-use recreation trail (3,200 to 6,400-sq ft of disturbed surface area). Trail construction will be performed by hand and will not result in the creation of large areas of impervious surfaces that could prevent water from infiltrating into the groundwater nor will it result in direct additions or withdrawals to existing groundwater (PWA 2020).
- c) Less Than Significant Impact. The slopes are permeable and covered in vegetation and woody debris that filter runoff. There were some signs of drainage runoff upon the site investigation from preexisting vegetation clearing (TransTerra Consulting, 2019). With any installment of trails some alteration of water drainage will occur and need to be accounted for. Some of the existing skid roads have runoff patterns. Runoff of the trail will be designed eliminate erosion to the surrounding area, as well as the trail itself. The trail design considers potential water drainage routes, and ground disturbance will be minimal. The City uses the California State parks Trail Manual, the US Forest Service Trail

Manual (FSM 2355), the USDA Forest Service Trails Management Handbook (FSH 23.09.18), USDA Standard Specifications for Construction and Maintenance of Trails (EM-7720-103, USDA/FHWA), Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds, and the 2004 International Mountain Biking- Trail Solutions Guide. Runoff of the trail will be designed to cause the least amount of erosion to the surrounding area as well as within the trail route to help reduce soil movement.

- i. Less Than Significant Impact. As proposed, the project will not result in significant impact to site soils, soil stability, or topsoil resources and characteristics. The existing drainage pattern of the site will not be altered and therefore impacts will be less than significant (PWA, 2020)
- ii. No Impact. The project does not propose altering any streams or rivers for water use (ESD 2019a). There is currently a domestic water surface water diversion located proximal to the parcel boundary. The use of the existing skid trail, which most of the proposed trail will follow, will help diminish any additions of potential alterations with water drainages. There will be less than significant impacts on the existing drainage patterns that would result in flooding. Option #1.5 would construct a narrow with minimal cut and fill 1,600 ft-long shared-use trail. During construction, BMPs will be implemented so that on-site and off-site erosion and sedimentation will be prevented and controlled to the extent practicable. Additional BMPs will be implemented wherever the trail alignment crosses soft soils or wet areas to ensure that erosion and sediment delivery does not occur due to project construction and use. As previously stated, surface water impacts due to construction, operations, and maintenance are predicted to be minor and less than significant (PWA, 2020).
- iii. No Impact. The proposed project involves minor alterations to an existing skid road. While runoff may occur, no external input of water or water use would be introduced from the project. These would not create or contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As proposed, the project will not result in significant impact to site soils, soil stability, or topsoil resources and characteristics. Minimization of the trail width (two to four feet wide), trail surfacing with rock aggregate, and installation of rolling dip drainage structures in accordance with best-management-practice standards will be sufficient to minimize surface erosion of trail and off-trail soils. To the north, in the Arcata Community Forest recently completed trail projects demonstrate that with proper design, construction, and maintenance, the region's soil offers

adequate stability for building excellent, highly sustainable trail networks.(PWA, 2020)

- iv. No Impact. The proposed project is not likely to impede or redirect flood flows. Erosion due to minor vegetation clearing for the trail installation may occur but would not likely cause significant alterations to any flows including flood flows.
- d) No Impact. There is no history of inundation by seiche, tsunami, or mudflow on or adjacent to the property, nor is it mapped in any of these stated potential hazard zones. The property is not located within a 100-year flood hazard (Zone A) (FEMA 2017). The property is relatively high above sea level in elevation (720-880 feet) and not near any major water bodies. The property is not placed within any designated flood zones or flood hazard zones.
- e) No Impact. The project is designed to improve stormwater runoff and reduce erosion potential. The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Findings: Based on the PWA project area assessment of potential risk to physical natural resources, the potential for adverse impacts to water, soil and geologic resources is less than significant to. The project design and implementation includes the PWA 2020 recommendations, as well as the above referenced trail design manuals. Impacts will be less than significant, in part, because the following design features minimize potential impacts to hydrology, water quality, and domestic water infrastructure:

