Environmental Assessment

for HUD-funded Proposals

Recommended format per 24 CFR 58.36, revised March 2005
[Previously recommended EA formats are obsolete].

Project Identification: Yurok Culture and Knowledge Park

Preparer: L. Robert Ulibarri, AICP

Responsible Entity: Yurok Tribe

Month/Year: April 2013

Environmental Assessment

Responsible Entity: Yurok Tribe, 190 Klamath Boulevard, P.O. Box 1027, Klamath, CA 95548
[24 CFR 58.2(a)(7)]

Certifying Officer: The Honorable Thomas O'Rourke Sr., Tribal Chairman
[24 CFR 58.2(a)(2)]

Project Name: Yurok Culture and Knowledge Park

Project Location: 147 Klamath Blvd., Klamath, CA 95548. Within a portion of Section 10, Township 13 North, Range 1 East, Humboldt Meridian. Assessor's Parcel Maps 140-083-03 and a portion of 140-082-12.

Estimated Total Project Cost: $891,000

Grant Recipient: The Yurok Tribe
[24 CFR 58.2(a)(5)]

Recipient Address: 190 Klamath Boulevard, P.O. Box 1027, Klamath, CA 95548

Project Representative: Sophia Lay, Planner III

Telephone Number: (707) 482-1350

Conditions for Approval: (List all mitigation measures adopted by the responsible entity to eliminate or minimize adverse environmental impacts. These conditions must be included in project contracts and other relevant documents as requirements). [24 CFR 58.40(d), 40 CFR 1505.2(c)]

An erosion and sedimentation control plan for the proposed project will be prepared, a final geotechnical investigation will be prepared; obtain an EPA's NPDES General Storm Water Discharge Permit for Construction Activities, prepare a drainage plan, dust control during construction, the Yurok Tribe's Inadvertent Discovery Policy will be followed if Cultural Resources are encountered during construction, the facilities shall be designed in compliance with the fire safety standards, traffic control during construction, and obtain a Coastal Development Permit from the County of Del Norte.

The following mitigation measures will be adopted to eliminate or minimize adverse environmental impacts:

- Obtainment of Coastal Development Permit from County of Del Norte
- Obtainment of an EPA NPDES General Stormwater Discharge Permit
- Preparation of a final geotechnical report
- Preparation of an erosion and sedimentation control plan
- Preparation of a drainage plan
- Design of facilities in compliance with fire safety standard
- Adherence to the Inadvertent Discovery Policy of the Yurok Tribe in the event cultural resources are encountered during construction
- Implementation of traffic control measures during construction
- Execution of dust control measures during construction

FINDING: [58.40(g)]

✓ **Finding of No Significant Impact**
(The project will not result in a significant impact on the quality of the human environment)

___ **Finding of Significant Impact**
(The project may significantly affect the quality of the human environment)

Preparer Signature: _____ **Date:** 4/1/13

Name/Title/Agency: L. Robert Ulibarri, AICP, LACO Associates

21 W. 4th Street, Eureka, CA (707) 443-5054

RE Approving Official Signature: _____ **Date:** 4/2/13

Name/Title/Agency: Thomas P. O'Rourke Sr, Chairperson, Yurok Tribe

Statement of Purpose and Need for the Proposal: [40 CFR 1508.9(b)]
The proposed cultural education and interpretive park – to be known as ***The Yurok Culture & Knowledge Park*** – will meet an essential community development need by providing space for cultural education and preservation activities that are critical to the continued existence of the Yurok Tribal community and outdoor recreation to promote a healthy and safe community. Consistent with the mission of the Yurok Tribe – *To promote and preserve our culture, language, and religious beliefs and practices, and pass them on to our children, our grandchildren, and to their children and grandchildren on, forever, to provide for the health, education, economy, and social wellbeing of our members and future members.*

The ***Yurok Culture & Knowledge Park*** will be built on two portions of trust property in the town of Klamath, California, on the Yurok Indian Reservation. The Park will include landscaped open spaces, an outdoor gathering circle (amphitheater), a traditional Yurok redwood village and sweat house, a walking trail, a salmon fire pit, a canoe carving area, ADA-compliant restrooms, outdoor lighting, paved parking areas and access roadways. The cultural park will provide an outdoor public facility for Tribal families to recreate and conduct community wellness activities.
This public facilities project will benefit all the Tribal residents on the Yurok Reservation. The number of persons living on the Yurok Reservation is 1,121 according to the 2003 Low-Income Person Extrapolation by tribe (Based on the 2000 Decennial Census information) which indicates 741 persons ***or*** *66% are listed as low- or moderate-income individuals, according to LMI Percentage (LMI%) Guidelines of SWONAP. Additionally, at least 70% of the HUD-ICDBG grant funds will be used to construct facilities that directly benefit low-and moderate income persons in accordance with HUD ICDBG LMI income guidelines.*

Construction of a local park is proactive in meeting the Yurok Tribe's park and recreation needs through the addition of an innovative, natural, Yurok culturally-themed park that will address recreational, wellness, and cultural needs of the local Tribal community. The Park will create

Construction of a local park is proactive in meeting the Yurok Tribe's park and recreation needs through the addition of an innovative, natural, Yurok culturally-themed park that will address recreational, wellness, and cultural needs of the local Tribal community. The Park will create high-quality, outdoor, recreational opportunities and add a cultural and historical resource where one currently does not exist. The facility will provide educational opportunities to Tribal members and inspire environmental stewardship that is critically needed for the future health of the Tribal membership of the Yurok Reservation. Parks are unique places where children can play, people can exercise, families can bond, seniors can socialize, youth can be mentored, cultures can share and celebrate their differences, and everyone can connect with nature. For these reasons, a vibrant park funded by HUD will be a cost-effective means of creating humane, livable communities on the Yurok Reservation.

Description of the Proposal: Include all contemplated actions which logically are either geographically or functionally a composite part of the project, regardless of the source of funding. [24 CFR 58.32, 40 CFR 1508.25]

The Culture and Knowledge Park Project is part of a larger vision for the project site that also includes a separately-funded Yurok Scenic Byways Visitors Center. The Visitors Center will start construction in 2013 and the Cultural and Knowledge Park is in the preliminary design phase. Although the projects are located partially on the same property (and are part of a larger vision) they have separate funding sources and are separate projects. The Culture and Knowledge Park is funded under the Indian Community Development Block Grant while the Yurok Scenic Byways Visitors Center has obtained funding from the Federal Highway Administration. Therefore, this environmental assessment analyses includes both actions. HUD regulation 24 CFR Part 58.32 Project Aggregation, states that, "A responsible party must group together and evaluate as a single project all individual activities which are related either on a geographical or functional basis, or are logical parts of a composite of contemplated actions.

The Culture and Knowledge Park Project is made up of several components. The plan for the park will include a demonstration Yurok Village, an outdoor amphitheatre, walking trails, a picnic area, salmon cooking fire pit, canoe carving area, restrooms, parking areas, and all necessary infrastructure improvements.

The **Demonstration Village** will include a Yurok dance pit and up to two Yurok traditional houses. The canoe carving area and salmon cooking pit and filet station should also be included within the demonstration village. The buildings will be constructed using traditional building and design techniques but would also include additional fortification and stabilization. Tribal cultural advisors will be available to provide technical consultation for village design and construction methodology. The village will be constructed using force-account construction, with the Yurok Tribe's Restoration Department providing the equipment and labor force.

The **Outdoor Amphitheatre** will be designed to seat up to 100 people. The materials specified for construction of the amphitheater will be based on the ability of the materials to withstand local weather conditions, and to last for many years with minimal maintenance and upkeep.

The **Interpretive Walking Trails** will feature local native plants traditionally used for gathering and for basket making. The trails will be designed to provide a place for physical exercise and to provide a learning experience about traditional resources. The trail design will allow for ample interpretive signage and multiple seating areas.

The **Picnic Area** will include picnic benches, barbeque pits, hose bibs, and drinking fountains.

The **Restroom** consists of separate men's and women's restroom facilities, including ADA-compliant restroom accommodations. These restrooms will be accessible from outdoors as well as indoors at the Yurok Scenic Byways Visitors Center.

The **Parking** facilities will be designed to accommodate 50 vehicles, including handicap, service, and recreation vehicles. The parking should be designed to minimize negative environmental effects through the use of sustainable materials and by effectively managing storm water runoff.

Except in the case of the traditional structures in the demonstration village, the project designs of the Culture and Knowledge Park will meet all local, state, and federal building codes, including those for ADA compliance.

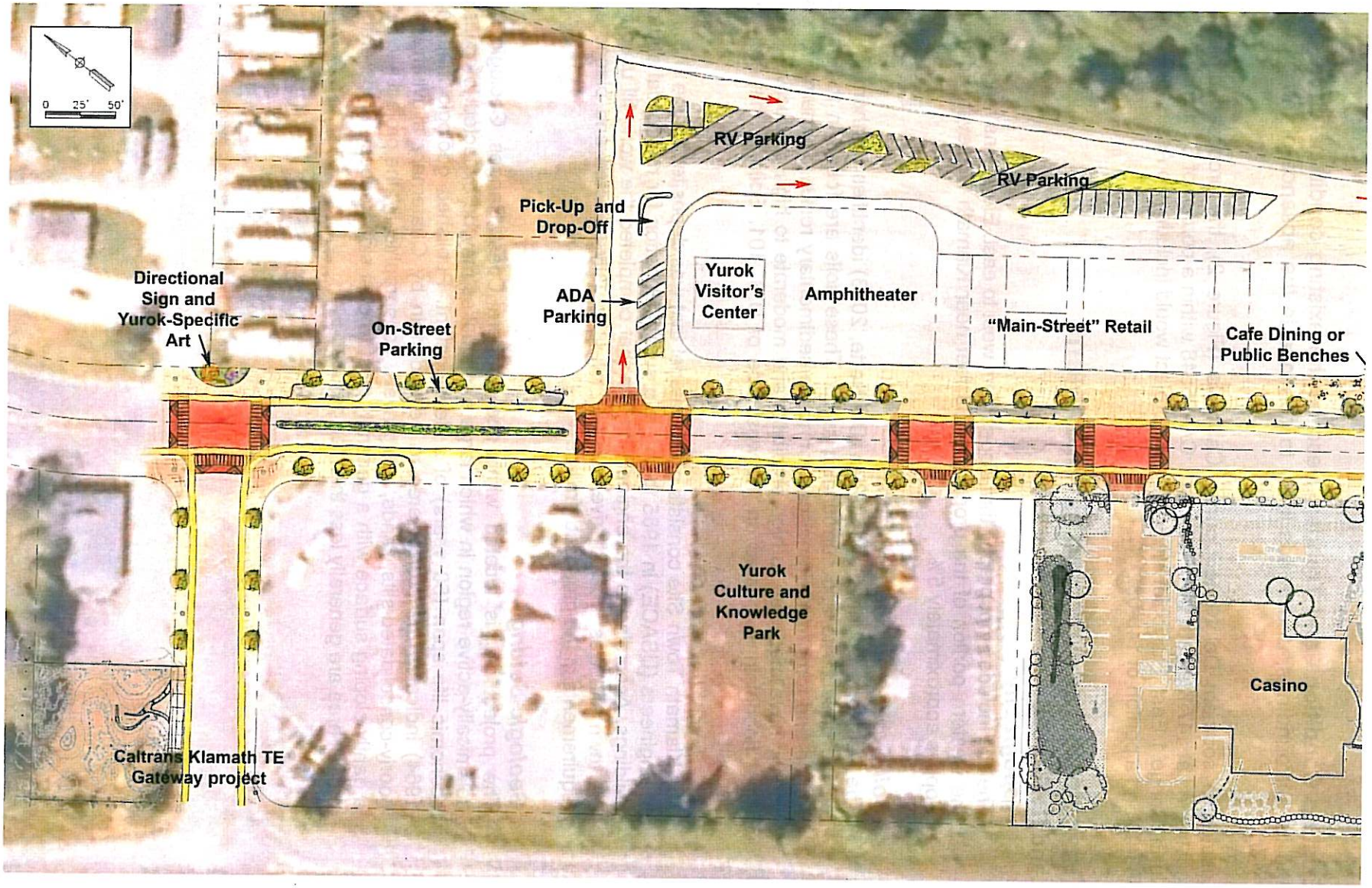
The **Yurok Scenic Byways Visitor's Center (YSBVC)** will be located on a shared parcel with the amphitheater and will share common utilities, such as sewer and water, with the Yurok Culture and Knowledge Park. The YSBVC project is funded by the Federal Highway Administration and is part of the contemplated action that will be aggregated with the project described herein.

