

# Initial Study and Draft Mitigated Negative Declaration

## Yurok Indian Housing Authority

### Rezone to Planned Community and Use Permit for Planned Community

*March 2021*



*Prepared By*  
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**Exhibits and Appendices Follow**



## **Project Information Summary**

- 1. Project Title:** Yurok Indian Housing Authority Rezone and Use Permit – R2102 & UP2110
- 2. Lead Agency Name and Address:** Del Norte County  
Planning Commission  
981 H Street, Suite 110  
Crescent City, CA 95531
- 3. Contact Person and Phone Number:** Heidi Kunstal  
(707) 464-7254  
hkunstal@co.del-norte.ca.us
- 4. Project Location and APN:** 15580 Highway 101, Klamath, CA, 95548  
Assessor Parcel Number 127-070-017
- 5. Project Sponsor's Name and Address:** Yurok Indian Housing Authority  
15540 U.S. Highway 101, Klamath CA 95548
- 6. County Land Use:** Rural Residential – one dwelling unit per acre (RR 1/1)
- 7. County Zoning:** Forest Recreation District (FR-1) and Commercial Recreation District (CR)
- 8. Description of Project:**

The Yurok Indian Housing Authority is the owner of a 23.48 acre parcel located on the east side of U.S. Highway 101 in the community of Klamath. The parcel is .5 miles south of the Trees of Mystery, a major destination in the Klamath area and .2 mile south of the Yurok Indian Housing Authority headquarters. The parcel has several existing structures including an abandoned house. All existing structures are proposed to be removed subject to approval of the Rezone and Use Permit. The zoning for the parcel is divided with roughly 5.58 acres of it designated as Commercial Recreation Zone District (CR) and 17.9 acres of it designated as Forest Recreation Zone District (FR-1). The General Plan Land Use designation for the entire parcel is Rural Residential – one dwelling unit per acre (RR 1/1). The applicant proposes to construct five new residences on the parcel in a planned community setting. In order to develop the property in this manner, the applicant proposes rezoning the entire parcel from CR and FR-1 to Planned Community Zone District (PC) which is consistent with the underlying RR 1/1 General Plan Land Use designation. The PC Zone District may be applied to parcels over one acre in size to allow the property owner to affect design control over the development. In the case of the subject project, the applicant proposes to cluster the residences on the southern portion of the property and implement zoning setbacks that may vary from those of the current zone districts. Under current zoning, the landowner would be required to subdivide the parcel in order to develop five residences on the property whereas the PC District allows the residences to remain under a single parcel and ownership. The applicant has concurrently submitted a Use Permit for a Planned Community application which is a requirement when rezoning to PC or developing a parcel already zoned PC. The Use Permit addresses general conditions of approval applicable to all development as well as conditions designed to address the design controls requested by the landowner/developer. The new residences will be accessed by an existing road that would be improved to meet County road and fire safe standards. Road improvements will be a condition of the Use Permit. The residences will be served by a private well and on-site wastewater disposal. Biological resources including endangered birds and amphibians exist within the project area and will be protected through mitigation measures.



**9. Surrounding Land Uses and Settings:**

The property and the surrounding area is predominantly vegetated with trees. The 640 acre parcel to immediate north of the parcel is the Yurok – Redwood Experimental Forest which is owned by the U.S. Forest Service and is undeveloped. To the northeast, is a 400 plus acre parcel owned by the Redwood National Park which has limited structures located near its Hwy. 101 frontage but no structures that abut the project site. Both properties have a Public Ownership zone designation and a Timberland General Plan Land Use designation. To the southeast, is a 7.5 acre parcel that includes the Woodland Villa Cabins and Market. To the west is a 72.6 acre owned by the Trees of Mystery and to the south, across Highway 101 is a 49.31 acre parcel developed with an the Mystic Forest RV park. The last three parcels are zoned Commercial Recreation Zone District and have a Visitor Serving Commercial General Plan Land Use designation.

- 10. Required Approvals:** Rezone – Del Norte County Board of Supervisors  
Use Permit – Del Norte County Planning Commission contingent upon approval of the Rezone by the Del Norte County Board of Supervisors
- 11. Other Approval (Public Agencies):** North Coast Regional Water Quality Control Board  
Caltrans – possibly for an encroachment permit
- 12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

Native American tribes, traditionally and culturally affiliated with the project area have been notified of the project application completion and the beginning of the AB 52 consultation period pursuant to PRC §21080.3.1. Notification of the beginning of the AB 52 consultation period was provided DATE HERE. No requests for consultation pursuant to PRC §21080.3.1 were not received.



### Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" without mitigation as indicated by the checklist on the following pages. All mitigation measures are provided in the Mitigation Monitoring and Reporting Program.

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

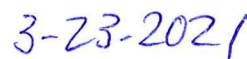
### Determination

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.



Heidi Kunstal  
Community Development Director



Date



## Environmental Checklist

### 1. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant Impact 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or public views of the site and its surroundings? (Public views are those that are experienced from publically accessible vantage points). 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 type="checkbox"/>	<input checked="" 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"/>

### Discussion of Impacts

- This project would have no foreseeable impact on scenic vistas.
- This project would have no foreseeable impact on scenic resources.
- The project would not degrade the existing visual character or public views of the site and its surroundings.
- The project does not propose any development which would create a new source of substantial light or glare which would adversely affect views.

### 2. Agriculture and Forest Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

### Discussion of Impacts

- No farmland exists on-site.
- No agricultural zoning exists on-site which would be impacted adversely by this project.
- The project would have no impact nor create conflicts with zoning of forestlands or Timber Production Zones. The land is zoned for residential and commercial recreation use.
- Yes. The project will require the conversion of timberland to a non-timberland use in order to improve the access road and to develop the five house sites. Either a Timber Conversion Permit (TCP) or Notice of Conversion Exemption Timber Operations (one time 3-acre conversion) will be required to be filed with CAL FIRE. Since the conversion area would be expected to be minimal in areas with low amounts of merchantable timber, the loss of forest land would be considered a less than significant impact.
- The project does not involve any other changes in the existing environment that could adversely affect farmland or timberlands.

### 3. Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

- This project would have no foreseeable impacts on the implementation of an air quality plan.
- This project would have no foreseeable impacts on increasing criteria pollutants in the region.
- This project would not expose receptors to pollutant concentrations.
- This project would have no foreseeable impacts in increasing any emissions.



#### 4. Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion of Impacts

a. The *Biological Assessment for Proposed Bennet Property Development Klamath, CA. September 2020*, prepared by Galea Biological Consulting identified three species of listed status that would potentially be impacted by the project. They include the Northern spotted owl (NSO) and the Marbled murrelet (MAMU) which are both listed as Federally Threatened (FT) and California Endangered (CE). In both cases, Galea Biological Consulting (GBC) identified the potential habitat being on the federal lands located east of the project site.

No bird nests were located during an investigation of the property in October 2020. As no NSO surveys have been completed to determine if an NSO Activity Center is present, GBC notes that it must be assumed that an Activity Center is in proximity and noise disturbance to NSO is a factor. GBC recommends that to prevent a “take” of NSO due to disturbance caused by noise from heavy equipment, no work using heavy equipment, should occur during the breeding season for NSO (February 1 – August 31), for any given year, within, 1,000 feet of the Yurok-Redwood Experimental Forest. The project area is less than 1,000 feet from this area. Mitigation Measure Bio Resources – 1 incorporates this recommendation.

Likewise for the MAMU, no surveys to determine presence/absence have been conducted. GBC recommends that to prevent “take” of the MAMU due to disturbance caused by noise from heavy equipment, no work should occur during



the breeding season of the MAMU (April 1-September 22), for any given year, within 1,000 feet of the Yurok-Redwood Experimental Forest. Mitigation Measure Bio Resources – 2 incorporates this recommendation.

The Northern red-legged frog is listed a California Species of Concern by the California Department of Fish and Wildlife. GBC identified the small, ephemeral stream located along the east of the project as potential habitat. Red-legged frogs have been observed just southeast of the property based on a GBC review of the CNDDDB (2020) and they should be considered to be present in the creek as well. GBC recommends that a qualified biologist survey for this species immediately before construction of any given area to remove amphibians which might be in harm's way. Additionally, GBC specifies that any amphibians found within the construction area be moved to suitable habitat on the property a safe distance away. Mitigation Measure Bio Resources – 3 incorporates this recommendation.

b. The *Biological Assessment for Proposed Bennet Property Development Klamath, CA. September 2020*, prepared by Galea Biological Consulting identified a small ephemeral stream that runs through the east side of the property, running from north to south. It is in proximity to the structures to be removed by the project. Two of the new residences will be located in the vicinity of the existing structures but further from the stream. Proposed residence one is from 20 to 40 feet from the centerline of the stream and proposed residence two is from 55 to 65 feet from the stream centerline. Proposed residence is located as close to the road as possible to provide distance to the stream. The stream is not identified on the USGS Requa Quadrangle (7.5 Minute) or the National Wetland Inventory.

c. The *Biological Assessment for Proposed Bennet Property Development Klamath, CA. September 2020*, prepared by Galea Biological Consulting did not identify any wetlands within the project area. Additionally, a search of the National Wetlands Inventory did not result in any wetlands located on the subject parcel.

d. The *Biological Assessment for Proposed Bennet Property Development Klamath, CA. September 2020*, prepared by Galea Biological Consulting noted limited nesting habitat for birds covered by the Migratory Bird Treaty Act in the form of thickets of Himalyan blackberry and dense vegetation within the drainages along the project site. GBC recommends that if construction is to occur during the migratory bird breeding season, February 1 to August 15<sup>th</sup>, surveys for nesting migratory birds should occur by a qualified biologist in the weeks before the onset of construction. If nesting birds are located adjacent to the construction zone, construction within 300 feet of a nest should be postponed until the young fledge the nest and are mobile. Mitigation Measure Bio Resources – 4 incorporates this recommendation.

e. This project would not conflict with any local policies or ordinances protecting biological resources.

f. This project would not conflict with any Habitat Conservation Plans, etc.

#### **Mitigation Measure Bio-Resources 1**

No work using heavy equipment should occur during the breeding season for NSO (February 1 – August 31), for any given year, within, 1,000 feet of the Yurok-Redwood Experimental Forest.

*Timing/Implementation: Ongoing from the onset of planning for construction of the project.*

*Enforcement: County Community Development Department, US Fish and Wildlife Service*

*Monitoring: Ongoing during construction period of project*

#### **Mitigation Measure Bio-Resources 2**

No work using heavy equipment should occur during the breeding season of the MAMU (April 1-September 22), for any given year, within 1,000 feet of the Yurok-Redwood Experimental Forest.

*Timing/Implementation: Ongoing from the onset of planning for construction of the project.*

*Enforcement: County Community Development Department, US Fish and Wildlife Service*

*Monitoring: Ongoing during construction period of project*



### Mitigation Measure Bio Resources 3

A survey for Northern red-legged frogs shall conducted by a qualified biologist immediately before construction of any given area to remove amphibians which might be in harm's way. Any amphibians found within the construction area shall be moved to suitable habitat on the property a safe distance away.

*Timing/Implementation: Prior to any construction activity.*

*Enforcement: County Community Development Department, California Department of Fish and Wildlife*

*Monitoring: Ongoing during construction period of project*

### Mitigation Measure Bio Resources 4

Construction should occur outside of the migratory bird breeding season (February 1<sup>st</sup> to August 15<sup>th</sup>) unless a survey for nesting conducted by a qualified biologist occurs in the weeks before the onset of construction. If nesting birds are located adjacent to the construction zone, construction within 300 feet of a nest should be postponed until the young fledge the nest and are mobile.

*Timing/Implementation: Ongoing from the onset of planning for construction of the project.*

*Enforcement: County Community Development Department, US Fish and Wildlife Service*

*Monitoring: Ongoing during construction period of project.*

## 5. Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion of Impacts

a-c. No cultural resources are known to exist on-site. The County records were searched for known cultural sites in the general project vicinity, and none were identified. The project is located on a previously heavily disturbed site. Notice was provided to the one tribe traditionally culturally affiliated with the project area and no comment was given with regard to cultural resources. While resources are not known to exist on-site, the possibility of an inadvertent discovery is always possible during construction or other implementation activities associated with the project. In this case, mitigation measures included as CULT-1 assigned to the project will ensure that any resources located on-site will be properly treated as to not cause a significant impact.

### Mitigation Measure CULT-1

An inadvertent discovery condition shall be added to the Use Permit stating that in the event of archeological or cultural resources are encountered during construction, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.



*Timing/Implementation: During any earthwork activities related to the improvement of the road and construction of the residences and related utilities.*

*Enforcement: County Community Development Department*

*Monitoring: N/A*

## 6. Energy

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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"/>

### Discussion of Impacts

- The project would have no foreseeable impacts on increasing wasteful, inefficient, or unnecessary energy use since no development is proposed as part of this application.
- This project does not conflict with nor obstruct a state or local plan for renewable energy or energy efficiency.