- Avoid fall-lines in order to reduce the risk of concentrating surface and overland runoff, increasing erosion rates and the volume of potential erosion. The trail's grade should not exceed half the grade of the hillside or sideslope that the trail traverses.
- Operations will follow BMPs for site grading activities, trail surface rock compaction, soil stabilization, handling, and storage of construction materials and equipment.
- Apply corrective actions to muddy or rutted trail sections and consider a wet weather use policy to prevent accelerated trail erosion during wet weather conditions.
- Managers must ensure that formal trails have a sustainable alignment, well-marked, and maintained to be the better preferred route to prevent informal trails.
- Offering superior, accessible (legal) trail experiences such as gravity flow lines, and single-track flow trails, users will gladly gravitate away from non-system trails.
- Communication with visitors to inform about special and rare plants, sensitive soils, downstream user groups, and the implications of soil erosion caused by off trail use.

- Communication with visitors to inform about implications of animal feces and water quality.
- Avoid construction of the trail within 100 ft of surface waters with existing domestic diversion.

Mitigation Measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

FEMA. (2017). Flood Zones. Federal Emergency Management Agency.
<https://www.fema.gov/flood-zones>

PWA. (2020). Evaluation of Fickle Hill Road Trail Crossing options and CEQA Initial Study for a new segment of the Arcata Ridge Trail, Humboldt County, CA

TransTerra Consulting. (2019). *Biological Assessment Report for APN 500-022-004*.

TransTerra Consulting. (2020a). Jurisdictional Wetland Delineation for Arcata Ridge Trail Project

USFWS - U.S. Fish and Wildlife Service. (2020). National Wetlands Inventory.
<https://www.fws.gov/wetlands/>

2.1.11 Land Use and Planning

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

Setting: The project site is located at the eastern most city limits of Arcata with the zoning designation of Natural Resources--Timber Production. Previous use of the land consists of timber production. Current land use and zoning allows for timber production and recreational. Residential development on the site is not permitted per recorded grant agreements and deed restrictions.

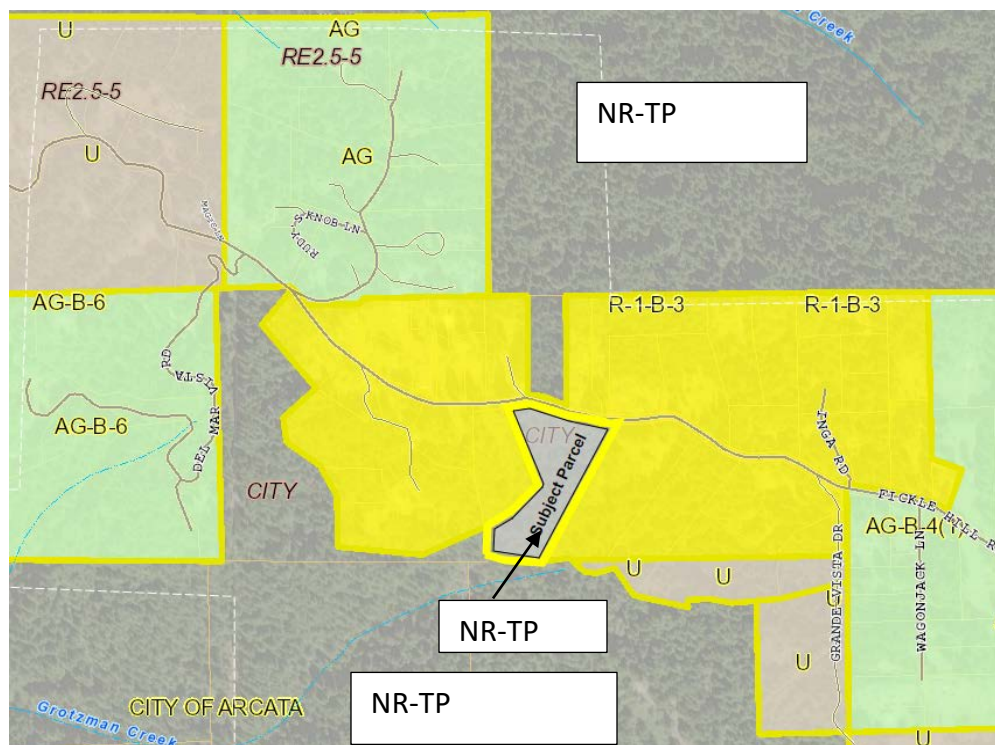


Figure 10 Humboldt County and City of Arcata GIS planning and zoning layers.