The YSBVC consists of a 2,500-square-foot facility and associated infrastructure. The building design will be fully ADA compliant, and will include a welcome area, exhibits, interpretation features, a gift shop, connection to the community sewer and water system, restrooms, drainage, office space, access to and from U.S. Highway 101, a parking area, walkways, handicapped parking areas, outdoor seating area, landscaping, and all other requirements to meet local, state, and federal building codes.

To the extent practicable, the YSBVC will be designed to incorporate green building practices and renewable energy, and will minimize the environmental footprint in keeping with traditional Yurok design and building practices. Energy efficiency will also be a key theme throughout the design, especially in the areas of HVAC, lighting, appliances, and weatherization. Landscaping will include the use of local native plants and will include interpretive signage indicating the native Yurok use of the plants. Figure 1 represents the conceptual lay-out of both projects.

The project site is bordered by U.S. Highway 101 on the west and Klamath Boulevard on the east. To the south of the site is the interchange of U.S. 101 and State Route 169. Directly east across Klamath Boulevard is the Yurok Tribal Office. North of the Tribal Office on the east side of Klamath Boulevard is the Klamath Shopping Center, which contains the Klamath Market and a café. Continuing north on the east side of Klamath Boulevard is the Country Club Bar and Grill and a small tribal office building that houses the Yurok Economic Development Corporation. On the west side of Klamath Boulevard is the Ravenwood Motel and continuing north is the Pem-Mey Fuel Mart on the corner of Ehlers Way. This business includes a gas station, mini-mart, and the kEE-Ya espresso bar. The northern portion of the Klamath Townsite is primarily residential. In addition to residences, this area includes the Klamath Post Office, Yurok Tribe Department of Public Safety, and the Klamath Community Center.

Figure 1 – Conceptual Lay-out
Yurok Culture Center, Knowledge Park, and Scenic Byways Visitor's Center



Existing Conditions and Trends: Describe the existing conditions of the project area and its surroundings, and trends likely to continue in the absence of the project. [24 CFR 58.40(a)]

Located in southern Del Norte County, California (Figure 2), the proposed project would be constructed at 147 Klamath Blvd., Klamath, CA 95548 within a portion of Section 10, Township 13 North, Range 1 East, Humboldt Meridian. The project would include two Assessor's Parcel's; 140-083-03 and a portion of 140-082-12

Description of Affected Environment

Land Resources

Topography

The site includes topography that slopes from west to east. Elevations range from 28 feet at the western portion of the property to 33 feet near Klamath Boulevard to the west. The slope is approximately 5%.

Soil Types and Characteristics

The Del Norte County General Plan (Del Norte, 2003) identifies Northern Franciscan soils on the project site and surrounding lands. These soils are found in the northern Coast Range and form from Franciscan formation sedimentary rocks. Northern Franciscan soils usually have moderate to high erodibility and moderate to high productivity. The Klamath River floodplain is located on the west side of U.S. 101. Soils in this area are alluvial deposits.

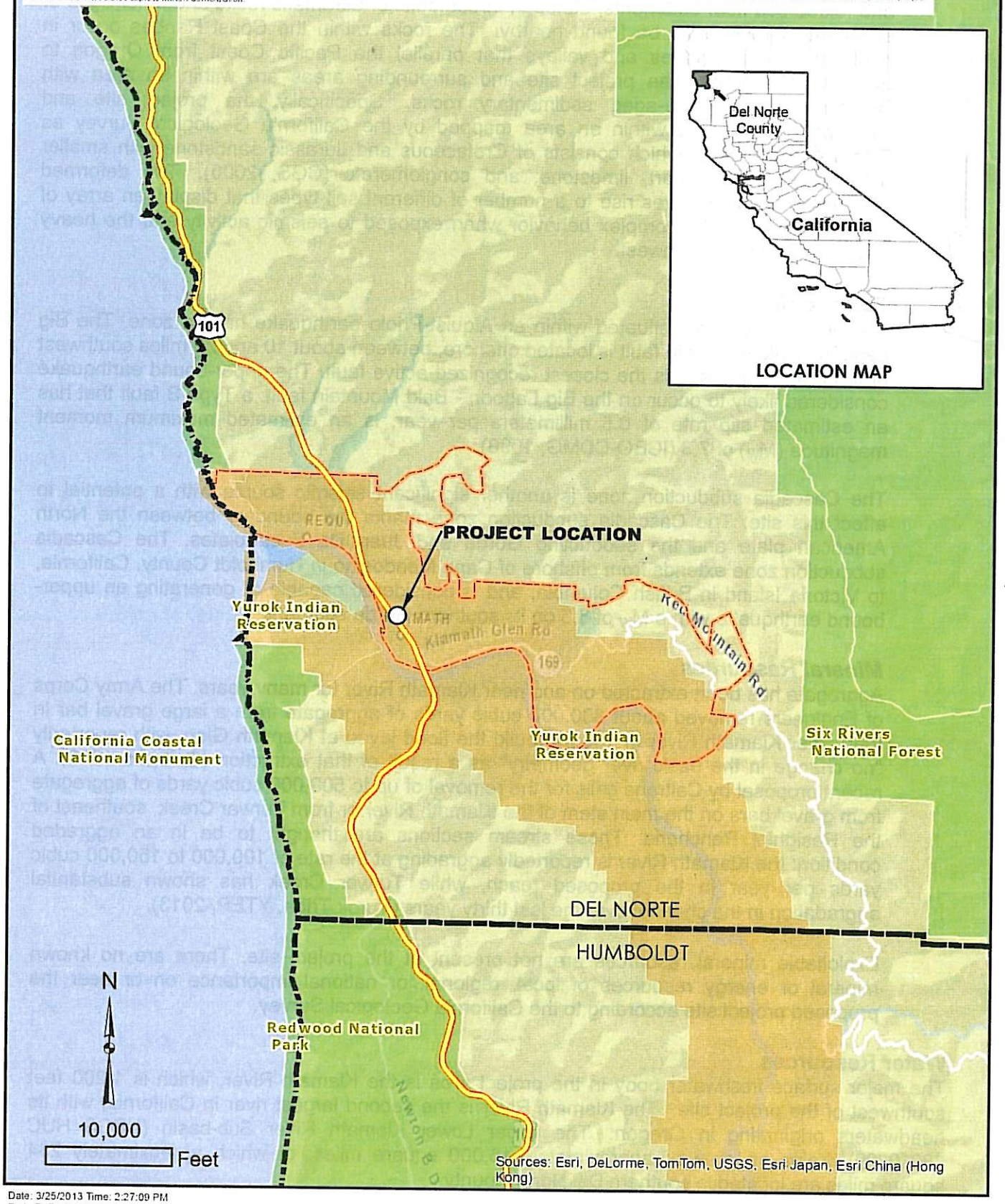
The Klamath Town Site consists of fill material that was deposited by the U.S. Army Corps of Engineers (USACE) in 1965 to create a suitable location for residential and commercial buildings. According to the engineering firm that completed the work, fill used to construct the town site was labeled "river run fill." Fill is usually selected and placed engineering requirements of the proposed project.

Geologic Setting

The project site is located within the northern Coast Ranges Geologic Province, a seismically-active region in which large earthquakes may be expected to occur during the economic life span (50 years) of a development. Published geologic mapping (CDMG, 1964) indicates the project area to be underlain by Quaternary alluvium, consisting of poorly-consolidated silts, sands, and gravels. Topographically, the project site is situated on a gently sloping surface with a generally west to east slope aspect. Slope gradients in the project area are generally less than ten percent.

LACO EUREKA • UKIAH • SANTA ROSA 1-800-515-5054 www.lacoassociates.com	PROJECT: YUOROK SCENIC BYWAYS VISITOR'S CENTER	BY: JB	FIGURE: 2
	CLIENT: YUROK TRIBE	CHECK: LRU	
	LOCATION: KLAMATH, CA.	DATE: 3/25/13	JOB NO.: 7105.09
	GENERAL SITE LOCATION		

REUSE OF DOCUMENTS: This document and the ideas and design incorporated herein, as an instrument of professional service, is the property of LACO Associates and shall not be reused in whole or part for any other project without LACO Associates express written authorization.



Date: 3/25/2013 Time: 2:27:09 PM
Path: P:\7100\7105 Yurok Tribal Transportation Systems\7105.09 On-Call Engineering Services\00 WO 1 EA for YSBVC\12 Figures_Maps\GIS\7105.09 PLANNING FIGURE 2.mxd

The northern Coast Ranges Geologic Province is composed primarily of crushed, crumpled, and folded sea floor sediments, although thrust-faults of ultramafic rocks and other ages of sedimentary rocks may be found nearby. The rocks within the Coast Ranges occur in northwest-trending ridges and valleys that parallel the Pacific Coast from Oregon to Southern California. The project site and surrounding areas are within an area with Pliocene- to Holocene-aged sedimentary rocks. Specifically, the project site and surrounding areas are within an area mapped by the California Geological Survey as Franciscan Complex, which consists of Cretaceous and Jurassic sandstone with smaller amounts of shale, chert, limestone, and conglomerate (CGS, 2000). The deformed Franciscan Complex gives rise to a number of different soil types that display an array of properties and exhibit complex behavior when exposed to seismic activity and the heavy rains of the Pacific Northwest.