## 7. Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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:				
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 type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion of Impacts

a. Del Norte County has not been mapped for Alquist-Priolo Earthquake Fault Zoning. While the 23.5 acre parcel does have steep slopes on its northern half, the southern portion where the project is proposed has gentler slopes that were not deemed to be at enough of a percentage of slopes to require the County's Hillside Development Criteria. The field visit conducted by the Environmental Review Committee did not identify an obvious risk for landslides related to the project development or note any conditions that would result in substantial soil erosion or the loss of top soil. With respect to seismic impacts and possible risks, northern California is subject to seismic activity associated with the Cascadia Subduction Zone (CSZ).

b. The Environmental Review Committee did not identify any site conditions or identify and concerns in the development proposal that would result in substantial soil erosion or the loss of top soil. Grading would be limited to road improvements and preparing building sites for future residences. An engineered grading and drainage plan would be required prior to issuance of the building permits for the new residences to address on-site and off-site drainage.

c. The project site has not been identified as being located with a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d. Standard and approved engineering practices shall be implemented during any excavation and construction activities. These measures will ensure that proposed buildings are structurally sound and future habitants are not exposed to geologic hazards.

e. An On-Site Sewage Disposal Evaluation was compiled for the parcel in November 2020 by Stover Engineering. Wet weather testing was conducted in April 2020 and test pits were observed by the County's Environmental Health Division staff. Stover Engineering's evaluation concluded that the property was suitable for a conventional on-site sewage wastewater treatment system within specified limitations.

f. The project area is not known to contain a unique paleontological resource or geologic feature.

## 8. Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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"/>



## Discussion of Impacts

a-b. In 2002, the California legislature declared that global climate change was a matter of increasing concern for the state's public health and environment, and enacted a law requiring the state Air Resource Board (ARB) to control GHG emission from motor vehicles (Health and Safety Code §32018.5 et seq.). CEQA Guidelines define GHG to include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The California Global Warming Solutions Act of 2006 (AB 32) definitively established the state's climate change policy and set GHG reduction targets (Health and Safety Code §38500 et seq.). The state has set its target at reducing greenhouse gases to 1990 levels by the year 2020.

Construction of the project may generate GHG emissions as a result of combustion of fossil fuels used in construction equipment. Use of variety of construction materials would contribute indirectly to GHG emissions because of the emissions associated with their manufacture. The construction-related GHG emissions would be minor and short-term and would not constitute a significant impact based on established thresholds.

The project would result in the addition of five new residences on the property. After construction of the new residences, it is anticipated that GHG impacts as a result of this Planned Community amendment will actually decrease net emissions as it is likely the eventual renters currently live in Crescent City and have to travel to Klamath for work or services provided by the Tribe.

## 9. Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



significant risk of loss, injury or death involving wildland fires?				
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## Discussion of Impacts

- The project would not cause a hazard to the public through the routine transport, use, or disposal of hazardous materials.
- The project would not cause a hazard to the public or environment through reasonably foreseeable accident conditions involving the release of hazardous materials into the environment.
- The project would not create hazardous emissions or require the handling of hazardous waste.
- This project is not located on a site which is included on any list of hazardous materials sites.
- This project is not located near any airport or within an area covered by an airport land use plan.
- This project would not impair implementation of an emergency response plan.
- This project will be located in an area of surrounding vegetation; however, the road to the new residences would comply with County Fire Safe Regulations with regard to road standards and ingress/egress as well as setbacks for defensible space. Additionally, new construction will comply with California Wildland Urban Interface (WUI) code and standards.

## 10. Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<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 source of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable ground water management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion of Impacts



a. Project activity, on-site would not generate any significant runoff pollutants. Stormwater runoff would be limited to rainfall onto graveled and/or paved areas and is not expected to violate water quality standards. It is the policy of the County to follow existing and future Federal and State water quality standards. An engineered grading and drainage plan would be required to prepared and reviewed by the County Engineer to assure that water quality and waste discharge requirements are not violated.

b. The proposed project would not result in any net deficit of groundwater recharge. The applicant is proposing the use of private. The Community Development Department - Environmental Health Division has not identified the area to be water deficient.

c. The project, a residential development of up to five additional single family residences, would not exceed the capacity of any existing or proposed stormwater drainage systems or provide substantial additional sources of polluted runoff. An engineered grading and drainage would be required as a condition of the project approval. No alterations of any stream or river or other drainage pattern would occur that would cause substantial erosion or siltation. Also, there will be no change in site characteristics as a result of the project that would alter a course of a stream or river, or substantial increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

d. The project is not located within a flood hazard zone, tsunami or seiche zone and would not result in the risk of pollutants due to project inundation.

e. The project would not conflict with or obstruct implementation of a water quality control plan or sustainable ground water management plan.

## 11. Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 of an agency adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

The proposed project would not divide any community, designated planning area or surrounding area. The project site is located with the Klamath Planning Area and is designated as Rural Residential – one dwelling units per one acres in the Del Norte County General Plan (January 28, 2003). The site is zoned FR-1 (Forest Recreation –2 acre minimum lot size) and Commercial Recreation in the Del Norte County Zoning Ordinance; however, the applicant proposes the rezone to Planned Community to allow design control over the development. The proposed project would not change the land use on the subject parcel. The proposed project would not conflict with any regional land use or environmental plans. No environmental plans or policies of state or regional agencies are directly applicable or would be affected by the proposed project.



## 12. Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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"/>

### Discussion of Impacts

a. The project site is not located in an area designated to have significant mineral resources, as defined by the California department of Conservation under the Surface Mining and Reclamation Act. The proposed project would not affect mineral resources in the area.

b. The project site and the surrounding area are not subject to mineral resource recovery operations. Thus, the proposed project would not affect mining operations elsewhere in the County.

## 13. Noise

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

### Discussion of Impacts

a. The project should not result in a significant level of noise beyond that which is already present. The project would result in the addition of up to five additional family residences on parcels that on a 23.5 acre parcel. Surrounding lands uses are primarily low intensity commercial recreation or publicly owned lands with no existing or proposed development.

b. The project will not expose any persons to or generate excessive groundborne vibration or groundborne noise levels.



c. The proposed site is not located near the airport. The site would not be exposed to excessive noise from any airport operations.

## 14. Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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"/>

### Discussion of Impacts

a. The proposed project would result in five single family residences being constructed. It would not result in substantial amount of population growth on-site nor would it affect population growth in the area.

b. The proposed project would not displace any housing units located near the site. The existing structures, including a dilapidated residence, are inhabitable.

## 15. Public Services

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

### Discussion of Impacts



**Fire Protection** - The project must comply with the requirements of the County and State Fire Safe Regulations for fire safety and fire emergency response. The project is served by the Klamath Fire Protection District and CAL FIRE as it is located within the State Responsibility Area.

**Police Protection** - The project would not result in the need to alter or expand police service in the area and would not have an adverse effect on existing police service or response times. The area is served by the Yurok Tribal Police and the Del Norte County Sheriff's Office.

**Schools** - The project would not involve a significant increase in the number of school age children and as such no new schools would need to be constructed nor would additions be needed for existing schools. The Del Norte Unified School District collects a school mitigation fee on a per square foot basis for new residential development. The fee goes toward the maintenance of the County school system to assure adequate classroom space is available for a growing population.

**Parks** - The project would allow for the development of five single family residences and thus would not directly nor indirectly place additional strain on existing parks.

**Other Public Facilities** - The project would allow for the development of five single family residences and thus would not directly nor indirectly place additional strain on any other public services.

## 16. Recreation

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

a. The project would result in limited increase in the use of existing neighborhood and regional parks or other recreational facilities. The impact is not expected to be significant.

b. The project would not result in a substantial increase in users of existing neighborhood and regional parks or other recreational facilities

## 17. Transportation

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Guidelines section 15064.3, subdivision(b)?				
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion of Impacts

a. The project is not anticipated to conflict with a program, plan, ordinance, or policy addressing any circulation system. The property was previously had a residential use and the proposed project will result in a reinstatement of that use with an additional four residences added for a total of five residences. This relatively small addition of residents to the area will not create any significant impacts with the circulation system. The use permit will require that road improvements be constructed which will be incorporated as conditions of approval for consistency with County Code.

b. The project is not expected to be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). According to the Institute of Traffic Engineers Trip Generation, the project is anticipated to generate 47.20 trips per day<sup>1</sup>. According to the 2020 Del Norte Region SB 743 Implementation Plan, the Traffic Analysis Zone (TAZ 104) containing in the project area describes the average VMT to be approximately 30.13 daily per capita and 39.79 daily per employee. Further, the Plan provides for thresholds of significance that screen certain projects out of constituting a significant impact toward VMT generation. In this case, the project is expected to generate less than 110 trips per day, so it can be considered to have a less than significant impact as a 'Small Project' under Section 3.2.1 of the SB 743 Implementation Plan. Additionally, the housing project is 100% affordable and located within an infill area.

c. The project does not increase hazards due to a design feature .The project would allow access to the property from an existing encroachment from U.S. Highway 101 to the parcel. Improvements to the encroachments may be a condition of the use permit. There are no dangerous features in the project area and this project would not require improvements that would introduce circulation or traffic safety hazards.

d. The project would not add any new emergency access to the parcel. The only ingress/egress to the parcel already exists and was utilized by a prior owner when occupied with a residential use. No other emergency access in the surrounding area would be affected by development of this project.

## 18. Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup> Average Daily Trips Rate per Single Family Detach House is 9.44 per the 10th Edition of the ITE Trip Generation.



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.				
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## Discussion of Impacts

a. The project would have no foreseeable impacts on tribal cultural resources. A member of the Environmental Review Committee is a Native American representative and has not issued notice of any concern of resources on-site. Further, an AB 52 tribal consultation has been sent to local tribes associated with the project area and no requests for consultations have been received by the Lead Agency.

### Mitigation Measure TRIBAL CULTURAL: RESOURCES-1

An inadvertent discovery condition shall be added to the Use Permit stating that in the event of archeological or cultural resources are encountered during construction, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.

*Timing/Implementation: During any earthwork activities related to the improvement of the road and construction of the residences and related utilities.*

*Enforcement: County Community Development Department*

*Monitoring: N/A*

## 19. Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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, or stormwater 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 providers existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



reduction statutes and regulations related to solid waste?				
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## Discussion of Impacts

- a. The project will result in the addition of five new residences. The new residences will not result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects
- b. The project would not have a significant impact on water supplies available to the parcel. The project will be served by a public well. The area has not been identified as being deficient in water.
- c. The project will be served by a private onsite wastewater treatment system. No burden will be placed on a public wastewater treatment provider.
- d. The project site has solid waste pickup service available from local franchisee Recology. Self-hauling to the Del Norte Transfer Station is also available. The solid waste generated by five homes would not significantly impact the capacity of either service provider.
- e. No conflict with solid waste regulations is expected.

## 20. Wildfire

Would the project:	Potentially Significant Impact	Less Than Significant Impact 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion of Impacts

- a. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.
- b. The project, as designed and sited on the property, would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The development is located on the southern portion of the



property where vegetation is less dense than elsewhere on the property. The residences will be clustered and as such will have a shorter distance to travel in the event of a wildfire.

c. The project is located within the State Responsibility Area and is designated as a High Fire Risk Area. The project will be required to be developed in substantial compliance with the County's Fire Safe Regulations and/or the State's Minimum Fire Regulations depending upon when the project is physically constructed. Standards for road widths, emergency water supply, setbacks for defensible space, gates, ingress/egress must be incorporated into final plans for the development. Significant changes to the State's Minimum Fire Safe Regulations are anticipated to go into effect as of the date of this Initial Study. Fuel breaks and other safety measures may be required unless the implementation of the regulations is delayed by the Board of Forestry. A mitigation measure is added to generally describe all local and state standards applicable to the project. Additional specific conditions related to the implementation of the standards will be placed on the Use Permit (i.e. road standards, establishing an emergency water supply etc.).

d. The project as designed and sited will not 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

#### **Mitigation Measure WILDFIRE-1**

The project shall comply with the Del Norte County Fire Safe Regulations (Del Norte County Code Title 19) and/or the California Minimum State Fire Safe Standards depending upon when construction of the project occurs. All structures shall comply with the State's Wildland Urban Interface (WUI) Codes and Standards including Chapter 7A of the California Building Code (CBC) and Chapter R337 of the California Residential Code (CRC).

*Timing/Implementation: Some standards will be required prior to issuance of the building permit while some will be verified prior to issuance of a certificate of completion and/or occupancy.*

*Enforcement: County Community Development Department*

*Monitoring: Inspections prior to building permit issuance and ongoing until final certificate of completion and/or occupancy is issued by the County.*

## **21. Mandatory Findings of Significance**

<b>Would the project:</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



indirectly?				
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a-c. The project does not 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 species 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. Additionally, the project does not have impacts that are individually limited but cumulatively considerable and does not have environmental effects which will cause substantial adverse effects on human beings directly nor indirectly.



## **Mitigation Monitoring Plan**

### **BIOLOGICAL RESOURCES**

#### **Mitigation Measure Bio-Resources 1**

No work using heavy equipment should occur during the breeding season for NSO (February 1 – August 31), for any given year, within, 1,000 feet of the Yurok-Redwood Experimental Forest.

Timing/Implementation: Ongoing from the onset of planning for construction of the project.

Enforcement: County Community Development Department, US Fish and Wildlife Service

Monitoring: Ongoing during construction period of project

#### **Mitigation Measure Bio-Resources 2**

No work using heavy equipment should occur during the breeding season of the MAMU (April 1-September 22), for any given year, within 1,000 feet of the Yurok-Redwood Experimental Forest.

Timing/Implementation: Ongoing from the onset of planning for construction of the project.

Enforcement: County Community Development Department, US Fish and Wildlife Service

Monitoring: Ongoing during construction period of project

#### **Mitigation Measure Bio Resources 3**

A survey for Northern red-legged frogs shall conducted by a qualified biologist immediately before construction of any given area to remove amphibians which might be in harm's way. Any amphibians found within the construction area shall be moved to suitable habitat on the property a safe distance away.

Timing/Implementation: Prior to any construction activity.