Discussion:

Explanation of findings for items a-b in the **Land Use and Planning checklist** (above).

- a) No Impact. The Arcata General Plan (City of Arcata, 2008) serves as the overall guiding policy document for land use and development. The Arcata General Plan provides detailed land uses and zoning for the City of Arcata planning area, which includes the project site. The project provides pedestrian connectivity and does not have the potential to physically divide an established community.
- b) No Impact. The proposed project area is approximately 1,600 linear feet of recreational trail, located within the bounds of a 6.17-acre parcel which is part of a larger 330- acre Sunny Brae Forest Tract that has existing recreational trail use on other existing trails. The project area is currently zoned as Natural Resource-Timber Production (NR-TP). The proposed uses of the project are consistent with the land use designations for the project site.

Findings: The proposed project would not divide a community or conflict with any applicable land use plan, policy, or regulation of the City of Arcata, which is the agency overseeing the project. The project area is not associated with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the project will have no impact related to Land Use and Planning

Mitigation Measures: None required.

Documentation:

City of Arcata. (2008). *Arcata General Plan: 2020*. <https://www.cityofarcata.org/160/General-Plan>

Humboldt County. (2017). *Humboldt County General Plan*. <https://humboldt.gov/205/General-Plan>

2.1.12 Mineral Resources

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

Setting: The proposed trail is located in The Arcata Community Forest in Arcata, California. The U.S. Geological Survey reports no mineral resources, including mines and deposits, mapped in the area (USGS, 2020).

Discussion:

Explanation of findings for items a-b in the **Mineral Resources checklist** (above).

a-b) No Impact. This project will not have any significant impact on locally available minerals or mineral resources valuable to the region or State (ESD, 2019a; USGS, 2020). The closest mineral resource point is a quarry located approximately 1.5 miles away from the project site upon Granite Butte (USGS, 2020). There are no known valuable or locally-important mineral resources on the site. The Division of Mines and Geology has noted that the 'Classification and Designation of Mineral Lands' per Surface Mining and Reclamation Act Section 2790 'Minerals of Regional Significance' and associated mapping has not occurred for Humboldt County and other than in-stream gravel resources and rock quarries, have not identified any mineral resources needing protection from incompatible land uses. Therefore, the project will not 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. Based on the project description and its location, the proposed project will not result in any mineral resource-related impacts.

Findings: Based upon the review of the information above, the implementation of the project will have no impact with respect to mineral resources.

Mitigation Measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

USGS. (2020). *USGS Mineral Resources On-Line Spatial Data*. U.S. Geological Survey.
<https://mrdata.usgs.gov/>

2.1.13 Noise

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne 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"/>

Setting: The project is at the semi-rural, northeastern edge of the City of Arcata with low background or ambient noise levels. There are low density neighboring residences approximately a tenth of a mile away (except for one house 100' north of the Fickle Hill Crossing) from the project area. The extent of the proposal for the project area indicates a temporary increase in noise due during the construction and installment of the trail and associated signage.

Discussion:

Explanation of findings for items a-c in the **Noise checklist** (above).

- a) Less Than Significant Impact. The project would not expose persons or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Construction of the proposed project (trail, signs, benches, etc.) would generate a short, temporary increase in noise (ESD 2019a). The project does not include heavy equipment and no ongoing noise producing mechanisms for operation post construction.
- b) Less Than Significant Impact. The construction of the trail may involve the use of a small, gas powered compactor to compact gravel rocks as trail tread if needed (ESD 2019a).

This would only be during the installation of the trail and would cause minimal, non-significant disturbance of groundbourne vibrations and noise levels.

Following completion of project construction there would be no noise generated by the project that would differ from current conditions. Therefore, operation of the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

- c) No Impact. The project site is not located within two miles of a public airport or in the vicinity of a private airstrip, and thus would not expose people working or residing in the area due to excessive noise levels.