Seismic Hazards

The project site is not situated within an Alquist-Priolo earthquake hazard zone. The Big Lagoon - Bald Mountain fault is located offshore, between about 10 and 20 miles southwest of the project site, and is the closest recognized active fault. The upper-bound earthquake considered likely to occur on the Big Lagoon - Bald Mountain fault, a Type B fault that has an estimated slip rate of 0.5 millimeters per year, is an estimated maximum moment magnitude (M_W) of 7.3 (ICBO-CDMG, 1998).

The Cascadia subduction zone is another significant seismic source with a potential to affect this site. The Cascadia subduction zone marks the boundary between the North American plate and the subducting Gorda and Juan De Fuca plates. The Cascadia subduction zone extends from offshore of Cape Mendocino in Humboldt County, California, to Victoria Island in British Columbia, and is considered capable of generating an upper-bound earthquake with a M_W of 8.3 on its southern Gorda segment.

Mineral Resources

Aggregate has been extracted on and near Klamath River for many years. The Army Corps of Engineers removed about 800,000 cubic yards of aggregate from a large gravel bar in the Lower Klamath River in 1965 to build the flood levee at Klamath Glen, with reportedly "no change in the basic river geometry" as a result of that extraction (Caltrans 1989). A recent proposal by Caltrans calls for the removal of up to 500,000 cubic yards of aggregate from gravel bars on the main stem of the Klamath River or from Turwar Creek, southeast of the Resighini Rancheria. These stream sections are thought to be in an aggraded condition: the Klamath River is reportedly aggrading at the rate of 100,000 to 150,000 cubic yards per year in the proposed reach, while Turwar Creek has shown substantial aggradation in the channel over the last thirty years (Yurok Tribe, YTEP, 2013).

Exploitable mineral resources are not present at the project site. There are no known mineral or energy resources of local, regional, or national importance on or near the proposed project site according to the California Geological Survey.

Water Resources

The major surface freshwater body in the project area is the Klamath River, which is 1,200 feet southwest of the project site. The Klamath River is the second largest river in California, with its headwaters originating in Oregon. The larger Lower Klamath River Sub-basin (USGS HUC 18010209) drains an area of approximately 15,000 square miles, of which approximately 234 square miles are located in southern Del Norte County.

Discharge patterns in the Lower Klamath tributaries are the result of natural rainfall, snowmelt, and runoff conditions. Extremely high flows occur periodically as a result of high intensity rainfall events. Historical flood events (1955, 1964, 1974, and 1983) created debris jams and caused massive aggradation at most tributary mouths.

Potential production from existing habitat in the Lower Klamath River and tributaries is significant. Fall Chinook salmon have access to about 100 miles of spawning and rearing habitat, coho salmon have access to about 130 miles of habitat, steelhead have access to about 150 miles of habitat, and green sturgeon have access to the lower 45 miles of mainstem habitat.

Surface Water

The nearest surface water to the project site is the Klamath River and the associated estuarine habitat. Located approximately 1,200 feet southwest of the site, the Klamath River is separated from the site by U.S. Highway 101. Estuarine water resources are also important water resources in Del Norte County in that they provide critical habitat for anadromous fish that are economically valuable to local coastal fisheries. The mouth of the Klamath River is one of the primary estuarine habitats in Del Norte County and extends approximately 3.5 miles upstream.

Storm water from the existing development on the Klamath Townsite is collected and conveyed through a system of vegetated drainage swales, catch basins, and storm drains. There are two storm drains located just north and south of the Tribal office on the east side of Klamath Boulevard. Storm water from these drains is conveyed to inlets on the west side of the roadway. Storm water is then piped across the project site discharging into a vegetated surface ditch located adjacent to the project site along the eastern edge of the north bound lane of U.S. Highway 101. Storm water flows from the U.S. Highway 101 drainage ditch into the Klamath River.

Groundwater

The Lower Klamath River Valley Groundwater Basin is located inland from the coast and includes the communities of Requa, Klamath, and Klamath Glen. The basin consists of Quaternary alluvial deposits, terrace deposits, and dune and beach sand deposits from the Klamath River and its tributaries. The basin is bounded on all sides by the Franciscan Formation (Strand 1963). Much of the basin is located within the Yurok Indian Reservation. Annual precipitation ranges from 96 to 150 inches, increasing to the east. Estimates of groundwater extraction are based on a survey conducted by the California Department of Water Resources in 1996. The survey included land use and sources of water. Estimates of groundwater extraction for agricultural and municipal/industrial uses are 410 and 160 acre-feet, respectively. Deep percolation from applied water is estimated to be 210 acre-feet.

Flooding

Areas near the Klamath River have the potential to flood, depending on elevation and proximity to streams and floodplains. Most streams and rivers of substantial flow have been controlled by the construction of diversion systems or through the development of communities above identified flood hazard areas. The project site is located in what is known as the Klamath Townsite and was developed by the Army Corps of Engineers after a flood destroyed the original townsite in 1964. The Klamath Townsite is located on engineered fill and sited above the identified 100-year floodplain as a result of the reconstruction after the flood in 1964. This information is provided on Flood Insurance Rate Maps (FIRMs). The FIRM relevant to this project is Del Norte County Community and Panel Number 06015C0475E, revised in September 2008.

Wetlands

Executive Order 11990 (Protection of Wetlands) requires an examination of impacts to wetlands. Policies of the federal government call for a "no net loss" of the acreage and values of the nation's wetlands. Four federal agencies are directly responsible for the identification of wetlands as part of implementation of a variety of federal laws and policies. These agencies are the U.S. Army Corps of Engineers, (USACE), Environmental Protection Agency (EPA), Fish and Wildlife Service (FWS), and the Natural Resource Conservation Service (NRCS).

The USACE and EPA identify and delineate wetlands as part of the administration of Section 404 of the Clean Water Act, which covers the discharge of fill or dredged material into the waters of the United States. The NRCS delineates wetlands on agricultural land in order to assess eligibility for U.S. Department of Agriculture (USDA) benefits under the National Food Security Act. The FWS began an inventory of the nation's wetlands in the late 1970's. The result of this effort has been the publication of Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, *et. al.,* 1979) and the National Wetland Inventory Maps, which indicate wetlands locations and types on USGS topographic base maps. While each agency uses slightly differing definitions of wetlands, they are in agreement in requiring the presence of all three parameters, wetland vegetation, hydric soils, and wetland hydrology, for an area to be considered a jurisdictional wetland.

The project site was traversed by a certified wetland delineator during the field reconnaissance and no wetlands are present at the project site.

Water Quality

The federal government has delegated primary responsibility for the protection of the water quality on the Yurok Indian Reservation to the Yurok Tribal Environmental Program (YTEP) and the Yurok Tribal Fisheries Program (YTFP). YTEP and YTFP provide Reservation-wide coordination of the water quality control program by developing, reviewing, and recommending Tribal approval of Reservation-wide policies, plans, and permits for the implementation of Tribal and federal law.

The Yurok Tribe Environmental Program includes a water quality control plan (WQCP) for the Yurok Indian Reservation which is authorized by Section 106 of the Clean Water Act (CWA) and fulfills the Tribe's duty under the anti-degradation provisions of the CWA. The Tribe has jurisdictional authority over the portions of the Klamath River near the proposed project site, as the Yurok Reservation is defined as one mile from the Klamath River on either side. The Tribe has opted for Tribal law authority to manage water resources on the Reservation, and is a sovereign power for the purposes of water pollution control.

More than 33,000 salmon and steelhead died in the Lower Klamath River in late September 2002 on their way to spawning areas upstream. According to the California Department of Fish and Game, the cause of death was infection by protozoan and bacterial pathogens. Two factors that may have contributed to the disease incidence are low streamflow and high water temperature.

Survey of dead fish conducted by the California Department of Fish and Game found that, of the salmonid species, 95.2 percent were Chinook salmon, 0.5 percent were coho salmon, and 4.3 percent were steelhead trout. The cause of death was infection by the ciliated protozoan *Ichthy- opthirius multifilis* (Ich) and the bacterial pathogen *Flavobacter columnare* (Columnaris). Although both pathogens commonly occur naturally worldwide and are always present in the Klamath River and other aquatic systems, high water

temperature, low flow, and crowding provided conditions favorable to their rapid proliferation and transmission (California Department of Fish and Game, 2003).

September streamflows throughout the Klamath Basin were low, among the four lowest September flows recorded on the main stem since 1960. The low streamflows were caused by below-average snow pack and long-term drought, with resulting reduced ground-water discharge to streams.

On the basis of historical climate data from the Klamath Basin and historical water temperature data from an adjacent basin, September 2002 water temperatures were above the long-term average. Temperatures in the Klamath River above the fish die-off reach exceeded 65 degrees Fahrenheit for nearly all of September; multiple days of exposure by fish to temperatures at or above that level can greatly increase disease incidence.

On May 29, 2008, EPA listed the mainstem Klamath River as impaired for microcystin toxins in the reach including the Copco I, Copco II, and Iron Gate reservoirs, and the river waters in between. This is an addition to California's 2010 Section 303(d) List of Impaired Waterbodies. The 2010 303(d) list already identified each segment of the Klamath River within California as impaired due to excessive nutrients, organic enrichment/low dissolved oxygen, sedimentation, and temperature. The listings do not extend to any water bodies located within Indian country, as defined in 18 USC §1151. For the Yurok Tribe and several other Tribes in the basin, the formation of the Klamath Basin Tribal Water Quality Working Group addresses water quality issues of the Klamath within Indian Country. The members of the Yurok Tribe have a primary interest in the protection, control, and conservation of the water resources which flow into and through the Reservation, and the quality of such waters must be protected to insure the health, economic, aesthetic, and cultural well-being of the people of the Tribe.

On December 21st and 28th, 2011, EPA approved California's water quality improvement plan for the California portion of the 255-mile long Klamath River, from the Oregon border to the coast. The approval calls for pollution reductions of 57 percent in phosphorus, 32 percent in nitrogen and 16 percent in carbonaceous biochemical oxygen demand (CBOD). CBOD refers to aquatic plant consumption of oxygen. The approval calls for annual reductions in the river's reservoirs of more than 120,000 pounds of nitrogen and 22,000 pounds of phosphorus.