Enforcement: County Community Development Department, California Department of Fish and Wildlife

Monitoring: Ongoing during construction period of project

#### **Mitigation Measure Bio Resources 4**

Construction should occur outside of the migratory bird breeding season (February 1st to August 15th) unless a survey for nesting conducted by a qualified biologist occurs in the weeks before the onset of construction. If nesting birds are located adjacent to the construction zone, construction within 300 feet of a nest should be postponed until the young fledge the nest and are mobile.

Timing/Implementation: Ongoing from the onset of planning for construction of the project.

Enforcement: County Community Development Department, US Fish and Wildlife Service

Monitoring: Ongoing during construction period of project.

### **CULTURAL RESOURCES**

#### **Mitigation Measure CULT-1**

An inadvertent discovery condition shall be added to the Use Permit stating that in the event of archeological or cultural resources are encountered during construction, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.



*Timing/Implementation: During any earthwork activities related to the improvement of the road and construction of the residences and related utilities.*

*Enforcement: County Community Development Department*

*Monitoring: N/A*

## **TRIBAL CULTURAL RESOURCES**

### **Mitigation Measure TRIBAL CULTURAL RESOURCES-1**

An inadvertent discovery condition shall be added to the Use Permit stating that in the event of archeological or cultural resources are encountered during construction, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.

*Timing/Implementation: During any earthwork activities related to the improvement of the road and construction of the residences and related utilities.*

*Enforcement: County Community Development Department*

*Monitoring: N/A*

## **WILDFIRE**

### **Mitigation Measure WILDFIRE-1**

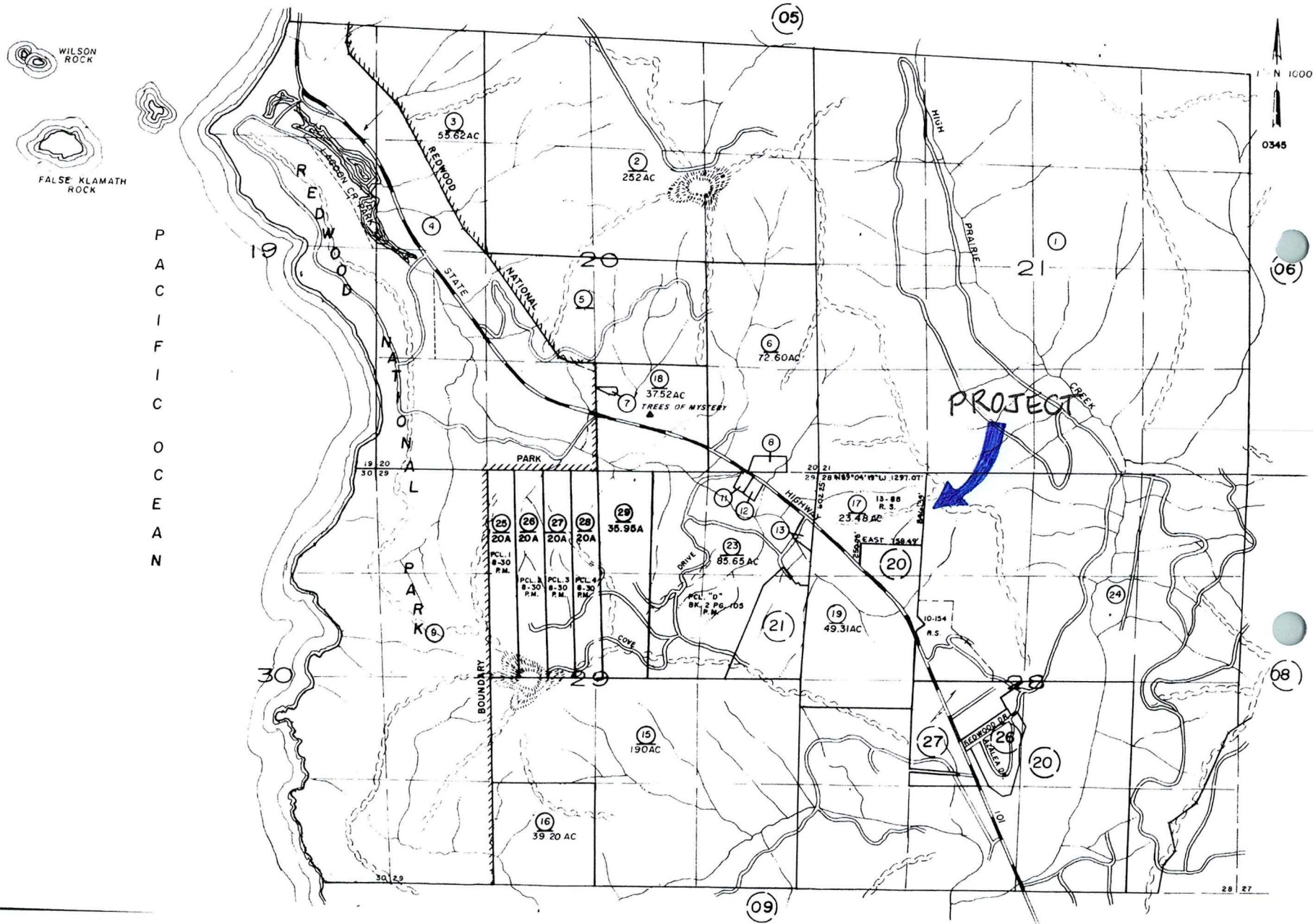
The project shall comply with the Del Norte County Fire Safe Regulations (Del Norte County Code Title 19) and/or the California Minimum State Fire Safe Standards depending upon when construction of the project occurs. All structures shall comply with the State's Wildland Urban Interface (WUI) Codes and Standards including Chapter 7A of the California Building Code (CBC) and Chapter R337 of the California Residential Code (CRC).

*Timing/Implementation: Some standards will be required prior to issuance of the building permit while some will be verified prior to issuance of a certificate of completion and/or occupancy.*

*Enforcement: County Community Development Department*

*Monitoring: Inspections prior to building permit issuance and ongoing until final certificate of completion and/or occupancy is issued by the County.*







ADDRESS: 15580 HIGHWAY 101  
KLAMATH, CA 95548

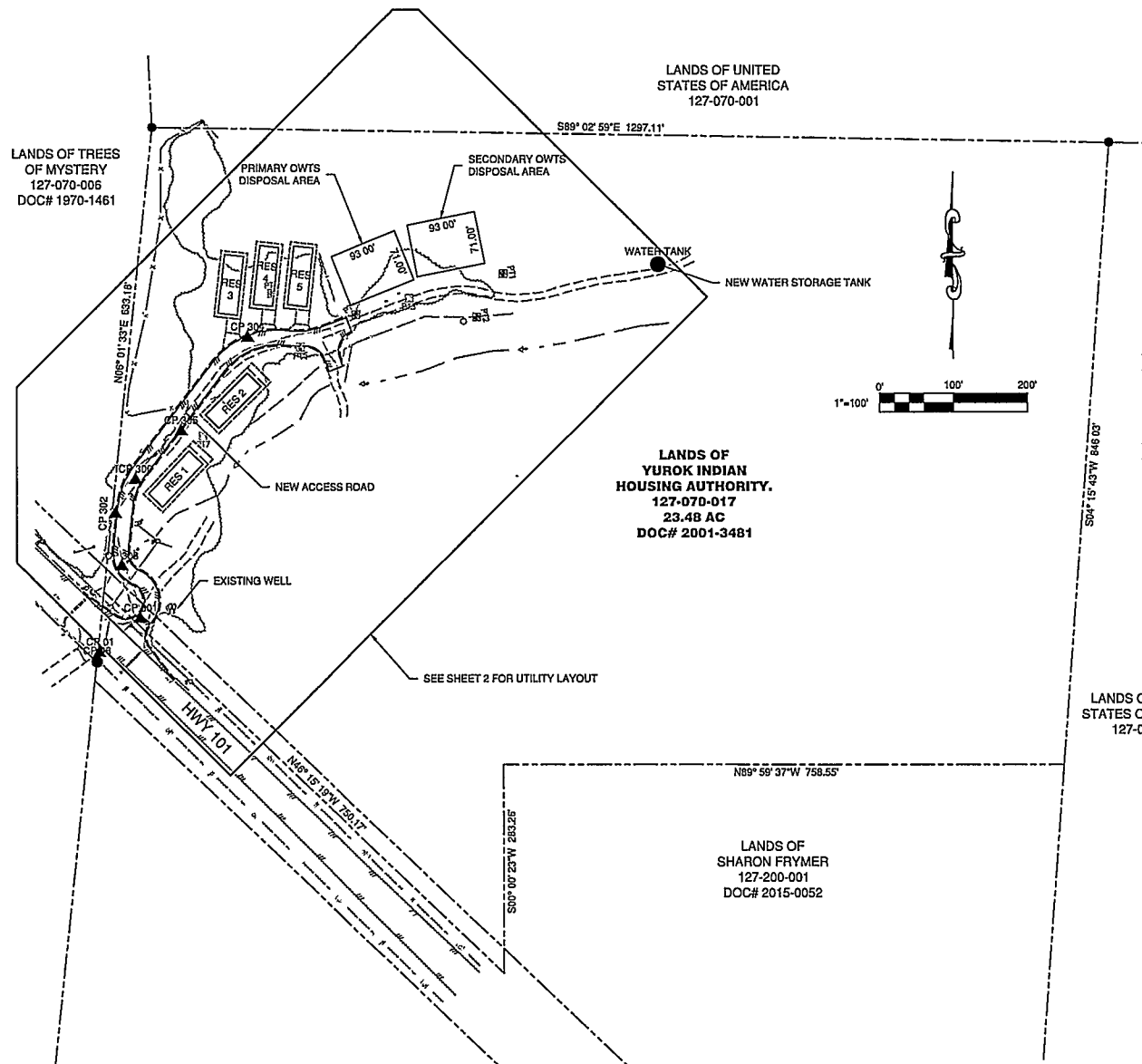
ALL PROPERTY LINES, EASEMENTS, AND EXISTING FEATURES ARE FOR ILLUSTRATION ONLY.

PROPOSED

		JOINT LINE - OVERHEAD
		JOINT TRENCH - UNDERGROUND
		ROAD - ALIGNMENT CENTERLINE
		ROAD - GRAVEL ROADWAY
		ROAD - PAVEMENT
		SANITARY SEWER - GRAVITY
		SANITARY SEWER - PRESSURE LINE
		STORM DITCH FLOWLINE
		STORM DRAIN LINE
		STORM DRAIN CULVERT
		STRUCTURE - FENCE
		STRUCTURE - RETAINING WALL
		WATER - DOMESTIC
		WATER - MAIN
		WATER - 100' WELL SETBACK

PLOT PLAN  
OF  
PLANNED COMMUNITY  
FOR  
YUROK INDIAN HOUSING AUTHORITY  
APN 127-070-017  
25.97 AC

PREPARED BY  
**STOVER ENGINEERING**  
Civil Engineers and Consultants  
PO BOX 783 - 711 H STREET  
CRESCENT CITY, CA 95531 707-465-6742  
JN 4675  
SHEET 1 OF 2



















**COUNTY OF DEL NORTE**  
COMMUNITY DEVELOPMENT DEPARTMENT

981 "H" Street, Suite 110  
Crescent City, California 95531

Fax (707) 465-0340

Planning  
(707) 464-7254

Engineering & Surveying  
(707) 464-7229

Roads  
(707) 464-7238

Building Inspection  
(707) 464-7253

Environmental Health  
(707) 465-0426

**Tribal CEQA Notification for Consultation**

Date: December 11, 2020

Sent to:					
<input type="checkbox"/>	Tolowa Dee-ni' Nation Attn: Tribal Historic Preservation Officer 140 Rowdy Creek Road Smith River, CA 95567	<input type="checkbox"/>	Elk Valley Rancheria Attn: Dale A. Miller 2322 Howland Hill Road Crescent City, CA 95531	<input checked="" type="checkbox"/>	The Karuk Tribe THPO Department of Natural Resources P.O. Box 282 Orleans, CA 95556

**Re: County Project Number:**

YUOK INDIAN HOUSING AUTHORITY – Rezone from CR and FR-1 to Planned Community – R2102 – and – Use Permit for a Planned Community – UP2110 – APN 127-070-017 located at 15580 US Highway 101, Klamath.

**To Whom It May Concern:**

The County is contacting you pursuant to Section 21080.3(d) of the California Public Resources Code (PRC) as you have previously requested to be notified and have designated the above named person (or are the person named identified on the contact list maintained by the California Native American Heritage Commission) for notification. You are receiving this notice as your tribe may be traditionally and culturally affiliated with the area in which the subject project is located.

Attached herein please find a brief description, location, and County staff contact for this project. You are hereby advised that, pursuant to the PRC, you are provided 30-days to respond to the County in writing if you wish to request consultation for this project.

**Please direct your written request for consultation to:**

Del Norte County Community Development Department (Planning Division)  
981 H Street, Suite 110  
Crescent City, CA 95531



# STOVER ENGINEERING

## Civil Engineers and Consultants

PO Box 783 - 711 H Street  
Crescent City CA 95531  
Tel: 707.465.6742  
Fax: 707.465.5922  
info@stovereng.com

NICOLE SAGER, EXECUTIVE DIRECTOR  
YUOK INDIAN HOUSING AUTHORITY  
15540 HIGHWAY 101 NORTH  
KLAMATH, CA 95548

Job Number: 4675

27 November 2020

RE: On-site Wastewater Treatment System Feasibility Report – 15580 Highway 101 North, CA  
(APN 127-070-017-000)

Dear Ms. Sager,

At your request, Stover Engineering performed an on-site wastewater treatment system (OWTS) feasibility evaluation for a group of proposed residences at the subject parcel. The proposed residences will be served by an on-site well. Based on our investigation, it is our opinion that a conventional OWTS plus a reserve area can be situated on the property. This report conforms to the Del Norte County Sewage Disposal Ordinance and the North Coast Regional Water Quality Control Board OWTS Policy for Tier 1 systems.