Findings: Noise impact associated with the project is less than significant. Construction will adhere to limitations set by the Arcata General Plan to ameliorate disturbance of the neighboring residences during construction. The use of the site will not generate noise.

Mitigation Measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

2.1.14 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<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"/>

Setting: The project site is in a semi-rural area of North Coast coniferous forest (Sunny Brae Forest/Arcata Community Forest area), at the northeastern city limits of Arcata (TransTerra Consulting, 2020b). The purpose of the project is to add 1,600 linear feet of recreational trail to the existing Arcata Ridge Trail (ESD, 2019a).

Discussion:

Explanation of findings for items a-b in the **Population and Housing checklist** (above).

- a) No Impact. The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). The trail would be used by the public and increase the number of people in the area at intermittent times. No overnight facilities or activities would be installed or permitted on the property.
- b) No Impact. The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. There are no homes within the project areas, and no new permanent residences are part of the project plans.

Findings: No population or housing growth will result from building a trail segment. This project will have no impact upon Population and Housing.

Mitigation Measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

TransTerra Consulting. (2020b). Biological Assessment Report for APN 500-022-004.

2.1.15 Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>
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Setting: The project is located within the northeastern most city limits for the City of Arcata, Arcata Community Forest which is public land. There are no schools, parks, or other public facilities within 600 feet of the project area.

Discussion:

Explanation of findings for items in the **Public Services checklist** (above).

No Impact. The proposed project would not 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 of fire protection, police protection, schools, parks, or any other public facilities (ESD, 2019a). The closest public facility to the site, Sunny Brae Middle School, is approximately 1.05 miles away from the project. The distance of the project from surrounding public services is great enough that the proposed project will have no impact on these services.

Findings: The project will have no impact on any of the above listed public services.

Mitigation measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

2.1.16 Recreation

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Setting: The project, located within the Arcata Community Forest at the northeastern edge of the Arcata city limits, is a proposed connecting trail segment to the Arcata Ridge Trail at Fickle Hill Road.

Discussion:

Explanation of findings for items a-b in the **Recreation checklist** (above).

- a) Less than significant Impact. The project would have a long-term positive effect by increasing access to recreation activities consistent with the Arcata 2010 Bike and Pedestrian Master Plan, Arcata General Plan Policy OS-1d (Linkages between open space areas), Arcata Forest Plan Goal #3, which reads, “The Community Forest shall also be managed to provide forest recreational opportunities for the Community”, and Arcata General Plan Open Space Element Goal G (Provide additional entryways to the Community Forest to promote greater accessibility from Arcata’s adjacent neighborhoods).

Once completed, the trail would become a component of the Arcata Community Forest trail system providing an increase in recreational access for the public including bikes, pedestrians, and equestrians. The proposed project would not lead to an increase in the use of recreational facilities that would contribute to the substantial physical deterioration of other recreational facilities. The City anticipates a modest increase over current use of the trail. But the use will not be significantly different from use of other trails in the system.

- b) No impact. The proposed trail will not create a need to construct additional facilities.

Findings: The project is consistent with the Arcata General Plan and the Bike and Pedestrian Master Plan. The project does not induce growth or use of public recreation facilities. The project will not require additional facilities to be constructed. Therefore, there will be a less than significant impact affecting Recreation.

Mitigation Measures: None required.

Documentation:

City of Arcata Public Works Department. (2010). *City of Arcata Pedestrian and Bicycle Master Plan 2010*. http://assessment.walkfriendly.org/fileupload/Apr10_PedBikeMasterPlan-2010-cc.pdf

2.1.17 Transportation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable program, plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting: The project is located in the northeastern edge of the Arcata city limits. There are currently no stream crossings on the property or proposed in the project plan. Fickle Hill Road is a County-maintained road, and trails on the community forest are maintained by the city.

Discussion:

Explanation of findings for items a-d in the **Transportation checklist** (above).