In general, urbanization has a direct impact on water resources and water quality. Urbanization introduces impervious surfaces to the landscape, including concrete, asphalt, and other building materials. This reduces the amount of permeable surfaces, which are vital for groundwater percolation and the recharge of water aquifers. In addition, urbanization reduces natural vegetation, which plays an important role in reducing erosion and sedimentation, and filtering pollutants from water as it percolates through the soil. Urbanization also decreases water quality by increasing the amount of pollutants that enter waterways. Pollutants, including silt, herbicides, pesticides, fertilizers, trash, grease, oil, hydrocarbons, and heavy metals are constantly introduced to the built environment. Stormwater often carries these pollutants from streets, parking lots, and landscaped areas to urban drainage systems that flow to natural streams, rivers, and lakes. These pollutants can pose a serious threat to the water quality of the streams, rivers, and lakes, and can have a negative impact on their ecology. Since there are changes in land use proposed, urbanization impacts to water resources is an issue. Moreover, since there is proposed construction associated with the proposed project, water quality permits such as a NPDES permit would be applicable.

Additionally, the project will be subject to the Tribe's Water Pollution Control Ordinance and a Water Quality Certification under Section 402 of the Clean Water Act.

Air Quality

The North Coast Air Basin consists of Del Norte, Trinity, Humboldt, Mendocino, and the northern half of Sonoma counties, and is under the regulatory jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). NCUAQMD is responsible for monitoring and enforcing local and state air quality standards. Air quality standards are set for emissions that may include, but are not limited to: visible emissions, particulate matter, and fugitive dust. Pursuant to Air Quality Regulation 1, Chapter IV, Rule 400 – *General Limitations*, a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

The North Coast Air Basin is currently in attainment (or is unclassified) of all state and federal ambient air quality standards, with the exception of the state standard for particulate matter less than ten micrometers in diameter (PM_{10}). An ambient air quality standard has recently been adopted for $PM_{2.5}$, and the North Coast Air Basin has not been designated.

Nearly all areas of the state are classified as non-attainment for PM_{10}. Despite the non-attainment designation for PM_{10}, air quality in the North Coast Air Basin is generally regarded as good. PM_{10} air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 micrometers. PM_{10} emissions include smoke from wood stoves and airborne salts and other particulate matter naturally generated by ocean surf. The greatest sources of PM_{10} are human-caused area-wide sources, such as unpaved-road dust, residential fuel combustion, waste burning and disposal, and paved road dust. Construction and demolition contributes only a small fraction of PM_{10} emissions. In part because of the large number of wood stoves in Del Norte County and because of the generally heavy surf and high winds common to this area, Del Norte County has exceeded the state standard for PM_{10} air emissions. Therefore, any use or activity that generates unnecessary airborne particulate matter may be of concern to the NCUAQMD.

Criteria Air Pollutants

Efforts to reduce air emissions are required by the Federal Clean Air Act and the California Clean Air Act. The federal government, primarily through EPA, sets federal health standards for air emissions. EPA also oversees state and local actions and implements programs for toxic air pollutants, heavy-duty trucks, locomotives, ships, aircraft, off-road diesel equipment, and other types of industrial equipment. In California, the California Air Resources Board (CARB) sets state air quality standards and implements programs to improve air quality. The state air quality standards are equal to or more stringent than the federal air quality standards. Table 1 is a comparative analysis of the National and California air quality standards.

On the Yurok Indian Reservation trust lands, neither EPA nor the Tribe has performed air quality conformity determinations.

It should be noted that pursuant to the Clean Air Act as amended, air quality jurisdiction falls with the Tribe if programmatic jurisdiction is delegated by EPA. The Yurok Tribe is a recipient of a General Assistance Program grant from EPA and operates several environmental programs, but has not assumed air quality jurisdiction. Therefore, EPA

maintains air quality jurisdiction for the Reservation and not the State. Instead of state standards, the National Ambient Air Quality Standards (NAAQS) apply. This issue is not unique to the Yurok Indian Reservations as it is the same at most of the 114 Indian Reservations or Rancheria's in California.

The Yurok Tribe Environmental Programs does receive funding from EPA under the Clean Air Act, but has not established primacy over air pollution.

However, if construction or operational emissions of the Culture and Knowledge Park were to drift off-site, the NCUAQMD could assert jurisdiction or at the very least petition the EPA for violations of the Clean Air Act.

Table 1
State and National Ambient Air Quality Standards

Pollutant	Averaging Time	National[b,c]	State of California[a,c]
Ozone[d]	1 hour	0.12 ppm (235 $\mu g/m^3$)	0.09 ppm (180 $\mu g/m^3$)
	8 hour	0.08 ppm (160 $\mu g/m^3$)	NA
Carbon Monoxide	1 hour	35 ppm (40,000 $\mu g/m^3$)	20 ppm (23,000 $\mu g/m^3$)
	8 hour	9 ppm (10,000 $\mu g/m^3$)	9.0 ppm (10,000 $\mu g/m^3$)
Nitrogen Dioxide	1 hour	NA	0.25 ppm (470 $\mu g/m^3$)
	Annual	0.053 ppm (100 $\mu g/m^3$)	NA
Sulfur Dioxide	1 hour	NA	0.25 ppm (655 $\mu g/m^3$)
	3 hour	0.5 ppm (1,300 $\mu g/m^3$)	NA
	24 hour	0.14 ppm (365 $\mu g/m^3$)	0.04 ppm (105 $\mu g/m^3$)
	Annual	0.03 ppm (80 $\mu g/m^3$)	NA
Particulate Matter (PM-10)	24 hour	150 $\mu g/m^3$	50 $\mu g/m^3$
	Annual	50 $\mu g/m^3$	30 $\mu g/m^3$
Sulfates	24 hour	NA	25 $\mu g/m^3$
Lead	30 day	NA	1.5 $\mu g/m^3$
	Calendar Quarter	1.5 $\mu g/m^3$	NA
Hydrogen Sulfide	1 hour	NA	0.03 ppm (42 $\mu g/m^3$)
Vinyl Chloride	24 hour	NA	0.010 ppm (26 $\mu g/m^3$)

California standards for ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter (PM-10) are values that are not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

National standards, other than for ozone and particulate matter and those based on annual averages, are not to be exceeded more than once per year. For the one-hour ozone standard, the ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one. The eight-hour ozone standard is met at a monitoring site when the three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration is less than or equal to 0.08 ppm.

ppm = parts per million by volume; $\mu g/m^3$ = micrograms per cubic meter.
New standards effective September 16, 1997 (40 CFR 50.7 and 40 CFR 50.10).
NA: Not Applicable.

Biological Resources

An Endangered Species List was obtained from the USFWS and reviewed for habitat potential. A site review was conducted on March 27, 2013. Based on those reviews, it was determined that the site is within a developed and urbanized area. No sensitive habitats were identified on the site.

Habitat types are described based on dominant vegetation, wildlife, and structure and are defined as supporting a similar and somewhat predictable set of plants and animals. Within the immediate vicinity of the Proposed Project site, the following plant communities and habitat types occur: Hardwood Forest, Coniferous Forest, Mixed Conifer and Hardwood Forest, shrubland, and herbaceous annual grassland.

The following is a description of the listed species and the probability of occurrence in the study area and was partially obtained from the species list obtained from the USFWS.

Table 2
Listed Species and Habitat Values at the Project Site

Species	Status	Habitat	Occurrence in the Study Area
Mammals			
Fisher, West Coast (*Martes pennanti)*	Candidate	Fishers inhabit upland and lowland forests, including coniferous, mixed, and deciduous forests. They occur primarily in dense coniferous or mixed forests, including early successional forest with dense overhead cover. Fishers commonly use hardwood stands in summer but prefer coniferous or mixed forests in winter. They generally avoid areas with little forest cover or significant human disturbance and conversely prefer large areas of contiguous interior forest	Unlikely, no suitable habitat at project site; not likely to occur in highly urbanized areas.
sei whale, blue whale, fin whale, humpback whale, killer whale and Steller northern sea-lion.	Endangered or Threatened	Ocean and marine habitat.	Absent: Habitat for these species are not available at the project site
Invertebrates			
Mardon skipper (*Polites mardon)*	Candidate	This butterfly species includes an area of Del Norte County. The butterfly prefers serpentine grasslands that include festuca rubra (red fescue) during the larva stage. Adult's nectar at dandelion (Taraxacum officinale) and western wallflower (Erysimum capitatum). Four sites in Del Norte County have found populations of the butterfly.	Unlikely: Threats to this species include invasive herbs, grasses, and shrubs at many sites, inappropriate fires at some. Other threats applicable at some sites include human disturbance associated with roads, recreation and development, grazing, herbicides and pesticides.
black abalone (*Haliotis cracherodii)*	Proposed Endangered	The species occurs from the high inter-tidal to 6 m depth, and has evolved to withstand extreme variation in environmental conditions such as temperature, salinity, moisture, and wave action. It occurs on a variety of rock types and complex surfaces with cracks and crevices are crucial to recruitment.	Absent: The proposed site is not within inter-tidal areas.
Fish			
green sturgeon (*Acipenser medirostris)*	Threatened	Wide-ranging migrant, but only 3 known spawning rivers (Klamath River, California; Sacramento River system, California; Rogue River, Oregon (Moyle et al. 1995).	Absent: The project area in not within any of the known spawning rivers.
tidewater goby (*Eucyclogobius newberryi)*	Endangered	Historically widespread in brackish coastal lagoons and coastal creeks in California from the mouth of the Smith River, Del Norte County, south to Agua Hedionda Lagoon, San Diego County (Lee et al. 1980, USFWS 1999).	Absent: Naturally absent (due to lack of suitable habitat).
S. OR/N. CA Coho salmon *(Oncorhynchus kisutch)*	Threatened	All coho salmon stocks between Punta Gorda and Cape Blanco are depressed relative to past abundance. The main stocks in this region (Rogue River, Klamath River, and Trinity River) are heavily influenced by hatcheries and, apparently, have little natural production in mainstem rivers.	Absent: There are no streams in the project area that could support this species.
CA coastal Chinook salmon (*Oncorhynchus tshawytscha)*	Threatened	Range includes marine waters off Oregon and California and spawning streams from Euchre Creek, Oregon, to the lower Klamath River, California; trends in abundance are mixed but generally increasing; impacts of hatchery fishes and declines in spring runs are of concern; recent evaluation by NMFS concluded that this ESU is not threatened with extinction and is not likely to become so in the foreseeable future.	Absent: There are no streams in the project area that could support this species.
Southern eulachon DPS *(Thaleichthys pacificus)*	Threatened	Eulachon occur in near shore ocean waters and to 1,000 feet (300 m) in depth, except for the brief spawning runs into their natal (birth) streams. Spawning grounds are typically in the lower reaches of larger snowmelt-fed rivers with water temperatures	Absent: There are no streams in the project area that could support this species and near shore waters are not within the project vicinity.