Our staff performed field observations during wet weather season on 10 April 2020 for the purpose of determining suitability for the OWTS. Houawa Moua of the Del Norte County Environmental Health Department was present during the soil observations. The existing ground generally slopes downward to the west at an average 13% slope.

Seven test pits were excavated to a depth of 7.5 feet or more below ground surface (bgs) with a backhoe, as indicated on the attached site plan. The soil test pit locations are designated as TP-1 thru TP-7. Soils observed in TP-1 comprised of brown loam topsoil to a depth of 1 foot bgs, tan sandy clay from 1 to 6 feet bgs, and reddish-brown sandy clay from 6 to 8 feet bgs. No groundwater was observed in TP-1. Soils observed in TP-2 comprised of brown loam topsoil to a depth of 1.5 feet bgs, reddish-brown sandy clay from 1.5 to 3.5 feet bgs, and tan sandy clay from 3.5 to 7.5 feet bgs. The bottom of the test pit appeared wet and began to collect a small amount of water in TP-2.

Soils observed in TP-3 comprised of brown loam topsoil to depth of 1.5 feet bgs, tan sandy clay from 1.5 to 6 feet bgs, and reddish-brown sandy clay from 6 to 7.5 feet bgs. No groundwater was observed in TP-3. Soils observed in TP-4 comprised of brown loam topsoil to a depth of 1 foot bgs, reddish-brown loam with roots from 1 to 2 feet bgs, tan sandy clay from 2 to 4 feet bgs, and yellow-brown clay from 4 to 8 feet bgs. No groundwater was observed in TP-4. Soils observed in TP-5 comprised of brown loam topsoil to a depth of 1 foot bgs, tan sandy clay from 1 to 5 feet bgs, reddish-brown sandy clay from 5 to 7 feet bgs, and brown clay from 7 to 8 feet bgs. No groundwater was observed in TP-5.

Soils observed in TP-6 comprised of brown loam topsoil to a depth of 1 foot bgs, reddish-brown loam from 1 to 2 feet bgs, and tan sandy clay from 2 to 8 feet bgs. No groundwater was observed in TP-6. Soils observed in TP-7 comprised of brown loam topsoil to a depth of 1 foot bgs, reddish-brown sandy clay loam from 1 to 5 feet bgs, and tan sandy clay from 5 to 8 feet bgs. No groundwater was observed in TP-7.



Percolation testing was performed by Stover Engineering on 13 April 2020 during wet weather season. The percolation testing was performed in close proximity to each of the seven test pits. The percolation rate near TP-1 was observed to be 30 minutes per inch (MPI). The percolation rate near TP-2 was observed to be 15 MPI. The percolation rate near TP-3 was observed to be 15 MPI. The percolation rate near TP-4 was observed to be 41 MPI. The percolation rate near TP-5 was observed to be 30 MPI. The percolation rate near TP-6 did not stabilize after 70 minutes of pre-soaking and 110 minutes of percolation; the slowest rate of percolation observed near TP-6 was 120 MPI. The percolation rate near TP-7 was observed to be 30 MPI.

The minimum required separation distance to groundwater from the bottom of leachfield trenches is five feet for soils with percolation rates between 30 MPI and 120 MPI, in accordance with the design standards. Based on the observed depth to groundwater in the test pits, and our calculations, there is sufficient area to site a conventional OWTS and a reserve area on the proposed parcel as shown in the attached site plan. Copies of the site evaluation summary, site plan, soils exploration logs, percolation test logs, table of application rates, design calculations, and trench detail are attached to this letter.

Please be informed that grading activities which disturb the reserve or primary areas indicated on the attached site plan will alter the suitability of the existing soils and subsequently invalidate the findings of our report. In addition, the placement of both on-site and off-site future improvements, including but not limited to wells and water lines, must adhere to all required setbacks.

The recommendations contained in this letter are based on data obtained during the stated site observations only. Soil conditions may vary throughout the site of the proposed disposal areas. Stover Engineering assumes no liability for conditions that differ from those observed by our staff at the time of the site visit.

We trust that this provides the information you require. Please feel free to contact me if you have any questions.

Very truly yours,

STOVER ENGINEERING



Grant Goddard, EIT  
Assistant Civil Engineer



Ryan C. Young, PE, PLS  
Project Engineer



Attachment (19 pages)  
QA/QC WCS

**STOVER ENGINEERING**



## YIHA BENNETT SITE

STOVER ENGINEERING

## SITE EVALUATION SUMMARY

Owner: YUROK INDIAN HOUSING AUTH.

Date: 4/10/20

Address: 15540 HWY 101 NORTH  
KLAMATH CA 95548

Job No.: 4675

APN: 127-070-017

Location: 15580 HWY 101 KLAMATH CA

Lot Size: 25 ACRES

Water System: WELL

Ground Slope: ~15%

Setbacks: (Del Norte County Minimum)	Septic tank	Leach Field
Property Line	✓ (10')	✓ (10')
Well	✓ (100')	✓ (100')
Water Line	✓ (10')	✓ (10')
Stream	✓ (100')	✓ (100')
Drainage Channel	✓ (50')	✓ (50')
Ocean, Lake, etc.	NA (50')	NA (100')
Bluff or Cutback	✓ (25')	✓ (25')

Primary Area Site(s): YES

Replacement Site(s): YES

Other excavations N/A

Depth to Hardpan, Bedrock, Etc.: NONE FOUND

Depth To Groundwater: 7.5 FT (IN TP-2 ONLY)

Depth to Mottling: NONE FOUND

Other Factors:

Soil analysis zone: 2 &amp; 3

Percolation Rate: VARIES (15 MPI TO 120 MPI)

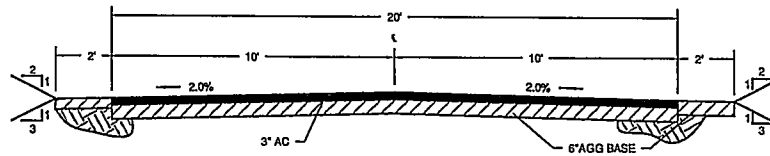
Depth of Soils  
under leachfield Required: 5 FTActual Depth  
Available: ≥ 5 FT

Replacement Area Available: YES

Adequate? YES

Other Comments: DEPTH OF SOILS REQUIRED IS DEPENDENT  
ON PERC RATE - TEST PITS WERE DUG  
TO 8 FT MAX DEPTH



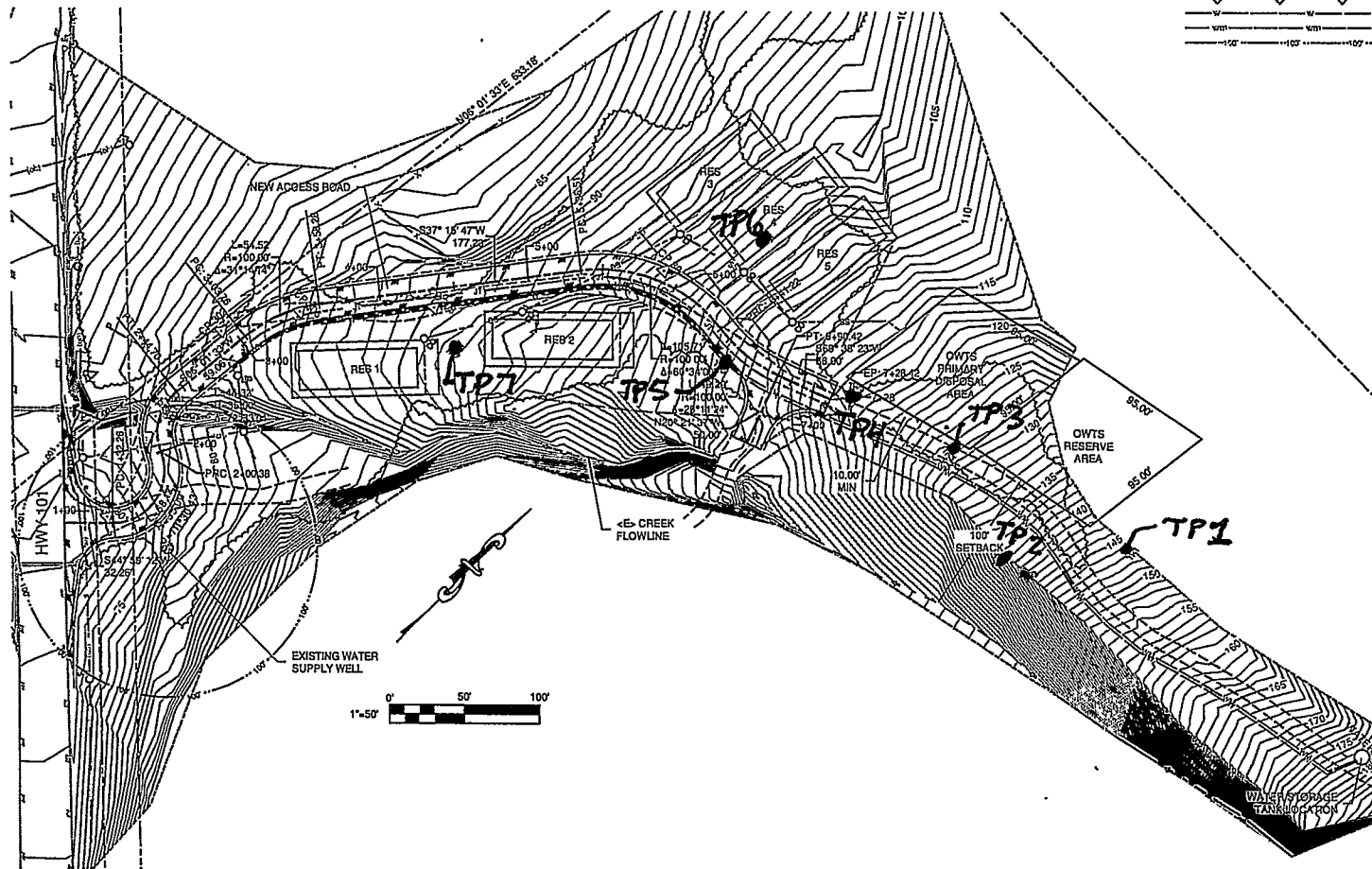


1  
2  
TYPICAL ROAD CROSS SECTION  
NTS

LEGEND	
EXISTING	PROPOSED
	JOINT LINE - OVERHEAD
	JOINT TRENCH - UNDERGROUND
	ROAD - ALIGNMENT CENTERLINE
	ROAD - GRAVEL ROADWAY
	ROAD - PAVEMENT
	SANITARY SEWER - GRAVITY
	SANITARY SEWER - PRESSURE LINE
	STORM DITCH FLOWLINE
	STORM DRAIN LINE
	STORM DRAIN CULVERT
	STRUCTURE - FENCE
	STRUCTURE - RETAINING WALL
	WATER - DOMESTIC
	WATER - MAIN
	WATER - 100' WELL SETBACK

### NOTES

1. SURVEY CONTOURS ARE REFERENCED FROM A FIELD SURVEY CONDUCTED BY SPENCER & ASSOCIATES IN 2002. STOVER ENGINEERING PERFORMED A SUPPLEMENTAL SURVEY IN AUGUST 2020.
2. ELEVATIONS ARE BASED ON BENCHMARK: NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION A 1401, P10 LV0575, FD METAL ROD IN 5" WELL NEAR THE MOST NORTHERLY CORNER OF THE "TREES MOTEL" LOCATED SOUTHWEST OF HIGHWAY 101 ACROSS FROM TREES OF MYSTERY, ELEVATION = 49.69 FEET. TEMPORARY BENCHMARK: NAIL AND SHINER SET IN PAVEMENT AS SHOWN HEREON. ELEVATION = 68.20 FEET.
3. UTILITIES SHOWN HEREON ARE APPROXIMATE LOCATIONS AND ARE FOR PLANNING PURPOSES ONLY.