- a) No Impact. The proposed project does not conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The project would, in fact, provide an increase in available areas for pedestrians and bicycles.
- b) No Impact. The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). While the trail connection proposed by the project will be over a main road, there will be no parking in this area for recreational use. There may be temporary traffic delay during construction of the crossing. The level of service will remain unchanged before and after the project.
- c) Less Than Significant Impact. There would not be a substantial increase in hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., construction equipment). Fickle Hill Road is a windy road with blind driveways and sharp curves. The section of Fickle Hill Road where the trail crossing would be located has relatively good visibility on both sides of the road. The crossing would be placed at the point that ensures the highest visibility for both pedestrians, bikes, and cars (ESD,

2019a). Depending on what crossing plan is used, a portion of the new trail may be installed parallel to the main road, all of the construction of the trail other than the crossing that will be designed by the City and approved by the County, will be off road on the project parcel. The proposed alignment provides the greatest vision clearance for vehicles.

- d) Less Than Significant Impact. There is no gate associated with the project. The Arcata Volunteer Fire Department has access in the ACF below as well as an emergency pullout on the north side of Fickle Hill Road. Emergency access will be maintained or enhanced by the project.

Findings: The project includes plans for trail crossing and signage that are designed per current engineering standards to ensure the safety of the trail crossing for both trail users and vehicle traffic. There is no indication that the proposed project will significantly increase traffic flow or hazards.

Mitigation Measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for Encroachment permit. City of Arcata Environmental Services Department.

2.1.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting:

Prior to the arrival of Euroamericans, the Wiyot people inhabited the area. Native people lived in villages adjacent to the forests which they frequented for hunting, and fishing and other uses. The Wiyot population prior to 1850 is estimated to have been between 1,000 and 3,300 individuals (Taylor and Roscoe, 1998).

Soon after the Euroamericans began to occupy the ancestral homeland of the Wiyot, around 1850, the Wiyot population was decimated by violence and disease. In 1850, Arcata or "Uniontown" was started as a supply depot for the gold fields near Weaverville and the Native tribes were soon driven off their lands. The Wiyot Tribe today is 600 members strong and growing. The Yurok probably entered the region some 200 years later, taking up residence north of the Wiyot territory. The Tolowa, Chilula, and Hupa (Athapascan group) may have also occupied the region. (ESD, 2019b)

Discussion:

Explanation of findings for items a-b in the **Tribal Cultural Resources checklist** (above).

Tribal communications and coordination were arranged with the following:

- a) There are no structures or other features that are eligible for listing in the California Register of Historical Resources, and there are no local listings of any features on or near the subject site. The project will have no impact on historical resources.
- b) The City initiated formal AB 52 consultation with the three area Wiyot Tribes. In addition, the City conducted a records search with NWIC. Local THPO's of the Wiyot Tribe, Bear River Tribe, and Blue Lake Rancheria were contacted in 2008 for a Timber Harvest Plan, and 2019 for proposed trail improvements request for archaeological information (ESD, 2019b). The Blue Lake Rancheria and Bear River Tribe expressed no knowledge or concern of cultural resources within the project area but recommended Inadvertent Archaeological Discovery protocol (ESD, 2019b).

The Wiyot Tribe expressed no knowledge of cultural resources within the project area but expressed the potential for cultural use and resource areas around Grotzman Creek, south facing slopes and along the known Fickle Hill Trail (ESD, 2019b). The Wiyot Tribe also requested particular attention to survey in these areas of high potential and contact if cultural resources were to be found. The North Coastal Information Center was contacted for any existing archaeological documents from the project area. They predicted a moderate probability of finding sites or evidence of cultural activity in the project area due to the proximity to the historic Trinity and Klamath trail. The

Information Center recommended an archaeological survey be conducted and all findings recorded on State of California DPR 523 forms (ESD 2019b).

The archaeological investigation for this trail addition involves one phase: (1) pedestrian survey conducted in order to locate any archaeological sites that could be impacted within the project area. A 30 ft. buffer was created on either side of the proposed trail as the Area of Potential Effects (APE). A pedestrian survey was conducted of the APE consisting of boot scrapes and surface level trowel tests (ESD 2019b).

Findings: The project will have no impact on historical resources and will incorporate inadvertent discovery protocols described under the Cultural Resources section to ensure less than significant impacts on Wiyot Tribal cultural resources.