Species	Status	Habitat	Occurrence in the Study Area
		ranging from 39 to 50° F (4-10° C). Spawning occurs over sand or coarse gravel substrates.	
Reptiles			
green turtle (*Chelonia mydas (incl. agassizi*	Threatened	Distribution is pantropical in the Atlantic, Pacific, and Indian oceans. In some areas this species occurs in higher temperate latitudes due to drifting in ocean currents in conjunction with above-normal sea temperatures or as a normal life history event; young turtles regularly range as far north as New England. Feeding occurs in shallow, low-energy waters with abundant submerged vegetation, and also in convergence zones in the open ocean.	Absent: The project does not include habitat needed for this species.
leatherback turtle (*Dermochelys coriacea)*	Endangered	Oceanic distribution is nearly worldwide, but the number of nesting sites is few; many nesting areas have few breeding females and suffer from some human predation; range and number of occurrences have undergone reduction; recent severe population declines at some nesting locations. Specific areas proposed for designation include two adjacent marine areas totaling approximately 46,100 square miles (119,400 square km) stretching along the California coast from Point Arena to Point Vincente.	Absent: The project does not include habitat needed for this species.
olive ridley sea turtle (*Lepidochelys olivacea)*	Threatened	Wide range in the tropical and subtropical Pacific, Indian, and Atlantic oceans; population much smaller than historical level; current trend varies among regions; many populations are declining as a result of incidental take by shrimpers, disturbance and development of nesting beaches, exploitation for meat, leather, and eggs, and other factors.	Absent: The project does not include habitat needed for this species.
loggerhead turtle (*Caretta caretta)*	Threatened	Warmer parts of Atlantic, Pacific, and Indian oceans, and Mediterranean (Bolten et al. 1992) and Caribbean seas. Ranges into temperate zones in summer. Rare or absent far from mainland shores.	Absent: The project does not include habitat needed for this species.
Birds			
marbled murrelet (*Brachyramphus marmoratus)*	Threatened	Extensive range along the Pacific coast of North America from Alaska to California; population numbers still high in British Columbia and Alaska, but declining; threats from habitat loss due to logging, oil spills, and gill net fisheries are increasing. On the southern coast of Washington, north coast of Oregon, and in California south of Humboldt County, murrelets are rare or uncommon where they once were common or abundant in the early 1900s (Ralph *et al.* 1995). Most populations are dependent on large trees in old-growth forests for nest sites. Continued harvest of old-growth and mature coastal coniferous forest that reduces critical nesting habitat is a major concern throughout most of the range.	Absent: Old-growth and mature coastal coniferous forest necessary for critical nesting habitat is not present at the project site.
Xantus's murrelet (*Synthliboramphus hypoleucus)*	Candidate	Most of the population breeds on only four islands off southern California and Baja California. This murrelet nests on rocky offshore islands. It nests on the ground, in rock crevices, under dense bushes or boulders, or in caves, usually on a cliff or steep slope, in secluded dark areas where the eggs generally are not visible from the cavity entrance, sometimes under vegetation on sandy slopes facing the sea.	Unlikely, no suitable habitat at project site; not likely to occur in highly urbanized areas.
western snowy plover (*Charadrius alexandrinus nivosus)*	Threatened	Nests on the ground on broad open beaches or salt or dry mud flats, where vegetation is sparse or absent (small clumps of vegetation are used for cover by chicks); nests beside or under object or in open (Page et al. 1985). Nests often are subject to flooding.	Absent: Broad open beaches or salt or dry mud flats are not present on the project site.
Western yellow-billed cuckoo (*Coccyzus americanus)*	Candidate	Western yellow-billed cuckoo formerly was widespread and locally common in California. Riparian forests have declined throughout the west as a result of conversion to agricultural and other uses, dams and river flow management, stream channelization and stabilization, livestock grazing, groundwater pumping, and invasion of alien vegetation. Habitat fragmentation is a major threat; in California, nesting by yellow-billed	Absent: Un-fragmented woodlands are not present at the project site.

Species	Status	Habitat	Occurrence in the Study Area
		cuckoos may require intact woodlands of at least 40 hectares, and woodlands greater than 80 hectares appear to be preferred (Laymon and Halterman 1989).	
short-tailed albatross (*Phoebastris albatrus*)	Endangered	Ranges widely in the North Pacific, but hunted to near-extinction in early 1900s. Currently there are only two known breeding colonies: one on Torishima Island in the Izu Shoto Island group (plus a possible new colony on Torishima) and the other on Minami-kojima Island in the Senkaku Retto, southwestern Ryukyu Islands. When not on the nesting islands, short-tailed albatrosses are widespread in the temperate and subarctic North Pacific and southward to California, often more proximate to islands and mainland coasts than to mid-ocean areas.	Absent: Marine habitat types are not present on the project site.
Northern Spotted Owl (*Strix occidentalis caurina*)	Threatened	Heavily forested areas in the coastal ranges of northern California from Marin Co. north, and in the Sierra Nevada from Plumas Co. to extreme northern Kern Co.	Unlikely, no suitable habitat at project site; not likely to occur in highly urbanized areas.
Plants			
Western lily (*Lilium occidentale*)	Endangered	Found in bogs and fens, coastal prairies, coastal bluff scrub, coastal scrub, marshes and swamps (freshwater) and North Coast coniferous forests (openings). Elevations range from 2-185 meters (CNPS, 2011).	Unlikely, no suitable habitat at project site; not likely to occur in highly urbanized areas.

OCCURRENCE DESIGNATIONS:
Present: Species observed on the study area at time of field surveys or during recent past.
Likely: Species not observed on the study area, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the study area, but it could occur there from time to time.
Unlikely: Species not observed on the study area, and would not be expected to occur there except, perhaps, as a transient
Absent: Species not observed on the study area, and precluded from occurring there because habitat requirements not met.

Sensitive Habitats

The project site is within an urban core of the Klamath area. A species list was obtained from the Arcata Field Office of the USFWS. None of the species listed are known to occur at the project site. The project will not affect any state- or federally-listed or proposed, Threatened or Endangered Species, or any designated or proposed critical habitat.

Cultural Resources

As a federal action, the proposed undertaking must comply with NEPA and Section 106 (Codified as 36 CFR Part 800) of the National Historic Preservation Act (NHPA), and must consider effects to historic properties. The area of analysis for cultural and historic resources includes the site known as the area of potential effects (APE) for the Proposed Action. The NHPA is the primary federal legislation governing preservation of cultural and historical resources in the United States. The NHPA established a national historic preservation program which encourages the identification and protection of cultural resources. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties listed in or eligible for the National Register of Historic Places and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (16 USC Section 470f). The ACHP promulgated the Section 106 implementing regulations, found at 36 CFR Part 800, which sets forth the Section 106 process, including consultation requirements.

The proposed project is expected to not affect any properties within a historic district, a Traditional Cultural Property or any properties on the National Register of Historic Places according to the Tribe's Historic Preservation Officer. A Cultural Resources Inventory was done that assessed the potential for impacts on archeological sites and Traditional Cultural Properties. A file search was conducted at the North Coastal Information Center of the California Historic Resources Information

System by Tribal Archaeologist Rosie Clayburn on April 2, 2013. Based on that file search, it was disclosed that the Redwood Ranger Station is listed on the National Register of Historic Places.

Ethnography and History

Yurok people have lived in Northwestern California along the Redwood Coast and the Klamath River since Noohl Hee-Kon (time immemorial). Traditionally Yurok people living on the upper region of the Klamath River are Pe-cheek-lah, lower region of the Klamath River Puelik-lah, and the coast, Ner-er-ner. Oohl, translates to mean Indian people, describes Yurok people together. The name Yurok comes from the Karuk word for "downriver", this is the most widely used word to describe the Tribe and people.

The Ancestral Lands of the Yurok Tribe extend unbroken along the Pacific Ocean coast (Including usual and customary off-shore fishing areas) from Damnation Creek, its northern boundary, to the southern boundary of the Little River drainage basin, and unbroken along the Klamath River, including both sides and its bed, from its mouth upstream to and including the Bluff Creek drainage basin. Included within these lands are the drainage basin of Wilson Creek, the drainage basins of all streams entering the Klamath River from its mouth upstream to and including the Bluff Creek and Slate Creek drainage basins, including the village site at Big Bar (except for the drainage basin upstream from the junction of Pine Creek and Snow Camp Creek), and the Canyon Creek (also known as Tank Creek) drainage basin of the Trinity River, the drainage basins of streams entering the ocean or lagoons between the Klamath River and Little River (except for the portion of the Redwood Creek drainage basin beyond the McArthur Creek drainage basin, and except for the portion of the Little River drainage basin which lies six miles up from the ocean). Yurok Ancestral Lands include all submerged lands, and the beds, banks and waters of all the tributaries within the territory just described. Also included within the Ancestral Lands is a shared interest with other tribes in ceremonial high country sites and trails as known by the Tribe, as well as the Tribes usual and customary hunting, fishing and gathering sites. The Ancestral Lands are depicted on the "Map of Yurok Ancestral Lands", on file in the Yurok Tribal Offices.

There are more than 70 known villages within the ancestral territory most of which are situated along the Klamath River and along the Pacific Coast (Waterman 1920). Within each village, houses were constructed primarily of redwood and each house had a name. Families and descendants are associated with these specific house names (Waterman 1920: 208). Families and/or houses within villages owned specific resource gathering areas such as fishing holes, acorn-gathering spots, trapping areas, and hunting locations. Glen Moore Sr. who was from the village of Srey-gon explained in an interview in 1996 that, "most Indian people had fishing spots; they have the right to fish. Sometimes its [fishing hole] is handed down through relations. You can give a fishing place to someone else" (Moore 1996). The sweathouse is another structure found within each village. Men typically did not spend the night in a family house; instead they stayed in the sweathouse. The sweathouse was also used for ceremonial purposes such as purification before hunting or ceremonies.

Yurok villages situated along river and coastal lines tend to be located near resource gathering areas such as good fishing access or coastal gathering sites. River villages tend to be on ancient river terraces and decrease in elevation the further down river they are, providing easy access to fishing holes along the Klamath. Coastal villages are situated along lagoons or mouths of rivers, adding additional food resources to ones provided by the ocean. The mountain areas above the water areas were mostly used for gathering and hunting (Waterman 1920: 183, Bearss 1969).

The Yurok ancestral land is approximately 1,148 square miles (Pilling, 1978) with villages placed along the Klamath River and Pacific Ocean. Despite such a large land base the Klamath River remains the heart of Yurok ancestral land and serves as the "highway" for Yurok people. Walt McCovey Jr. in a 1996 interviews explained, "That river is in the life of Indian people, we depend on the fish, depend on eels, sturgeon" (McCovey 1996). Redwood dugout canoes are utilized to travel on the River and off shore in the Ocean. Canoes could be 20ft long and 5ft wide (James 1997). Also, an elaborate trail system exists connecting villages, prayer sites and gathering areas (Waterman 1920). Trails were to be treated with respect and travelers are to stay within the trail (Waterman 1920:185).