PLOT PLAN  
OF  
PLANNED COMMUNITY  
FOR  
YUROK INDIAN HOUSING AUTHORITY

APN 127-070-017  
25.97 AC

PREPARED BY  
**STOVER ENGINEERING**  
Civil Engineers and Consultants  
PO BOX 783 - 7111 H STREET  
CRESCENT CITY, CA 95531 707-465-6742

JN 4675  
SHEET 2 OF 2

2/19



## EXPLORATION TEST LOG

by GBS

Project Name YIHA BENNETT Job Number 4675

Date 4/10/20

Hole Number 1

Hole Type BACKHOE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X		BROWN TOPSOIL LOOSE DAMP			
	1				
		ROOTS			
	2				
		TAN SANDY CLAY ANGULAR DAMP			
	3				
		ORANGE COLORATION			
	4				
	5				
	6				
		REDDISH BROWN SANDY CLAY ANGULAR DAMP			
	7				
	8	BOTTOM OF HOLE			
	9	NO GROUNDWATER			
	10				
	11				
	12				



## EXPLORATION TEST LOG

by 6B6

Project Name YIHA BENNETT Job Number 4675

Date 4/10/20

Hole Number 2

Hole Type BACKHOLE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X		BROWN TOPSOIL LOOSE DAMP			
	1	18" DEEP LOAMY			
	2	REDDISH SANDY GRANULAR MOIST			
	3	CLAY			
	4	TAN SANDY ANGULAR DAMP			
	5	CLAY			
	6				
	7				
	8	BOTTOM OF HOLE - WET			
	9	GROUNDWATER LIKELY AT 7.5'			
	10				
	11				
	12				



## EXPLORATION TEST LOG

by GBB

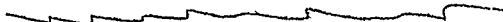
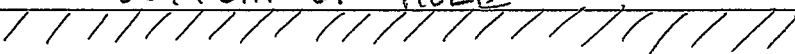
Project Name YIHA BENNETT Job Number 4675

Date 4/10/20

Hole Number 3

Hole Type BACKHOLE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X		BROWN TOPSOIL LOOSE DAMP			
	1	18" DEEP			
	2	TAN SANDY SUB ROUNDED CLAY BLOCKY DAMP			
	3				
		 ORANGE COLORATION ↓ ↓ ↓			
	4				
	5				
	6				
		REDDISH SANDY SUB BROWN CLAY ROUNDED DAMP BLOCKY			
	7				
		BOTTOM OF HOLE			
	8	 NO GROUNDWATER			
	9				
	10				
	11				
	12				



## EXPLORATION TEST LOG

by G86

Project Name YIHA BENNETT Job Number 4675

Date 4/10/20

Hole Number 4

Hole Type BACKHOE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X		BROWN	TOPSOIL	LOOSE	DAMP
	1				
		REDDISH BROWN	ROOT ZONE	LOOSE	DAMP
	2				
		TAN	SANDY CLAY	SUB ANGULAR BLOCKY	DAMP
	3				
	4				
		YELLOW BROWN	CLAY	BLOCKY OR MASSIVE	DAMP
	5				
	6				
	7				
	8	BOTTOM OF HOLE			
		NO GROUNDWATER			
	9				
	10				
	11				
	12				



# EXPLORATION TEST LOG

by GBG

Project Name YIHA BENNETT

Job Number 4675

Date 4/10/20

Hole Number 5

Hole Type BACKHOE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X	1	BROWN	TOPSOIL	LOOSE	DAMP
	2	TAN	SANDY CLAY	SUB ANGULAR BLOCKY	DAMP
	3				
	4				
	5				
	6	REDDISH	SANDY CLAY	SUB ANGULAR BLOCKY	DAMP
	7				
	8	BROWN	CLAY	SUB ANGULAR BLOCKY	DAMP
		BOTTOM OF HOLE			
	9	NO GROUNDWATER			
	10				
	11				
	12				



## EXPLORATION TEST LOG

by G B G

Project Name YIHA BENNETT Job Number 4675

Date 4/10/20

Hole Number 6

Hole Type BACKHOE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X		BROWN TOPSOIL LOOSE DAMP			
	1				
		REDDISH ROOT ZONE LOOSE DAMP			
	2				
		TAN SANDY CLAY	ANGULAR BLOCKY < 1"	DAMP	
	3				
	4				
		BOTTOM OF HOLE NO GROUNDWATER			
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				



## EXPLORATION TEST LOG

by GBS

Project Name YIHA BENNETT Job Number 4675

Date 4/10/20

Hole Number 7

Hole Type BACKHOE

APN 127-070-017

Soil Sample	Depth (ft) 0'	Soil Description			
		Color	Type	Structure	Saturation
X		BROWN TOPSOIL LOOSE DAMP			
	1				
		REDDISH SANDY			
	2	BROWN CLAY GRANULAR DAMP			
		LOAM			
	3				
	4				
	5				
	6	TAN SANDY ANGULAR DAMP			
		CLAY BLOCKY			
	7				
	8	BOTTOM OF HOLE			
		NO GROUNDWATER			
	9				
	10				
	11				
	12				



## PERCOLATION TEST LOG

Project Name YIHA Bennett Job # 4675 Test Date 4/13/20 Logged By GBG  
 Hole Number 7 Hole Type Backhoe/Hand Hole Elevation 150' Water Table ~60  
 Soil Type Sandy Clay Water Supply Bucket/Well Pump APN 127-070-017

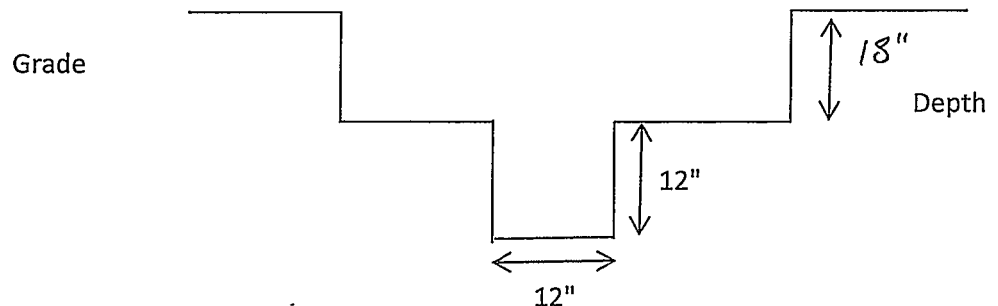
Begin Soak 11:00

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
11:00	12:05	SOAK	6.75"	<del>44</del> 65	—	—
12:05	12:20	5.5"	6"	15	0.5	30
12:20	12:35	5.25	5.75	15	0.5	30
12:35	12:50	5.75	6.5	15	0.75	20
12:50	1:05	6.5	7	15	0.5	30
1:05	1:20	5.75	6.25	15	0.5	30
1:20	1:35	5.5	6	15	0.5	30

Maximum Allowable Percolation Rate = 5 min/inch

Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 30 MIN/INCH





## PERCOLATION TEST LOG

Project Name YIHA Bennett Job # 4675 Test Date 4/13/20 Logged By GBG  
 Hole Number 2 Hole Type Backhoe/Hand Hole Elevation 136' Water Table ~60  
 Soil Type Sandy Clay Water Supply Bucket/Well Pump APN 127-070-017

11:00

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
11:00	12:10	SOAK	7.5	70 min	—	—
12:10	12:25	6.25	7.25	15	1	15
12:25	12:40	6	7	15	1	15
12:40	12:55	5.5	6.25	15	0.75	20
12:55	1:10	6.25	7.25	15	1	15
1:10	1:25	6	6.75	15	0.75	20
1:25	1:40	5.25	6.25	15	1	15

Maximum Allowable Percolation Rate = 5 min/inch

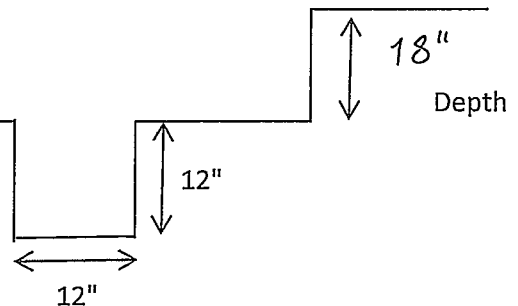
Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE =

15

MIN/INCH

Grade





## PERCOLATION TEST LOG

Project Name YHA Bennett Job # 4675 Test Date 4/13/20 Logged By GBG  
 Hole Number 3 Hole Type Backhoe/Hand Hole Elevation 128' Water Table ~60  
 Soil Type Sandy clay Water Supply Bucket/Well Pump APN 127-070-017

Soak 11:08

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
11:08	12:15	SOAK	9	67	—	—
12:15	12:30	8	9.25	15	1.25	12
12:30	12:45	8	9	15	1	15
12:45	1:00	7.75	8.5	15	0.75	20
1:00	1:15	7.5	8.5	15	1	15
1:15	1:30	8.25	9	15	0.75	20
1:30	1:45	7.75	8.75	15	1	15

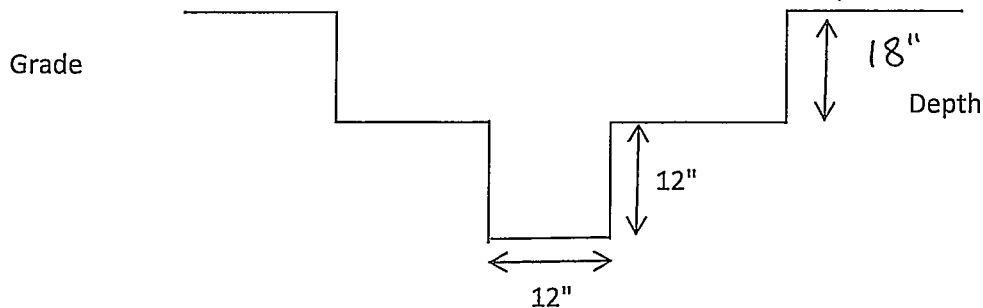
Maximum Allowable Percolation Rate = 5 min/inch

Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE =

15

MIN/INCH





## PERCOLATION TEST LOG

Project Name YHA Bennett Job # 4675 Test Date 4/13/20 Logged By JDE  
 Hole Number 4 Hole Type Backhoe/Hand Hole Elevation 120' Water Table ~60  
 Soil Type Sandy Clay Water Supply Bucket/Well Pump APN 127-070-017

12:55 1:02

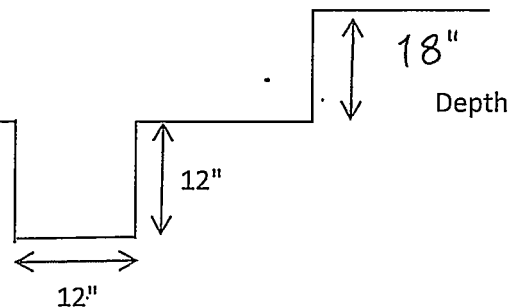
Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
2:04	2:19	7 1/8	8	15	.875	17
2:20	2:35	7 1/8	7 7/8	15	.75	20
2:36	2:52	7	<del>7 1/8</del> 7 1/8	16	.75	20
2:53	3:08	7 2/8	7 6/8	15	.5	30
3:08	3:23	7 1/8	7 4/8	15	.375	40
3:23	3:38	7 2/8	7 5/8	15	.375	40
3:38	3:56	7 1/8	<del>6.3</del> 7.56	18	.435	41

Maximum Allowable Percolation Rate = 5 min/inch

Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 41 MIN/INCH

Grade





## PERCOLATION TEST LOG

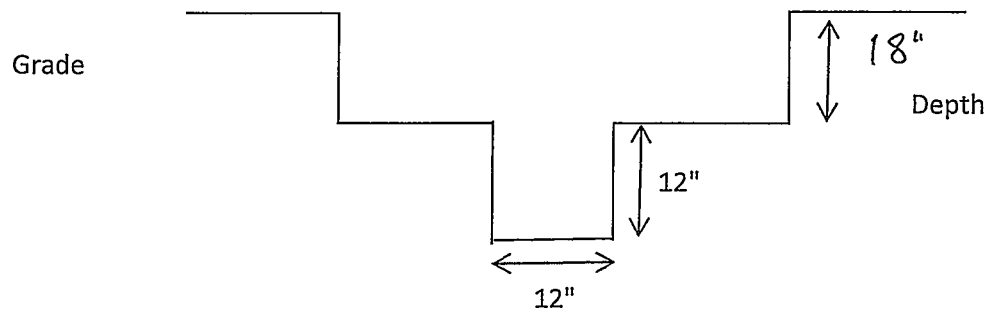
Project Name YIHA Bennett Job # 4675 Test Date 4/13/20 Logged By JDE  
 Hole Number 5 Hole Type Backhoe/Hand Hole Elevation 110' Water Table ~60  
 Soil Type Sandy Clay Water Supply Bucket/Well Pump APN 127-070-017

12:55

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
2:06	2:21	7	7 $\frac{1}{8}$	15	.75	20
2:22	2:37	7 $\frac{1}{8}$	7 $\frac{1}{8}$	15	.625	24
2:39	2:54	7 $\frac{1}{8}$	7 $\frac{1}{8}$	15	.625	24
2:56	3:11	7 $\frac{1}{8}$	7 $\frac{5}{8}$	15	.5	30
3:12	3:26	7	7 $\frac{1}{8}$	14	.5	30
3:26	3:40	6 $\frac{7}{8}$	7 $\frac{3}{8}$	14	.5	30

Maximum Allowable Percolation Rate = 5 min/inch  
 Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 30 MIN/INCH





## PERCOLATION TEST LOG

Project Name YIHA Bennett Job # 4675 Test Date 4/13/20 Logged By JDE  
 Hole Number 6 Hole Type Backhoe/Hand Hole Elevation 104' Water Table ~60  
 Soil Type Sandy clay Water Supply Bucket/Well Pump APN 127-070-017

12:59

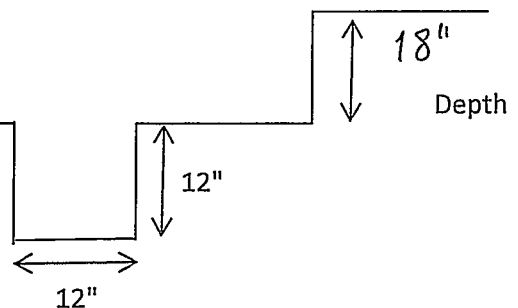
Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
2:10	2:25	6 1/8	6 4/8	15	.375	40
2:26	2:42	6 4/8	6 6/8	16	.250	64
2:45	3:00	6 2/8	6 5/8	15	.375	40
3:00	3:15	6 5/8	6 6/8	15	.125	120
3:15	3:30	6 6/8	7	15	.25	60
3:30	3:45	7	7 1/8	15	.125	120
3:45	4:00	7 1/8	0.62 <sup>48</sup> 7.44	15	.315	48