Mitigation Measures: None required

Documentation:

ESD. (2019b). Archaeological Survey Report: City of Arcata Addition to Arcata Ridge Trail, Pedestrian Survey, Humboldt County, California, Magdalena Martinez. City of Arcata Environmental Services Department.

Tribal Bear River Band of Rohnerville Rancheria-May 9, 2019-Letter from Mark Andre (City of Arcata)

Blue Lake Rancheria-May 9, 2019-Letter from Mark Andre (City of Arcata)

Wiyot Tribe-May 9, 2019-Letter from Mark Andre (City of Arcata)

2.1.19 Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment facilities 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 reductions 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Setting: The project is located in the northeastern edge of the Arcata city limits in the Sunny Brae Forest Tract. The project entails the recontouring of a skid trail with minimal relocation of the alignment to accommodate improved stormwater management and geologic stability. The project does not include activities that will generate solid waste. The project does not propose any water or wastewater systems on the property (ESD, 2019).

Discussion:

Explanation of findings for items a-e in the **Utilities and Service Systems checklist** (above).

- a) No Impact. The project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- b) No Impact. The proposed project will have sufficient water supplies available to serve the project from existing entitlements and resources, and new or expanded entitlements are not needed. No water sources are required for the long-term use of the project area.
- c) No Impact. There is no proposed development of wastewater systems on the property.
- d) No Impact. The project will generate minimal solid waste. The City is served by the HWMA which provides solid waste disposal services for the area and has sufficient permitted capacity to accommodate the project's solid waste disposal needs. If any recyclable construction materials are generated during project development (e.g., metal, wood, etc.) they will be properly recycled at appropriate local facilities.
- e) No Impact. The project will comply with federal, state, and local statutes and regulations related to solid waste. Adhering to proper waste disposal techniques should ensure that there will be no impact.

Findings: The project will result in no impact to utilities and service systems. All applicable regulations related to recycling and solid waste management will be followed during construction and maintenance. Any solid waste will be stored with secure containment to prevent release into the environment.

Mitigation Measures: None required.

Documentation:

ESD. (2019a). Arcata Ridge Trail Fickle Hill Road: Summary for County of Humboldt Encroachment permit. City of Arcata Environmental Services Department.

2.1.20 Wildfire

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

Setting: The off public road portion of the trail construction project is located in the Local Responsibility Area (LRA) and is rated as having high fire hazard severity (CAL FIRE FRAP, 2020). The County road right-of-way portion of the project is within the State Responsibility Area (SRA). The project is within the Arcata Fire District. Policy documents and plans for addressing wildfire risks in Humboldt County include the Humboldt County and City of Arcata General Plan Public Safety Elements, the Humboldt County Hazard Mitigation Plan, and the Humboldt County Community Wildfire Protection Plan (2019b). The site's setting amid mature trees and forest understory provides a setting conducive to the ignition and spread of a wildland fire if appropriate measures are not taken during work. Chapter 26 of the California Fire Code (California Code of Regulations, Title 24, Part 9) establishes provisions for safety and care during construction activities defined as hot work. In brief, the code requires that specific measures be taken during construction to minimize the potential ignition of a wildland fire in areas susceptible to such events, which include the project site and surrounding lands. Personnel carrying out the trail project have some training in wildland firefighting and will take all safety precautions necessary to avoid an escaped fire. Adherence to the California Fire Code will ensure that the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Discussion:

Explanation of findings for items a-d in the **Wildfire checklist** (above).