The river is vital part of Yurok life providing food resources such as salmon, sturgeon, eel and other fish. Gill nets, dip nets, weirs, basket traps, and hooks are used to obtain fish from the River. On the coast, many species are harvested for consumption including mussels, clams, seaweed, and many other resources. The primary game for hunting is deer and elk, but other smaller animals are also eaten. The other primary food source for the Yurok is acorns. Acorn gathering grounds and camps are found throughout the mountains in Yurok territory. Acorns are processed into a mush, which is cooked in large baskets with hot stones.

Yurok did not experience non-Indian exploration until much later than other tribal groups in California and the United States. One of the first documented visits in the local area was by the Spanish in the 1500s. When Spanish explorers Don Bruno de Heceta and Juan Francisco de la Bodega y Cuadra arrived in the early 1700s, they intruded upon the people of *Chue-rey village*. This visit resulted in Bodega laying claim by mounting a cross at Trinidad Head.

In the early 1800s, the first American ship visited the area of Trinidad and Big Lagoon. Initially, the Americans traded for sea otter fur with the coastal people. However, for unknown reasons tensions grew and the American expedition was cut short. The expeditions increased over the next few years and resulted in a dramatic decrease of otters in the area.

By 1828, the area was gaining attention because of the reports back from the American expeditions, despite the news that the local terrain was rough. The most well-known trapping expedition of this era was led by Jedediah Smith. Smith guided a team of trappers through the local area, coming down through the Yurok village of *Kep'-el*, crossing over Bald Hills and eventually making their way to the villages of *O men* and *O men hee-puer* on the coast. Smith's expedition, though brief, was influential to all other trappers and explorers. The reports from Smith's expedition resulted in more trappers exploring the area and eventually leading to an increase in non-Indian settlement.

By 1849, settlers were quickly moving into Northern California because of the discovery of gold at Gold Bluffs near present day Orick and Orleans on the Klamath River. Yurok and settlers traded goods and Yurok assisted with transporting items via dugout canoe. However, this relationship quickly changed as more settlers moved into the area and demonstrated hostility toward Indian people. With the surge of settlers, moving in the government was pressured to change laws to better protect the Yurok from loss of land and assault. The rough terrain of the local area did not deter settlers in their pursuit of gold. They moved through the area and encountered camps of Indian people. Hostility from both sides caused much bloodshed and loss of life.

The gold mining expeditions resulted in the destruction of villages, loss of life and a culture severely fragmented. By the end of the gold rush era at least 75% of the Yurok people died due to massacres and disease, while other tribes in California saw a 95% loss of life. While miners established camps along the Klamath and Trinity Rivers, the federal government worked toward finding a solution to the conflicts, which dramatically increased as each new settlement was established.

The government sent Indian agent Redick McKee to initiate treaty negotiations. Initially, local tribes were resistant to come together, some outright opposed meeting with the agent. The treaties negotiated by McKee were sent to Congress, which was inundated with complaints from settlers claiming the Indians were receiving an excess of valuable land and resources. The Congress rejected the treaties and failed to notify the tribes of this decision. In 1855, a group of "vigilante" Indians (who were known as Red Cap Indians) initiated a revolt against settlers.

The Red Cap Indians were believed to be a mix of tribal groups who were fighting settlers. The Red Cap War nearly brought a halt to the non-Indians settlement effort. The government was able to suppress the Red Cap Indians and regained control over the upper Yurok Reservation.

The Federal Government established the Yurok Reservation in 1855 and immediately Yurok people were confined to the area. The Reservation was considerably smaller than the Yurok original ancestral territory. This presented a hardship for Yurok families who traditionally lived in villages along the Klamath River and northern Pacific coastline. When Fort Terwer was established many Yurok families were relocated and forced to learn farming and the English language.

In January 1862, the Fort was washed away by flood waters, along with the Indian agency at *Wau-kell flat.* Several Yurok people were relocated to the newly established Reservation in Smith River that same year. However, the Smith River Reservation was closed in July 1867. Once the Hoopa Valley Reservation was established many Yurok people were sent to live there, as were the Mad River, Eel River and Tolowa Indians.

In the years following the opening of the Hoopa Valley Reservation, several squatters on the Yurok Reservation continued to farm and fish in the Klamath River. The government's response was to use military force in order to try to evict squatters. Many squatters did not vacate and waited for military intervention, which was slow to come. In the interim, the squatters pursued other avenues to acquire land.

The Fort and Agency were built from redwood, which was an abundant resource and culturally significant to Yurok. Non-Indians pursued the timber industry and hired local Indian men to work in the up and coming mills on the Reservation. This industry went through cycles of success, and was largely dependent on the needs of the nation. At the time, logging practices were unregulated and resulted in the contamination of the Klamath River, depletion of the salmon population and destruction of Yurok village sites and sacred areas.

The Yurok canneries were established near the mouth of the Klamath River beginning in 1876. The Yurok people opposed non-Indians taking of the salmon and asserted that they did not have the right to take fish from the river because it is an inherent right of the Yurok people.

Western education was imposed on Yurok children beginning in the late 1850s at Fort Terwer and at the Agency Office at *Wauk-ell.* This form of education continued until the 1860s when the Fort and Agency were washed away. Yurok children, sent to live at the Hoopa Valley Reservation, continued to be taught by missionaries. The goal of the missionary style of teaching was to eliminate the continued use of cultural and religious teachings that Indian children's families taught. Children were abused by missionaries for using the Yurok language and observing cultural and ceremonial traditions.

In the late 1800s children were removed from the Reservation to Chemawa in Oregon and Sherman Institute in Riverside, California. Today, many elders look back on this period in time as a horrifying experience because they lost their connection to their families, and their culture.

Many were not able to learn the Yurok language and did not participate in ceremonies for fear of violence being brought against them by non-Indians. Some elders went to great lengths to escape from the schools, traveling hundreds of miles to return home to their families. They lived with the constant fear of being caught and returned to the school. Families often hid their children when they saw government officials.

Over time the use of boarding schools declined and day schools were established on the Yurok Reservation. Elders recall getting up early in the morning, traveling by canoe to the nearest day school and returning home late at night. The fact that they were at day schools did not eliminate the constant pressure to forget their language and culture. Families disguised the practice of teaching traditional ways, while others succumbed to the western philosophy of education and left their traditional ways behind. Eventually, Indian children were granted permission to enroll in public schools. Although they were granted access, many faced harsh prejudice and stereotypes. These hardships plagued Indian students for generations, and are major factors in the decline of the Yurok language and traditional ways. The younger generations of Yurok who survived these eras became strong advocates (as elders) for cultural revitalization (Yurok Tribe, 2007).

Socioeconomic Conditions

Employment and Income

The Yurok Tribal Government employs over 200 people. Historically, other large employment sectors over the past century were canneries, regional agriculture (hops and lily bulbs), fishing and tourism/recreation, and timber industries, all of which gradually declined, resulting in relatively high unemployment rates (Tiller, 2005).

A 2005 BIA labor force report showed 4,912 enrolled Tribal members (year 2011 enrollment is over 5,600), and about 2,847 Indians on or near the Yurok Reservation eligible for BIA services, and of those, about 74 percent were unemployed (BIA, 2005).

In comparison, the 2001 BIA Labor Force Report showed 4,466 enrolled Yurok Tribal members and an unemployment rate of 74 percent.

Census 2000 data for the Yurok Reservation showed a high (relative to other Census area percentages) unemployment rate of 17.2 percent, a low median household income and per capita income, especially for the Indian population, with roughly 40 percent of the population in poverty. Most families (67%) with a female householder, no husband present with children were below the poverty level on the Reservation, especially those with children under 5 years old (73%). Unemployment was at least double and in some cases two and a half times higher for the Indian population on the Reservation than for the total

area, county, and State populations. The Tribe underscored its high unemployment rate compared to the counties:

> "Employment data for 2001 from the BIA indicate that the unemployment rate is 75% for Yurok and 40% for Hoopa Tribal Members. Comparable data for the downstream three counties in 2001 are much lower; Humboldt and Del Norte and Curry County Oregon having 6%, 8.1% and 6.9% unemployment respectively. Likewise, there is significant disparity in the median per capita income between the downstream Reservations and the counties in the downstream sub region □ "(Sloan, February 2011, pp. 86-87).

Overall, at 12.9 percent unemployed on the Reservation, 17.2 percent for the Indian population in the year 2000 census, the Yurok Reservation had one of the highest unemployment rates in the area, with the exception of the town of Klamath and Klamath area; however, many Yurok and some Resighini Tribal members live in and around Klamath. Reservation and surrounding area Indian unemployment rates averaged twice that of the counties, and about three times the California rate and Census 2005 to 2009 American Community Survey estimates show that unemployment may have eased slightly, but poverty rates may have increased in Klamath CCD and CDP, and otherwise remained essentially unchanged in 2009 compared to year.

Demographic Trends

The Indian population median age in 2000 was 32.4 years of age on the Yurok Indian Reservation which was generally 5 to 10 years younger than the surrounding areas general population. The difference is likely due to a moderately high birth rate; however the Reservation median age is older than most Indian reservations. The reason the Reservation population is slightly older than most others is likely because much of the land is non-Indian owned or controlled. Furthermore, younger Tribal members often must leave for education and job opportunities, but many probably return at a later age for health care and other Tribal services.

The Tribe has grown fairly rapidly as shown by the increases in enrollment, therefore it could be assumed that much of the growth is occurring off-Reservation -- much of the growth within the nearby ancestral territory where members still actively come to the Reservation to fish and attend ceremonies (Sloan, February 2012). Based on a 2005 BIA Labor Force Report, it was estimated that roughly 40 percent of Tribal members live on or around (ancestral territory) Reservation lands (BIA Labor Force Report, 2005).

In 2000, the rate of unemployment for all people 16 years and over residing within the Yurok Reservation (836) was 48%. This high rate of unemployment is compounded by the fact that 31% of households on the Reservation (413) were making less than $10,000 a year in 1999. The next highest percentage of people (17.9%) make between $15,000 and $24,999. Moreover, median household income that same year was $20,592. Conditions on the Hoopa Reservation and in the surrounding area are similar (U.S. Census Bureau, Profile of General Demographic Characteristics, Yurok Reservation, CA, 2000, Summary File 1).

Attitudes, Expectations, Lifestyle, and Cultural Values

In so far as Tribal expectations are concerned, Tribal Members are very supportive of the proposed project since the proposed project consists of creating a Culture and Knowledge Park that celebrates the Yurok culture. The lifestyle and cultural values of the Tribal community is not anticipated to negatively change as a result of the proposed action.