Maximum Allowable Percolation Rate = 5 min/inch  
 Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 120 MIN/INCH

WORST CASE

Grade





## PERCOLATION TEST LOG

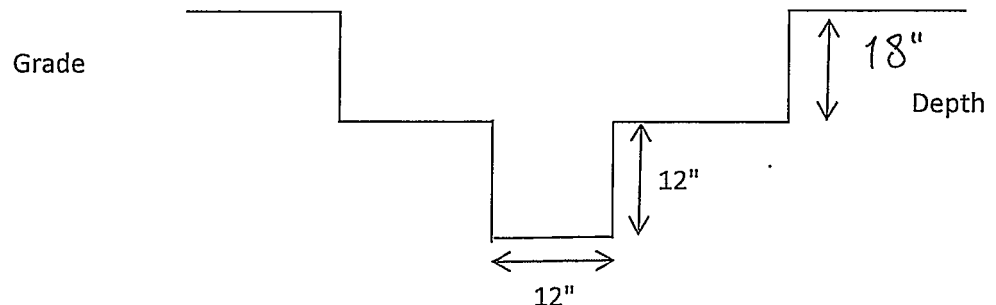
Project Name YHA Bennett Job # 4675 Test Date 4/13/20 Logged By JDE  
 Hole Number 2 Hole Type Backhoe/Hand Hole Elevation 92' Water Table ~60  
 Soil Type Sandy Clay Water Supply Bucket/Well Pump APN 127-070-017

1:06

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
2:08	2:23	6 $\frac{7}{8}$	6 $\frac{4}{8}$	15	.375	40
2:24	2:40	6 $\frac{4}{8}$	7 $\frac{2}{8}$	16	.750	20
2:40	2:56	7 $\frac{2}{8}$	<del>8 <math>\frac{6}{8}</math></del> 7 $\frac{7}{8}$	16	.625	24
2:57	3:13	7 $\frac{2}{8}$	7 $\frac{6}{8}$	16	.5	30
3:14	3:28	6 $\frac{4}{8}$	7	14	.5	30
3:28	3:43	6 $\frac{5}{8}$	7 $\frac{2}{8}$	15	.5	30

Maximum Allowable Percolation Rate = 5 min/inch  
 Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 30 MIN/INCH





## Tier 1 – Low Risk New or Replacement OWTS

Table 3: Application Rates as Determined from Stabilized Percolation Rate							
Percolation Rate (minutes per Inch)	Application Rate (gallons per day per square foot)		Percolation Rate (minutes per Inch)	Application Rate (gallons per day per square foot)		Percolation Rate (minutes per Inch)	Application Rate (gallons per day per square foot)
<1	Requires Local Management Program		31	0.522		61	0.197
1	1.2		32	0.511		62	0.194
2	1.2		33	0.5		63	0.19
3	1.2		34	0.489		64	0.187
4	1.2		35	0.478		65	0.184
5	1.2		36	0.467		66	0.18
6	0.8		37	0.456		67	0.177
7	0.8		38	0.445		68	0.174
8	0.8		39	0.434		69	0.17
9	0.8		40	0.422		70	0.167
10	0.8		41	0.411		71	0.164
11	0.786		42	0.4		72	0.16
12	0.771		43	0.389		73	0.157
13	0.757		44	0.378		74	0.154
14	0.743		45	0.367		75	0.15
15	0.729		46	0.356		76	0.147
16	0.714		47	0.345		77	0.144
17	0.7		48	0.334		78	0.14
18	0.686		49	0.323		79	0.137
19	0.671		50	0.311		80	0.133
20	0.657		51	0.3		81	0.13
21	0.643		52	0.289		82	0.127
22	0.629		53	0.278		83	0.123
23	0.614		54	0.267		84	0.12
24	0.6		55	0.256		85	0.117
25	0.589		56	0.245		86	0.113
26	0.578		57	0.234		87	0.11
27	0.567		58	0.223		88	0.107
28	0.556		59	0.212		89	0.103
29	0.545		60	0.2		90	0.1
30	0.533					>90 - 120	0.1



## Conventional Leachfield Design

01 - Determine Peak Flow	Peak Flow =	<u>2250</u> gpd	Five homes @ 450 GPD
02 - Determine Septic Tank Size	Septic Tank Size =	1200 gal	Five tanks total
	1000 gal minimum per UPC		
	1200 gal minimum per Del Norte County Code		
03 - Required Absorption Area	Soil Infiltration Rate, IR =	<u>0.6</u> gpd/ft <sup>2</sup>	Using 30 MPI perc rate
	Determine Based on Perc Rate, see WI Mound Design Manual		
	AA =	<u>3750</u> ft <sup>2</sup>	(Flow/IR)
04 - Determine Trench Length	L <sub>1</sub> =	<u>1250</u> ft	(AA/W <sub>1</sub> )
	W <sub>1</sub> =	<u>3</u> ft	
	Depth =	<u>2.5</u> ft	
	Reduction Factor, RF =	<u>83</u> %	(Table 3, Manual of Septic Tank Practice)
05 - Determine Adjusted Length	L <sub>2</sub> =	<u>1042</u> ft	(L <sub>1</sub> *RF)
	No. Laterals, No.L =	<u>11</u>	Total laterals needed
	Lateral Spacing, S =	<u>6</u> ft	
	Del Norte requires 6' minimum, Humbolt 10' minimum		
	Else use twice the depth, W <sub>1</sub>		
	Lateral Length, L <sub>3</sub> =	<u>95</u> ft	(L <sub>2</sub> /No.L) <b>SEE NOTE</b>
	L <sub>3</sub> < 70' recommended, < 100' required		
	Lateral Width, W =	<u>93</u> ft	(No.L*W <sub>1</sub> + S*(No.L - 1))



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JOB

4675

SHEET NO.

19

OF

19

CALCULATED BY

GPG

DATE

CHECKED BY

RLV

DATE

11/27/20

SCALE

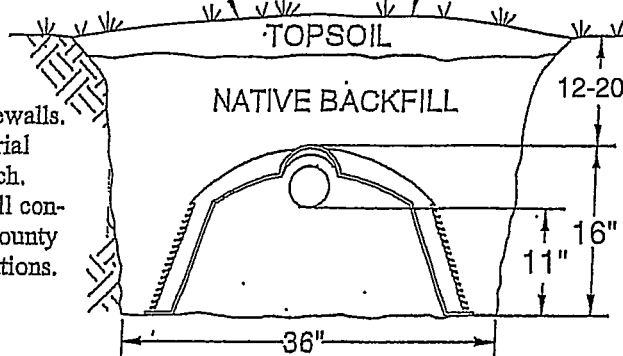
## TRENCH DETAIL

MOUND FOR PROPER DRAINAGE

ESTABLISH VEGETATIVE COVER

### NOTES:

1. Roughen trench sidewalls.
2. Remove loose material from bottom of trench.
3. All construction shall conform to Del Norte County standards and regulations.

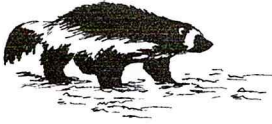


MAINTAIN EARTH  
COVER 12" MINIMUM  
20" MAXIMUM

QUICK4 HIGH CAPACITY  
INFILTRATOR OR  
APPROVED EQUAL  
16" HEIGHT

TOTAL TRENCH DEPTH  
36" MAX





# GALEA BIOLOGICAL CONSULTING

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200 Raccoon Court Crescent City California 95531  
Tel: 707-218-6039 E-mail: frankgalea@charter.net

## **Biological Assessment for Proposed Bennet Property Development Klamath, CA. September 2020.**

Submitted to:

Stover Engineering  
711 H Street  
Crescent City, CA 95531

Prepared by: Frank Galea, Certified Wildlife Biologist

Galea Biological Consulting  
200 Raccoon Court  
Crescent City, CA 95531  
E-mail: frankgalea@charter.net

Submitted: October 2020

By:



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The Yurok Tribe (Applicant) is proposing to develop the southern portion of a 23-acre property located just north of Highway 101 in Klamath, California (Figure 1). The proposal is for five new housing units to be built on the property, and to improve an existing access road.

This biological assessment was prepared by Galea Biological Consulting (GBC) to determine the potential impacts of the project, and possible alternatives, on sensitive wildlife species, including federally or state listed species, and species of special concern.

## 2.0

## INTRODUCTION

### 2.1 Project Description

The Applicant proposes to remove two abandoned structures, an old house and a trailer, and build five new single-family homes on the property. The old house to be removed is located very close to a stream flowing north to south on the property. Additionally, an access road through the property would be improved. The road improvements will entail widening the current access road to 24 feet in total width, and paving the entire length.

### 2.2 Environmental Setting

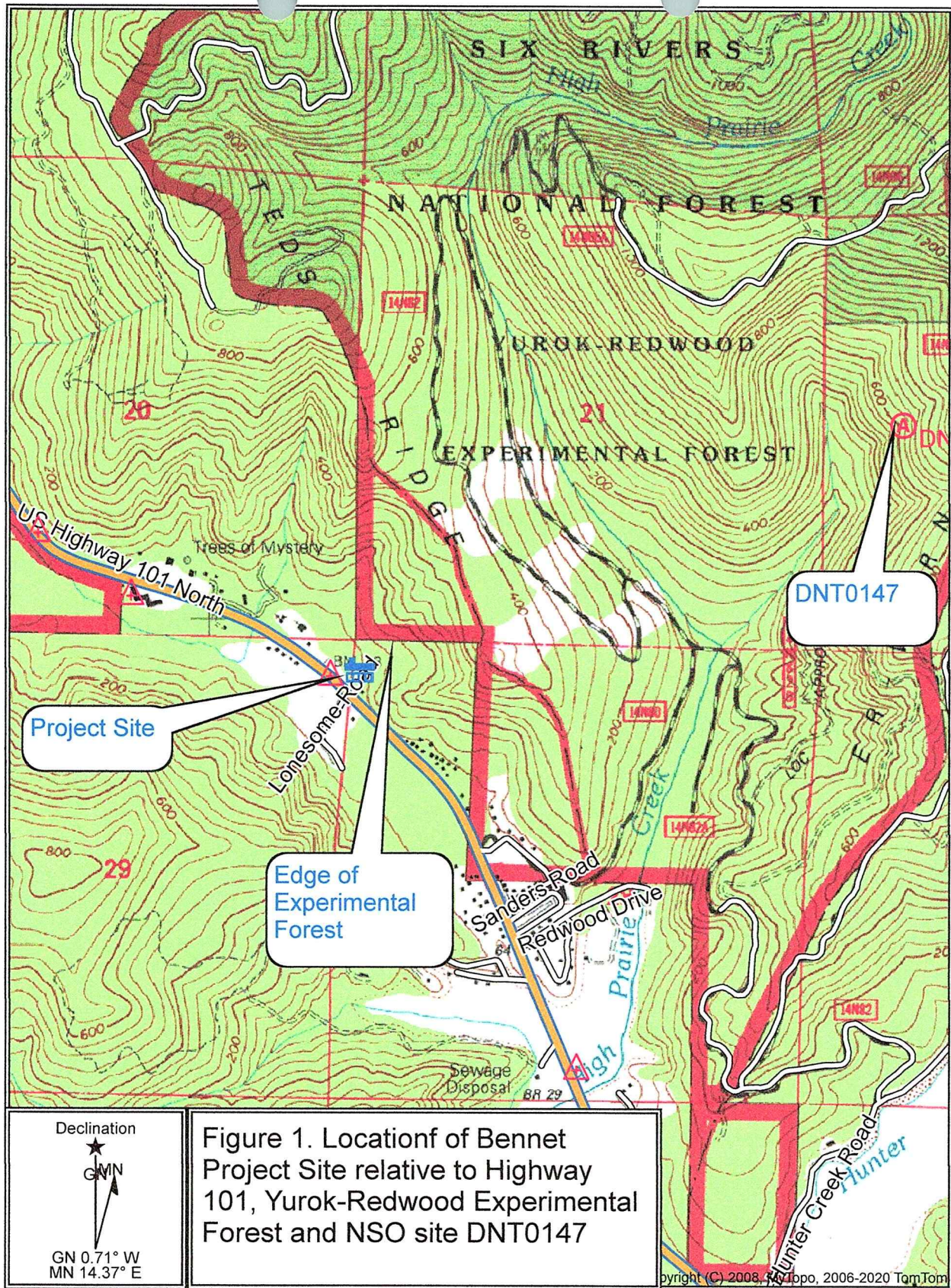
The project site is located in northwestern California, Del Norte County, approximately 15 miles southeast of Crescent City on Highway 101. The project is located within a 23-acre property known as the Bennet Property. The property is highly vegetated, consisting primarily of a mix of Redwood (*Sequoia sempervirens*), Sitka spruce (*Picea sitchensis*) and red alder (*Rubus alna*). A small, ephemeral stream runs through the east side of the property, running from north to south.

The 1,200-acre Redwood Experimental Forest is located just northeast of the project property. Old-growth stands of redwood remain within portions of the experimental forest.

### 2.3 Physical Environment

The climate of northern California is characterized as Mediterranean, with cool, wet winters and warm, dry summers with frequent fog. Along the coastline, proximity to the Pacific Ocean produces high levels of humidity and results in abundant fog and fog drip precipitation. The maritime influence diminishes with distance from the coast, resulting in lesser amounts of fog, drier summer conditions and more variable temperatures. Annual precipitation in the project watershed ranges from 60 - 150 inches occurring primarily as rain during the winter months. Air temperatures measured in the Crescent City area vary from 41°F to 67°F annually.