- a) No impact. The proposed project would not require the closure of public roadways or otherwise interfere with emergency evacuation plans for the surrounding area. Therefore, the project would not impair an adopted emergency response plan or emergency evacuation plan.
- b) No impact. The project is not within lands classified as very high fire hazard severity but is adjacent to state responsibility areas. The new trail provides pedestrian access for fire suppression personnel in an area that currently lacks access. The project is located near a main, paved road, Fickle Hill Road, which would aid in the evacuation of any persons in the event of a fire. While slope, prevailing winds, and other factors can exacerbate wildfire risks, they are unlikely to expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- c) No impact. The proposed recreational trail would provide a clear path for users. Use of mechanisms, such as generators or lighting that would increase the likelihood of fires is not expected on the trail. The project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk.
- d) Less than significant impact. The proposed trail would be used by recreational users and does not currently propose any structures. Clearing of vegetation, location of appropriately sized water storage facilities, and other actions required for fire protection and suppression actions as may be determined by the County or CALFIRE. The project will not influence wildfire behavior in a manner that exposes people or structures to significant risks as a result of post fire runoff or slope instability. The project is designed to maintain and improve slope stability and reduce stormwater runoff. These measures will improve downslope hazard conditions.

Findings: The project will have a less than significant impact on wildfire. The project will have no impact on several of the factors associated with exacerbating wildfire effects on- or off-site. And it will not impair or impede wildfire response. While the project does have the potential to affect drainage on the site, the project will improve slope stability and stormwater runoff. As a result, the project will have a less than significant impact on wildfire.

Mitigation Measures: None required.

Documentation:

Humboldt County. (2019b). *Humboldt County Community Wildfire Protection Plan | Humboldt County, CA*. <https://humboldt.gov/2431/CWPP-2019>

CAL FIRE FRAP. (2020). California Department of Forestry and Fire Protection. Fire and Resource Assessment Program (FRAP) <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>

2.1.20 Mandatory Findings of Significance

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<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 probable 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed, and it has been determined that with implementation of the mitigation measures recommended in this initial study, it would not:

- Substantially degrade environmental quality.
- Substantially reduce fish or wildlife habitat.
- Cause a fish or wildlife population to fall below self-sustaining levels.
- Threaten to eliminate a plant or animal community.
- Reduce the numbers or range of a rare, threatened, or endangered species.
- Eliminate important examples of the major periods of California history or prehistory.
- Achieve short term goals to the disadvantage of long-term goals.
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings.

- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.
- a) Less Than Significant Impact. The project is a recreational trail project designed to create connectivity and public access. Through the implementation of mitigation measures, the project will have a less than significant impact. Through avoidance and minimization, the project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or eliminate important examples of the major periods of California history or prehistory.
 - b) Less Than Significant Impact. The incremental effects of a project are cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The project will not have impacts that are individually limited, but cumulatively considerable. The project will not incrementally contribute to future population growth and development in the area as it does not result in a change in land use or zoning or involve development of any habitable structures or initiation of new uses. Many of the items reviewed as part of this initial study would result in no impact or were considered to have less than significant impacts, and where appropriate, findings were made with reference made to prevent cumulative impacts resulting from individual projects.
 - c) Less Than Significant Impact. The proposed project would not displace existing residents or employees, generate substantial pollution, or generate a substantial demand for public services or utilities. With implementation of mitigation measures, the project activities proposed in this remote area project do not have the potential to, either directly or indirectly, cause a substantial adverse effect on human beings. The project area is very remote and given the low intensity nature of project work, no direct or indirect impacts to human beings are anticipated.