Community Infrastructure

Fire Protection

The Klamath Fire Protection District (KFPD) provides first response fire and medical service to the Reservation. The KFPD is operated by 15 local residents, approximately 12 of which are "active" firefighters, all of which work on a volunteer basis. KFPD's main office is located at 16081 Highway 101, in Klamath, with three additional fire stations located throughout the Klamath region. The KFPD provides fire suppression services in the Klamath Townsite. Two engines are located within a half-mile of the Proposed Project site; in addition there are two other KPD engine sites in the KFPD. The KFPD has a total of three structural fire trucks, one wildfire truck, two water tenders, and two rescue trucks. Fire crews are entirely comprised of trained volunteers. The KFPD service area primarily consists of timberland and residential homes within 300- square miles, and can respond to most calls in this service area within 15 minutes.

CAL FIRE and the National Forest Service provide backup fire protection services, primarily for wildland fires, as the Klamath Townsite is located in a state responsibility area with high fire hazard potential.

Law Enforcement

The Del Norte County Sheriff's Office is responsible for providing law enforcement to all areas of Del Norte County. The Sheriff's Office has a patrol division, jail division, civil office, court security and county-side emergency communication. Search and Rescue operations are also provided by the Del Norte Sheriff. Located in Crescent City, the Del Norte County Sheriff Department is approximately 15 miles from the Yurok Indian Reservation. The Yurok Tribe maintains/operates a community based police force under the Yurok Tribe Department of Public Safety, consisting of two full-time staff and five sworn officers. Tribal officers are fully certified California Peace Officers that have been crossed-deputized with the Humboldt County Sheriff's office and Del Norte County Sheriff's office. The Tribal officers are working towards Special Law Enforcement Commissions through the Bureau of Indian Affairs Office of Justice Services (BIA-OJS), which would also qualify them as federal officers with the authority to enforce state law in California.

The Del Norte County Sheriff Department and the Yurok Tribe Public Safety Department have a mutual-aid arrangement through a cross-deputization process and collectively provide police services for the area.

Emergency Medical Services

The Klamath Fire Protection District (KFPD) provides first medical service to the Reservation. If needed, West Log Aviation/Cal-Ore Life will provide emergency air ambulance service. The closest emergency room is at Sutter Coast Hospital located at 800 East Washington Boulevard, Crescent City. The Rural Health Center is the Urgent Care portion of the Emergency Department, treating those with urgent, but less serious, conditions. Response time for ambulance services is estimated at ten minutes by the KFPD.

Schools

The project area is located within the vicinity of several schools including Margaret Keating Elementary School (K-5), Crescent Elk Middle School (6-8) Del Norte High School (9-12), and Sunset Continuation High School (9-12).

Solid Waste Disposal

The Del Norte Solid Waste Management Authority oversees solid waste and recycling services in Del Norte County. Del Norte Disposal, Inc. is the contract solid waste and recycling provider for the Solid Waste Authority. The Solid Waste Management Authority operates the Del Norte County Transfer Station at 1700 State Street that is used by Del Norte Disposal, Inc. For self-haul services, the nearest transfer station is the Klamath Transfer Station located across the river at Klamath Beach Road. The transfer station works on a container basis and does not operate under a capacity threshold. As containers are filled, the municipal waste is transferred to the larger Del Norte County transfer station for out of county transport.

Solid waste from Del Norte County is landfilled at the Dry Creek Landfill, located near Medford, Oregon. As of 2006, the landfill had a remaining capacity of 47.5 million tons, which is estimated to provide at least 50 years of operational life. The Yurok Tribe's Environmental Program also manages several recycling programs for the community.

Gas and Electric Services

PacifiCorp provides electricity service to Del Norte County. PacifiCorp provides energy through its trade names, Pacific Power and Rocky Mountain Power, and provides service encompassing 136,000 square miles in six states (Washington, Oregon, California, Idaho, Utah, and Wyoming). MidAmerica Energy Holdings acquired the company in 2006. Del Norte County is served by the Pacific Power trade name.

Suburban Propane in Crescent City provides propane gas service.

Communications Service

Verizon provides telephone services in Del Norte County. Verizon provides long distance services, wireless services, Internet access (dial-up), and other business solutions to residential and commercial consumers. Verizon Telephone lines are located adjacent to the project site.

Water Service

The Klamath Community Services District (KCSD) supplies water in the project area. Water is supplied by three wells. There are two primary wells and one well that serves as a backup. Only one well operates at a time. The three wells have capacities that range from 100 gallons per minute (gpm) to 250 gpm. Daily demand on the system is approximately 20,000 gallons per day (gpd) and consists mainly of individual residential users (approximately 45). KCSD will be providing domestic water to the project.

Sanitary Sewer Services

The Klamath Community Services District (KCSD) provides wastewater services in the project area, with exception of the Yurok Tribal offices. The system consists of a 20,000-gallon septic tank, a pressure fed line underneath U.S. 101 and three leachfields located on a 25-acre parcel west of U.S. 101.The Tribe has one connection available to the KCSD system and has allocated it to the project.

Health Care

The Potawot Health Village, along with a network of satellite clinics including one in Klamath, provides health care services to the Yurok Tribe and other Indian reservations. Among the services included at the Potawot Health Village is complete primary care, obstetrics, vision, dental, public and community health, nutrition, child and family services, a pharmacy, as well as tobacco awareness and diabetes prevention programs. The Potawot

Health Village is located in Arcata, approximately 55 miles from the Reservation. Sutter Coast Hospital in Crescent City provides in-patient care and emergency services.

RESOURCE USE PATTERNS

Hunting, Fishing, Gathering

The proposed site is not currently being used for hunting or gathering. Off site and within Reservation lands, gathering and fishing activities are exercised on a regular basis.

Timber

The proposed project site does not include merchantable timber stands.

Agriculture

The subject parcels are not included as Prime Farm land according to the NRCS.

Mining

Commercial mining is not a current land use activity within the vicinity of the proposed project site. There are no known mineral or energy resources of local, regional, or national importance on the proposed project site. Therefore, no impacts to mineral or energy resources would occur as a result of the proposed project.

Recreation

Recreation and tourism are the largest industries in the County and the economic health of the County is dependent on tourist spending. With the presence of ancient redwood forests, various Federal, State, and County managed parks and recreational facilities are located throughout Del Norte County. There are six County designated recreational facilities within the Klamath area. These facilities are listed and described in Table 3.

Table 3
Klamath Area Recreational Facilities

Recreational Site	Responsible Agency	Features/Types of Use
Redwood Park -- Lagoon Creek	Redwood National and State Parks	Day use, fishing, coastal trails, beach
Hunter Creek Park	County	Day use
Klamath Ball field	County	Field area
Klamath River Public Boat Ramp	County	River access, day use, fishing
Requa Boat Ramp	Yurok Tribe	River access, store, fishing
Klamath Glenn Boat Ramp	County	Day use and River access

There are several privately owned recreational land uses along the Klamath River west and northwest of the project site across U.S. 101. These include the Klamath's Camper Corral RV Park and Campground, Klamath River Jet Boat Tours, Cat's Lazy River Retreat, the Tree's of Mystery and many others.

Transportation Network

The Project Area can be accessed in two ways via U.S. 101. From the north, visitors can exit at Ehlers Avenue and proceed south along Klamath Boulevard. From the south, visitors can exit at the U.S. 101 off-ramp at State Route 169 (SR-169) and proceed east on SR-169, turn north onto Klamath Mills Road, and then left onto Klamath Boulevard.

Highway 101 has an approximate 13-foot central two-way left turn lane, 11.5-foot travel lane, and 4-foot shoulder in each direction (north and south) at the study intersection. The posted maximum speed limit at this stretch of Highway 101 is 55 miles per hour (mph).

From the northern access point, the traveler is greeted by signage in the Yurok language northbound on U.S. 101. Through a right-turn deceleration lane, the traveler turns off this section of U.S. 101 with a posted 55-mph speed limit, onto Ehlers Avenue, a local street with a residential speed limit of 25 mph.

At the southern access point, when the traveler exits U.S. 101 at Klamath Glen Road they are presented with directional signage to Klamath and the Terwer Valley. To access the Project Area, visitors turn right onto Klamath Glen Road and then a quick left onto Klamath Mill Road and continue northward.

Daily peak-hour traffic volume on Highway 101 in the vicinity of the project was obtained from 2011 traffic volume data provided by the Traffic Data Branch of Caltrans. At Post Mile 4.368 (Highway 101 at Junction of 169 SE) the average annual daily traffic (AADT)[1] was 7,250. Of the total AADT total, 10% were trucks.

The project intersection does not have crosswalks or any dedicated bike lanes on any of the major or minor streets within the study area. A 4-foot shoulder, which is commonly used as a bike lane, exists on both the northbound and the southbound directions of Highway 101. There are no sidewalks on Highway 101 or the project entrance.

No pedestrian or bicycle traffic was observed during the field observations on March 27, 2013. Due to the scenic nature of the area, an assumed value of 1 bicyclist/pedestrian per hour will be used at the project intersection.

The Redwood Coast Transit Authority (RCT) operates bus service in Del Norte County. RCT operates two regional routes with bus stops adjacent to the Project Area. Route 10 (Del Norte Coast/Klamath) is designed for commuters and provides one morning and one afternoon round trip Monday through Saturday. In addition to scheduled stops, passengers may call ahead to arrange for a pick-up at additional locations, or ask the driver for a drop-off off the regular route. Route 20 (Smith River/Arcata) is an intercity route that was initiated on July 1, 2005 to replace the loss of Greyhound Bus Lines' intercity service to Del Norte County. Route 20 operates between Smith River and Arcata, which is 90 miles south of Crescent City in Humboldt County. Each Monday through Saturday, five trips are made to Smith River and two trips to Arcata. Passengers can transfer to Curry County services in Smith River, or to the Arcata Mad River Transit System (AMRTS) or Redwood Transit System (RTS) in Arcata.

The closest airport to the Project Area is the Andy McBeth Airport, which is located in the small community of Klamath Glen off SR-169. McBeth Airport is a general aviation, non-NPAIS airport operated by the County of Del Norte with no services available. Private pilots and emergency responders use the field. FAA records for 2011 indicate that there are no aircraft based at the field and there were approximately 1,500 annual operations. McBeth Airport has ten tie down positions and no public transit service is available. Del Norte County Regional Airport, also known as Jack McNamara Field, is located 24 miles to the north, in Crescent City. Arcata/Eureka Airport is located 50 miles to the south, in McKinleyville.

The Klamath Townsite Boat Ramp is located nearby, at end of Chapman Road. The Tribe is developing a river taxi service for tourists and staff and recently purchased the Klamath

[1] Annual average daily traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th.

Jet Boat Tours. This jet boat tour service includes a 45-mile round trip tour up the Klamath River.

Land Use Plans

The Del Norte County General Plan designation for the parcel is Tribal Lands/BIA. This designation applies to those Native American lands held in trust by the Bureau of Indian Affairs over which the County has no land use jurisdiction. The County encourages the adoption of tribal management plans for these areas, which would include consideration of compatibility with and impacts upon adjacent area facilities and plans.