### 3.0

## METHODS

### 3.1 Records Search

A records search of the California Department of Fish and Wildlife (CDF&W) Natural Diversity Data Base (CNDDDB, 2020) was conducted to determine if any additional special-status plant or animal species had been previously reported within or near the project area.

The U.S. Fish and Wildlife Service (USFWS) IPaC (Information and Planning Center) web page was queried, providing a list of federally-protected species potentially found near the project area. These lists tend to be very comprehensive and list all Federally-listed species within Del Norte County.

The Yurok Tribe wildlife department was contacted for any information they may have regarding the property. Additionally, the U.S. Forest Service was contacted for information regarding the Redwood Experimental Forest.

#### Special-Status Species and Significant Natural Communities.

The following special-status species and sensitive community types are considered in this evaluation:

- Species that are listed, or designated as candidates for listing, as threatened or endangered under the federal Endangered Species Act;
- Species that are listed, or designated as candidates for listing as rare (plants), threatened, or endangered under the California Endangered Species Act;
- Wildlife species listed by the CDF&W as species of special concern or fully protected species;
- Communities designated by the CDFG to be "significant" natural communities;
- Species that meet the definition of rare or endangered under the California Environmental Quality Act (under Section 15380 of CEQA, a species not included on any formal list "shall nevertheless be considered rare or endangered if the species can be shown to meet the criteria" for listing); and
- Taxa of special concern by local agencies.

### 3.2 Regulatory Context

The project is located within Yurok Tribe fee lands; therefore, compliance is required with Federal and State agency jurisdictions and regulations. The following applies to federally-protected wildlife species:

**(a) U.S. Fish and Wildlife Service (USFWS).** The USFWS has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act (ESA). The ESA protects listed species from "take," broadly defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." An activity is defined as a "take" even if unintentional or accidental. An endangered plant or wildlife species is one that is considered in danger of becoming extinct throughout all, or a significant portion of its range. A threatened species is one that is likely to become endangered within the foreseeable future.



In addition, the USFWS has a list of candidate species which the USFWS currently has enough information to support a proposal for listing. Section 9 of the ESA and its applicable regulations restrict activities with respect to endangered and threatened plants. However, these restrictions are less stringent than those applicable to fish and wildlife species. These provisions prohibit the removal of, malicious damage to, or destruction of any listed plant species "from areas under federal jurisdiction." Listed plants may not be cut, dug up, damaged or destroyed, or removed from any other area (including private lands) in knowing violation of a State law or regulation.

**(b) Raptors & Migratory Bird Treaty Act (MBTA).** The MBTA (16 United States Code [USC] 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorized the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. The MBTA sets seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10).

**(c) U.S. Army Corps of Engineers (ACOE).** Under Section 404 of the Clean Water Act, the ACOE is responsible for regulating the discharge of fill material into waters of the U.S. Waters of the U.S. and their lateral limits are defined in 33 CFR (Code of Federal Regulations) Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and may be subject to ACOE jurisdiction.

**(d) California Department of Fish and Wildlife (CDF&W).** The CDF&W has jurisdiction over threatened or endangered species that are formally listed by the State under the California Endangered Species Act (CESA). The CESA is similar to the federal Endangered Species Act both in process and substance and is intended to provide additional protection to CESA listed species in California.

The CESA does not supersede the federal Endangered Species Act, but operates in conjunction with it. Species may be listed as threatened or endangered under both acts (in which case the provisions of both State and federal laws would apply) or under only one act. The California endangered species laws prohibit the taking of any plant listed as threatened, endangered, or rare. In California, an activity on private lands (such as development) will violate Section 9 of the Endangered Species Act if a plant species, listed under both State and federal endangered species laws, is intentionally removed, damaged, or destroyed. Under the State Fish and Game Code, the CDF&W also has jurisdiction over species that are designated as "fully protected." These species are protected against direct impacts. The CDF&W maintains informal lists of species of special concern, which are broadly defined as plants and wildlife that are of concern to CDF&W because of population declines and restricted distributions, and/or they are associated with habitats that are declining in California. These species, as well as threatened and endangered species, are inventoried in the California Natural Diversity Database.

The CDF&W also has jurisdiction over the bed and banks of watercourses (Section 1600 to 1616 of the Fish and Game Code). CDF&W requires a Streambed Alteration Permit for the fill or removal of any material from a natural drainage. CDF&W's jurisdiction extends to the top of banks and may include the outer edge of riparian vegetation canopy cover.



**(e) California Native Plant Society (CNPS).** The CNPS has developed lists of plants of special concern in California which is adopted and used by the CDF&W. A CNPS List IA plant is a species, subspecies, or variety that is considered to be extinct. A List 1B plant is considered rare, threatened, or endangered in California and elsewhere. A List 2 plant is considered rare, threatened, or endangered in California, but is more common elsewhere. A List 3 plant is a species for which California Native Plant Society lacks necessary information to determine if it should be assigned to a list or not. A List 4 plant has a limited distribution in California. All List 1 and List 2 plant species meet the requirements of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the CDF&G Code, and are eligible for State listing. Therefore, List 1 and 2 species should be considered under CEQA. Very few List 3 and List 4 plants are eligible for listing, but may be locally important, and their listing status could be elevated if conditions change.

**(f) CEQA Guidelines, Section 15380.** Although threatened and endangered species are protected by specific federal and State statutes, the CEQA Guidelines in Section 15380(b) provide that a species not included on the federal or State lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria.

These criteria have been modeled after the definitions in the federal Endangered Species Act and the CDFG Code. This section was included in the CEQA Guidelines primarily to deal with situations in which a public lead agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the U.S. Fish and Wildlife Service or CDFG. Thus, CEQA provides a lead agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

**(g) Regional Water Quality Control Board.** Pursuant to Section 401 of the Clean Water Act, projects that apply for a U.S. Army Corps of Engineers permit for discharge of dredge or fill material, and projects that qualify for a Nationwide Permit, must obtain water quality certification from the Regional Water Quality Control Board (RWQCB) that the project will uphold State water quality standards. Alternatively, the RWQCB may elect to notify an applicant that the State may issue Waste Discharge Requirements in lieu of a Section 401 certification.

### 3.3 Field Investigation

A field investigation of the project area was conducted in October of 2020. All potential wildlife habitats within and in proximity to the project area were assessed for their potential for listed wildlife species. Wildlife biologist Frank Galea conducted the field review for wildlife species. For wildlife an assessment area included habitats out to one mile around the actual project area. Trees in and adjacent to the project site were searched with high-power binoculars for nests, cavities or other potential nest sites for raptors or other large birds.



## 4.0

## RESULTS AND POTENTIAL IMPACTS

### 4.1 Records Search

The USFWS IPaC web page provided a comprehensive list of federally-protected species potentially found within Del Norte County (Appendix A). The list for bird species included the threatened marbled murrelet (*Brachyramphus marmoratus*), northern spotted owl (*Strix occidentalis caurina*), western snowy plover (*Charadrius nivosus nivosus*) plus the threatened yellow-billed cuckoo (*Coccyzus americanus*).

Potential habitat for the northern spotted owl (NSO) and the marbled murrelet (MAMU) is present on federal land just to the east of the property. There is no habitat for the western snowy plover or the yellow-billed cuckoo anywhere near the project area.

The CNDDDB (Figure 2) noted presence of the northern red-legged frog (*Rana aurora*) and the obscure bumblebee (*Bombus caliginosus*) in the list of sensitive species. Potential habitat for the northern red-legged frog was found on the property.

The Yurok Tribe wildlife department failed to return calls; therefore no information was made available as to the proximity of old-growth redwood stands, MAMU or NSO sites to the project.

A list of those sensitive or listed animal species potentially occurring in the vicinity of the project area is presented in Table 1, including their common and Latin names. The listing status of each species and if potential habitat (as determined by GBC, based upon a review of habitat available within the assessment area) was located within the project area is also indicated in Table 1.

### 4.2 Field Investigation

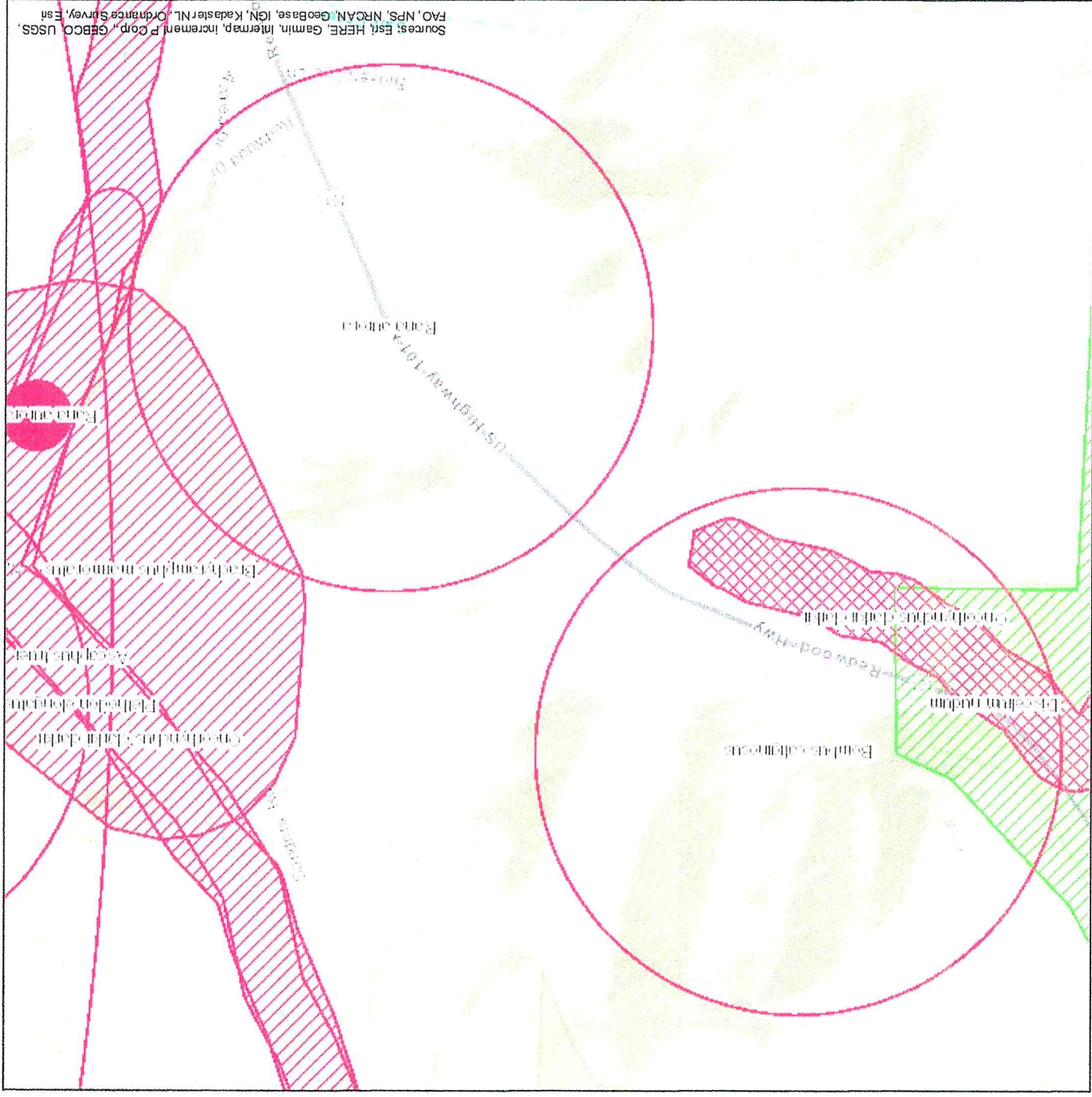
A field investigation was conducted in October of 2020. The property contains a derelict home and trailer, plus collapsed outbuildings, remnants of earlier use as rural residential property. An access road runs from Highway 101 up through the property to the northeast.

The property is densely vegetated with early seral redwood forest. Invasive plant species, such as Himalayan blackberry (*Rubus armeniacus*), cotoneaster (*Cotoneaster sp.*) and English ivy (*Hedera helix*) are concentrated toward the south end, around the buildings. The access road begins at Highway 101 and continues up a ridge to the northeast. The upper portion of the project site is vegetated with second-growth redwood forest, too young to be considered roosting or nesting habitat for NSO. Large redwoods were visible on the ridge to the north, within the experimental forest, approximately 1,000 feet away.