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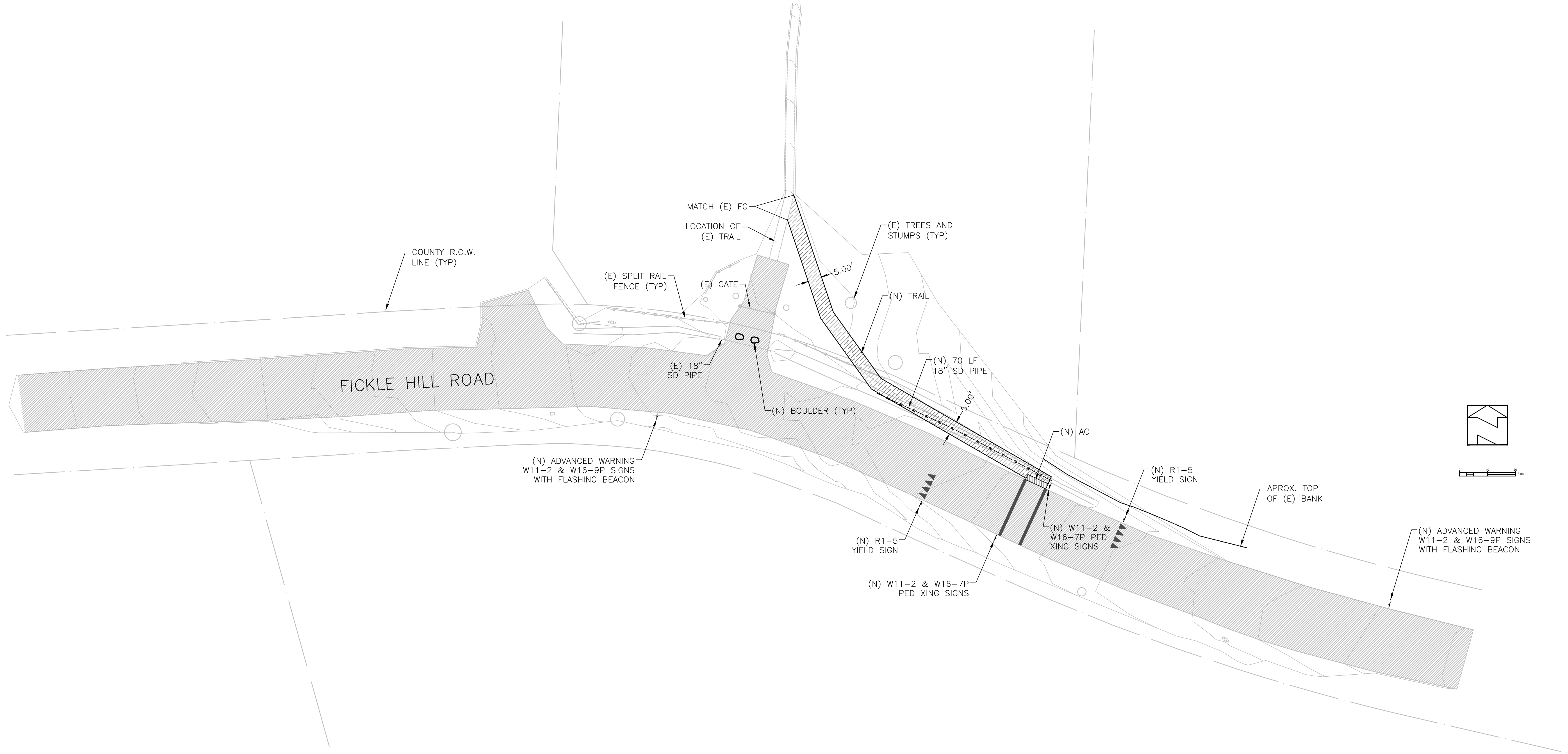
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Wiyot Tribe-May 9, 2019-Letter from Mark Andre (City of Arcata)

Appendix A

Proposed Crossing Detail



- NOTES:
1. ADVANCE WARNING SIGNS TO BE INSTALLED A MINIMUM OF 100 FT IN ADVANCE OF YIELD SIGNS AS PER TABLE 2C-4 OF THE CURRENT MUTCD.
 2. GRADING IN PUBLIC RIGHT-OF-WAY IS EXPECTED TO RESULT IN APPROXIMATELY 20 CY OF CUT/FILL.
 3. SOME TREES AND STUMPS TO BE REMOVED AS NECESSARY TO ATTAIN DESIRED VISIBILITY.

PRELIMINARY PLANS
(NOT FOR CONSTRUCTION)

No.	Revision/Issue	Date

SHEET TITLE

SITE PLAN – PREFERRED CROSSING

PROJECT NAME

ARCATA RIDGE TRAIL – FICKLE HILL SEGMENT

PROJECT ADDRESS

FICKLE HILL ROAD

DESIGNED BY

JBC

DRAWN BY

JBC

CHECKED BY

NBK

APPROVED BY

N. B. KHATRI, RCE #75248

DATE

11/18/2020

SCALE

1" = 20'

SHEET

C2.2

OF ## SHEETS

ART-FHS | Arcata Ridge Trail-Fickle Hill Segment Project - IS/ND | 101