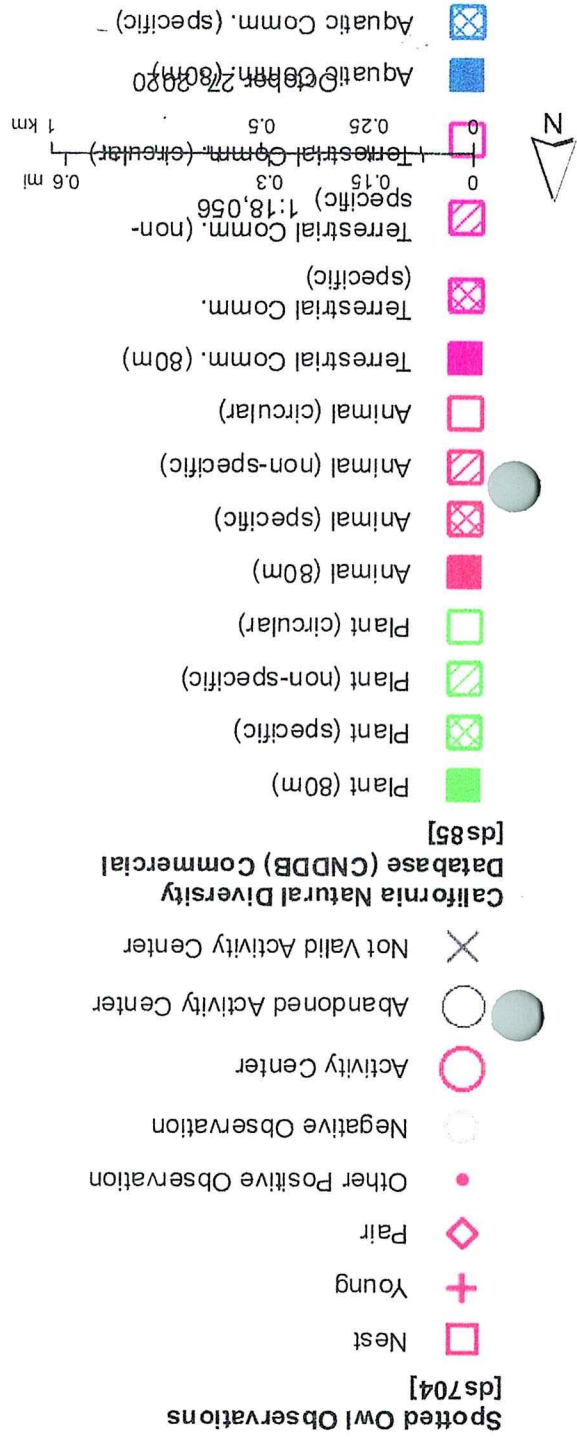
No evidence of bird nests was located during the investigation. Bats could potentially be using the derelict buildings; however, these were not searched intensively during review.



### Map of Project Area



Author: frankgalea@charter.net  
Printed from <http://bios.dig.ca.gov>





<b>Table 1. Federally-Protected Wildlife Species Potentially Occurring near the Project Area due to Suitable Habitat Conditions</b> (From California Natural Diversity Database 2020 Quad search and USFWS IPaC list)					
Common Name	Scientific Name	Federal Status	State Status	Breeding Habitat near Project Area?	Forage Habitat near project Area?
<b>BIRDS</b>					
Marbled murrelet	<i>Brachyramphus marmoratus</i>	FT	CE	No	No
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT	CE	No	Yes
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	FT	CE	No	No
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	CSC	No	No
<b>AMPHIBIANS</b>					
Northern red-legged frog	<i>Rana aurora aurora</i>	None	CSC	Yes	Yes
<b>INVERTEBRATES</b>					
Obscure bumblebee	<i>Bombus caliginosus</i>	None	CSC	No	Yes

## Codes:

Federal Status

FE	Federally endangered
FT	Federally threatened
FC	Federal candidate for listing
FP	Federally protected
FPE	Federally proposed for endangered listing

State Status

CE	California endangered
CT	California threatened
CCE	California candidate for endangered listing
CSC	California species of concern (CDFG)
CFP	California fully protected

### 4.3 Habitat Analysis and Impact Assessment for Fish and Wildlife

#### 4.3a Federally-Listed Threatened or Endangered Species

##### 1. Northern Spotted Owl (NSO)

The NSO is listed as federally threatened and as a California species of concern. The NSO is not uncommon over most of its range, which in northern California includes most conifer forests and mixed-conifer woodlands of the coastal mountains. It occurs locally in second-growth forests if the proper parameters, such as canopy closure and prey base, are present.



NSO prefer large diameter trees within well-shaded stands for nest sites, where they will use old nests built by other species, cavities or shaded, broken-topped trees. They prefer an overhead canopy over nests and roost sites for thermal and predator protection and are intolerant to extreme heat, especially for nest sites. Spotted owls hunt in relatively closed canopy forests with open sub-canopies and moderate stem densities.

The CNDDDB had a record of NSO activity center DNT0147 located approximately 1.2 miles ENE of the project area. This site is too distant to the project site to cause disturbance to nesting activities.

Suitable nesting and roosting habitat for NSO is available immediately east and north of the project site on Federal lands within the experimental forest, within approximately 1,000 feet of the project. As no NSO surveys have been completed to determine if an NSO Activity Center is present, it must be assumed that an Activity Center is in proximity and noise disturbance to NSO is a factor. Therefore, to prevent "take" of NSO due to disturbance caused by noise from heavy equipment, no work using heavy equipment should occur during the breeding season for NSO (February 1-August 31), for any given year, within 1,000 feet of the experimental forest.

## 2. Marbled Murrelet (MAMU)

The marbled murrelet (MAMU) occurs only in North America, from Alaska south to Santa Cruz, California. The MAMU is closely associated with old-growth and mature forests for nesting and population declines have been attributed in part to loss or modification of forest habitat. This species is federally listed as threatened (USFWS 1997) and state-listed as endangered in California.

Unlike most members of the family Alcidae, MAMU most often nest in trees. MAMU prefer to nest in old-growth and mature coniferous forests throughout most of their range. MAMU have recently been found nesting within large, second-growth redwoods as well. The closest potential MAMU nesting habitat to the project appears to be at the top of the ridge, approximately 1,000 feet away. is at least one mile away. As no surveys to determine presence/absence of MAMU have been conducted for this project, one should assume that MAMU may be nesting within 1,000 feet of the project. Therefore, to prevent "take" of MAMU due to disturbance caused by noise from heavy equipment, no work using heavy equipment should occur during the breeding season for NSO (April 1-September 22), for any given year, within 1,000 feet of the experimental forest.

## 3. Yellow-billed Cuckoo

The Yellow-billed Cuckoo is listed as a Threatened species under the Federal Endangered Species Act and as an Endangered Species in California. Yellow-billed cuckoos have a wide distribution throughout North America, however in California it has a much smaller range and more restrictive habitat requirements.



Over the past 80 years the range of the yellow-billed cuckoo has decreased in size by approximately 50%, primarily due to a reduction and fragmentation of riparian nesting habitat. The last breeding record in California north of the Sacramento Valley was at Mt. Shasta in 1951.

Yellow-billed cuckoos have one of the most restrictive suite of macro-habitat requirements of any bird species. During the breeding season in California, they are confined to cottonwood-willow riparian habitat. Generally, yellow-billed cuckoos require a habitat patch area at least 50 acres in size with a width of at least 325 feet as a nest stand. No such habitat is found anywhere near this project area; therefore, this project would have no impacts upon this species.

#### 4. Western snowy plover

The snowy plover is Federally-listed as threatened and is fully protected by the State of California. The Pacific coast population of the western snowy plover breeds primarily on coastal beaches from southern Washington to southern Baja California, Mexico. They nest above the high tide line on coastal beaches, sand spits, sparsely-vegetated dunes, and salt pans at lagoons and estuaries.

Historical records show that nesting western snowy plovers were once more widely distributed in coastal California, Oregon, and Washington. The snowy plover is now a rare bird along the California and Oregon coasts. In Oregon, snowy plovers historically nested at 29 locations on the coast, where now there are only 10 sites, a 65 percent decline in active breeding areas. In California, there has also been a significant decline in breeding locations, especially in southern California.

The snowy plover uses beaches, and occasionally gravel bars along large rivers, for nest sites. Although found along Del Norte county beaches in winter, there has been a lack of snowy plover nest sites on Del Norte county beaches since the 1980's.

No snowy plover habitat is located on or near the project area. The project area and vicinity provide no habitat for the snowy plover, and would have no impacts on snowy plovers nor their habitats.

#### 4.3b Migratory Bird Treaty Act

Limited potential nesting habitat for birds covered by the Migratory Bird Treaty Act occurs around the project area in the form of thickets of Himalayan blackberry and dense vegetation within the drainages alongside the project site. It is recommended that if construction is to occur during the migratory bird breeding season, February 1 to August 15<sup>th</sup>, surveys for nesting migratory birds should occur by a qualified biologist in the weeks before the onset of construction. If nesting birds are located adjacent to the construction zone, construction within 300 feet of a nest site should be postponed until the young fledge the nest and are mobile.



#### 4.3c Non-sensitive Wildlife

Black-tailed deer (*Odocoileus hemionus*), black bear (*Ursus americanus*), Roosevelt elk (*Cervus elaphus roosevelti*) and other local species are known in the area.

Table 1 lists the northern red-legged frog (*Rana aurora*) as occurring in the area. The northern red legged frog was relatively common in wetlands, riparian areas and ponds in northern California. Loss of habitat and predation by non-native frogs has reduced or eliminated populations of a close relative, the federally-listed California red-legged frog (*Rana draytonii*), in southern and central California.

In Del Norte County the northern red-legged frog this is a very common species in a wide range of habitats. Although this species is not a protected species in Del Norte County and is locally relatively abundant, population levels are not doing well in the remainder of its range.

Northern red-legged frogs can utilize a variety of habitats for foraging and they are never found far from available, standing water. This species breeds in moist areas, such as ponds, wet meadows and drainage channels, requiring standing water. It feeds on a variety of invertebrates, and can forage in wet fields, backyards, and in woodlots. It is designated as a Species of Special Concern by the California Department of Fish and Wildlife.

The only potential habitat on the property for the red-legged frog would be the small, ephemeral creek found along the east side of the project. As red-legged frogs have been found just southeast of the property (CNDDDB, 2020), they should be considered to be present within the creek as well.

Due to the proximity of habitat, it is recommended that a qualified biologist survey for this species immediately before construction of any given area to remove any amphibians which might be in harm's way. Any amphibians found within the construction area would be moved to suitable habitat on the property a safe distance away.

The obscure bumblebee was noted as having been detected just northwest of the project site (CNDDDB 2020). This species prefers coastal scrub habitats, which are located to the west nearer the coast. No preferred habitat for this species is found within the project site. This project will have no impacts on the obscure bumblebee.

### 5.0 RECCOMENDATIONS FOR RESOURCE PROTECTION

1. All construction activities should be bordered with a properly installed, sediment-drift fence located between construction and any wetlands or riparian habitats, to prevent sediments or pollutants from entering wetland habitats. No spoils shall be placed or stored within 50 feet of the top of bank.
2. All construction vehicles should be maintained to prevent oil or other fluid leaks. A regular inspection for leaks and any necessary repairs will be performed on all vehicles.
3. Vehicles and equipment should be kept clean to prevent excessive build-up of oil and grease. Clean-up materials will be kept nearby in the case of any leak or spill.



4. If fueling must occur on-site, designated areas away from wetlands should be used. On-site fuel storage tanks will be located with a berm area designed to hold the tank volume. Secondary containment, such as a drain pan or drop cloth, should be used to catch spills or leaks when removing or changing fluids.
5. Construction vehicles should be stored at least 100 feet away from wetlands and streams during non-work hours.
6. Construction should occur outside of the migratory bird breeding season (February 1<sup>st</sup> to August 15<sup>th</sup>) unless surveys for migratory bird nests are completed prior to construction and no migratory bird nests are located in proximity to construction.
7. No vegetation removal or ground disturbing work should occur during any rainfall events, nor afterwards until the ground is dry.
8. Pre-construction surveys for amphibians should be conducted by a biologist at the proposed construction area. If amphibians are found, they should be collected and moved to suitable habitats by the biologist.
9. A tail-gate meeting to educated construction crews regarding wildlife species should be conducted by a qualified wildlife biologist.

## 6.0

### STAFF QUALIFICATIONS

Habitat assessment and report writing for this project was conducted by Principal Biologist, Frank Galea. Frank is the primary Biological Consultant for Galea Biological Consulting, established in 1989. Frank is certified as a Wildlife Biologist through the Wildlife Society and has a Master of Science Degree in Wildlife Management from Humboldt State University plus a Bachelor of Science in Zoology from San Diego State University. Frank has been assessing habitat and conducting field surveys for Threatened and Endangered species for over 30 years. Frank has taken an accredited class on wetland delineation through the Wetland Training Institute, and has successfully completed a Watershed Assessment and Erosion Treatment course through the Salmonid Restoration Federation.



## APPENDIX A

List of Federally-listed species provided by the IPaC Website of the U.S. Fish and Wildlife Service



Marbled Murrelet *Brachyramphus marmoratus*



Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/4467>

Northern Spotted Owl *Strix occidentalis caurina*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1123>

Western Snowy Plover *Charadrius nivosus nivosus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/8035>

Yellow-billed Cuckoo *Coccyzus americanus*

Threatened

There is **proposed** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3911>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

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



# Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME

STATUS





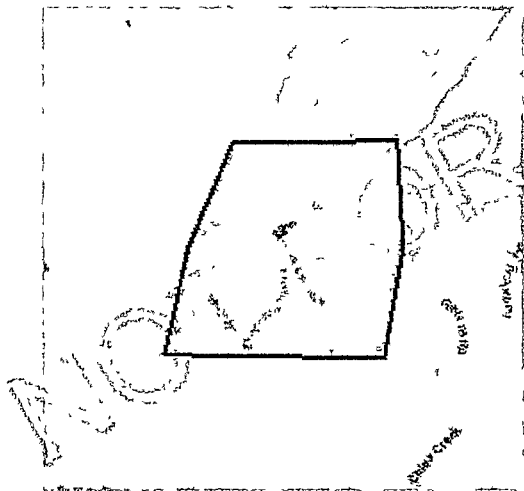
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Humboldt County, California



## Local office

Arcata Fish And Wildlife Office

☎ (707) 822-7201

📠 (707) 822-8411

1655 Heindon Road  
Arcata, CA 95521-4573