The project site and vicinity are located within the boundaries of the Yurok Reservation; however only a small portion of the land within the reservation boundaries is owned by the Yurok Tribe or in federal trust status on behalf of the Tribe. Currently, the Tribe has not adopted a General Plan or a Land Use Map for the Reservation.

As Tribal trust land, the property would not be subject to local zoning (See Santa Rosa Band of Indians et al., Plaintiffs-appellees, v. Kings County et al., Defendants-appellants United States Court of Appeals, Ninth Circuit (532 F.2d 655, 1976) and United States of America, Hoopa Valley Tribe, Hoopa Valley Indian Housing Authority, Plaintiffs-appellees, v. County of Humboldt, a Political Subdivision of the State of California, Defendant-appellant, and State of California, Defendant-intervenor-appellant, United States Court of Appeals, Ninth Circuit. (615 F.2d 1260, 1980).[2]

Coastal Zone Management

The Coastal Zone Management Program (CZMP) is authorized by the Coastal Zone Management Act of 1972 and administered at the federal level by the Coastal Programs Division (CPD) within the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management (OCRM).

The CPD is responsible for advancing national coastal management objectives and maintaining and strengthening state and territorial coastal management capabilities. It supports states through financial assistance, mediation, technical services and information, and participation in priority state, regional, and local forums.

The subject property lies within the Coastal Zone. Only for new construction, conversion, major rehabilitation, and substantial improvement activities does the Coastal Zone Management (CZM) authority apply. Projects that can affect the coastal zone must be carried out in a manner consistent with the approved State coastal zone management program under Sec. 307 of the Coastal Zone Management Act of 1972, as amended.

Local Coastal Programs (LCPs) are basic planning tools used by local governments to guide development in the coastal zone, in partnership with the California Coastal Commission. LCPs contain the ground rules for future development and protection of coastal resources in the 76 coastal cities and counties. The LCPs specify appropriate location, type, and scale of new or changed uses of land and water. Each LCP includes a land use plan and measures to implement the plan (such as zoning ordinances). Prepared

---

[2] The Courts have twice held that any County in California is without jurisdiction to enforce its zoning ordinance or building code on Tribal Trust Lands. The immunity of Indian use of trust property from state regulation is based on the notion that trust lands are a Federal instrumentality held to affect the Federal policy of Indian advancement and may not therefore be burdened or interfered with by the State.

by local government, these programs govern decisions that determine the short- and long-term conservation and use of coastal resources.

The California Coastal Commission certified the LCP for Del Norte County on October 12, 1983 and the County assumed permit-issuing authority on February 1, 1984.

Under Title 21 – Coastal Zoning, Chapter 26, C-2 Light Commercial District, of the Del Norte County codes, the district classification is designed to be applied to areas such as small community shopping centers and business districts which cater to quiet enclosed businesses which are accessory to residential, urban, or suburban living. Shops and services which cater to residential needs are to be encouraged to the exclusion of other businesses.

The proposed Culture and Knowledge Park (commercial recreational facilities) falls under the C-2 Zoning designation and is permitted use under the LCP.

OTHER VALUES

Wilderness

The proposed project site is not located in a natural wilderness area.

Sound and Noise

The assessment of noise impacts involves the identification of project noise sources and the location of noise-sensitive receptors. Trucks are the dominant source of noise in the area. The noise generated from vehicles using roads within the area is governed primarily by the number of vehicles, type of vehicles (mix of automobiles, trucks, and other large vehicles), and speed.

The aggregate noise for both the Culture and Knowledge Park and the Scenic Byways Visitor's Center was reviewed for the purposes on noise impacts as discussed below.

The Del Norte County General Plan, adopted in 2003 (General Plan), is the guiding document for development in the unincorporated areas of the County. The General Plan does not apply to trust land on which the Proposed Project would be located, or to the Proposed Project itself. However, FHwA does policies and regulations related to noise, although they are more applicable to highway project generated noise.

In general, existing noise levels should be established by field measurements for all developed land uses and activities. Field measurements should be made, since existing background noise is usually a composite from many sources, and noise prediction models are applicable only to noise originating from a specific source.

Under NEPA, a proposed alternative is compared with the no-build alternative) to determine whether highway traffic noise impacts will occur. That is, the proposed project causes an impact when it changes the noise level compared to the no-build condition. Changes that are less than 3 dB(A) may be considered negligible or unimportant under NEPA because they are barely perceptible.

In addition, the HUD Noise Handbook was consulted and ambient noise readings were obtained during a site review conducted on March 27, 2013. Although the ambient noise conducted during site review did not exceed 45 dB, HUD requirements include an analysis of average DNLs. HUD has developed an electronic assessment tool that calculates the

DNL from roadway and railway traffic and this was used in the assessment. This is a web-based application of the existing HUD Noise Assessment Guidelines (NAG). Based on the existing traffic conditions and the project with new traffic, the ambient noise increase is negligible. According to the traffic impact study, the project is expected to increase traffic by 104 ADT. The following Tables show the existing noise levels and the noise levels as a result of the project.

Table 4 - Existing Noise (DNL)

Site ID Culture Center
Record Date 3/22/2013
User's Name R. Ulibarri

Road # 1 Name U.S. Highway 101 at Ehlers

Road #1			
Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	60	60	60
Distance to Stop Sign	370	370	370
Average Speed	55	55	55
Average Daily Trips (ADT)	7250	725	72
Night Fraction of ADT	15	10	5
Road Gradient (%)			0
Vehicle DNL	63.8115	62.8883	61.975
Calculate Road #1 DNL	67.7374	Reset	

Add Road Source | Add Rail Source

Airport Noise Level

Loud Impulse Sounds? Yes No

Combined DNL for all Road and Rail sources 67.7374

Combined DNL including Airport N/A

Site DNL with Loud Impulse Sound

Table 5 Noise Levels with Project (DNL)

Site ID Culture Center
Record Date 3/22/2013
User's Name R. Ulibarri

Road # 1 Name

Road #1			
Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	60	60	60
Distance to Stop Sign	370	370	370
Average Speed	55	55	55
Average Daily Trips (ADT)	7275	727	73
Night Fraction of ADT	15	10	5
Road Gradient (%)			0
Vehicle DNL	63.8264	62.9003	62.035
Calculate Road #1 DNL	67.7649	Reset	

Add Road Source | Add Rail Source

Airport Noise Level

Loud Impulse Sounds? Yes No

Combined DNL for all Road and Rail sources 0

Combined DNL including Airport N/A

Site DNL with Loud Impulse Sound

As indicated by the tables above, the net increase of noise is not perceptible when comparing the existing conditions with those of the proposed project. Due to the proximity of the Cultural and Knowledge Park to U.S. Highway 101, a sound wall is proposed.

Public Health and Safety

GeoTracker is an online database that provides state-wide data of authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This system consists of a relational database, on-line compliance reporting features, a geographical information system (GIS) interface and other features that are utilized by the State Water Resources Control Board, regional boards, local agencies, regulated industry and the public to input, manage, or access

compliance and regulatory tracking data. This database was queried and no sites were listed on or near the property.

A visual site reconnaissance was conducted on March 27, 2013, by a recognized environmental professional of the site and surrounding area. There were no hazardous wastes or waste sites and no evidence of underground storage tanks was evident at the site. No above ground storage tanks were observed. No potential PCB-containing equipment or pole mounted leaking utility transformers were observed within the immediate area of the site.

Aesthetics

In 1963, the State Legislature established the California Scenic Highway Program through Senate Bill (SB) 1467, provisions of which were added to the Streets and Highways Code. The goal of the California Scenic Highway Program is to preserve and enhance the natural beauty of California, with scenic highways being designated based upon the amount of natural landscape visible to a passing motorist (Caltrans, 2007). Scenic highway designation does not preclude nearby development; however, the program encourages development that does not degrade the scenic value of the highway corridor (Caltrans, 2008). Adjacent to the project site, U.S. 101 is identified as an Eligible State Scenic Highway, but is not officially designated as a State Scenic Highway.

Scenic resources that have been identified in the Klamath area include U.S. 101 and local vistas. Caltrans identifies U.S. 101 as an Eligible State Scenic Highway throughout Del Norte and Humboldt Counties, except for the portion within Del Norte Redwoods State Park, which is officially designated as a State Scenic Highway. The officially designated portion begins approximately five miles north of the Klamath Townsite. Scenic viewpoints identified by Del Norte County in the Klamath area include the Douglas Memorial Bridge Overlook on U.S. 101 immediately south of Klamath and the Requa Hill Overlook on Requa Hill Road/Patrick Murphy Memorial Drive northwest of Klamath on the north side of the Klamath River. Del Norte County has also identified scenic corridors in the Klamath area including Requa Hill Road/Patrick Murphy Memorial Drive, Klamath Beach Road west of Klamath and to the southwest of the Klamath River, and the Coastal Drive southwest of Klamath along the coastline. These areas provide views of the ocean, the Klamath River estuary, riparian vegetation, and forested slopes.

There are portions of U.S. Highway 101 in Del Norte County that are designated Scenic Highways and also, portions of the Klamath River that are designated as a Wild and Scenic River by the Department of Interior. However, this project will not change the aesthetics of either the adjacent U.S. Highway 101 or the Klamath River. Aesthetic changes posed by the proposed project are considered negligible.

Statutory Checklist

[24CFR §58.5]

Record the determinations made regarding each listed statute, executive order or regulation. Provide appropriate source documentation. Note reviews or consultations completed as well as any applicable permits or approvals obtained or required. Note dates of contact or page references. Provide compliance or consistency documentation. Attach additional material as appropriate. Note conditions, attenuation or mitigation measures required.

Factors	Determination and Compliance Documentation
Historic Preservation [36 CFR 800]	Letter from THPO dated April 2, 2013 provides concurrence that the project will not likely affect cultural and historic resources
Floodplain Management [24 CFR 55, Executive Order 11988]	The project site is not located within a floodplain area, according to the Flood Insurance Rate Map (FIRM) for the project site. FIRM Panel 06015C0475E, September 2008
Wetlands Protection [Executive Order 11990]	Wetlands Delineation analysis performed by L. Robert Ulibarri March 27, 2013 did not disclose any wetlands at the subject parcels.
Coastal Zone Management Act [Sections 307(c), (d)]	The subject property is approximately 2.11 miles from the coast and is within the Coastal Zone. A Coastal Development Plan and Coastal Grading Permit will be obtained from the County of Del Norte under the LCP prior to construction.
Sole Source Aquifers [40 CFR 149]	This project is not located within an area designated by the U.S. EPA as being supported by a sole source aquifer, based on the data found at: http://www.epa.gov/region9/water/groundwater/ssa.html
Endangered Species Act [50 CFR 402]	The project will not affect any federally listed or proposed Threatened or Endangered Species, or any designated or proposed critical habitat. The project site is developed. A species list was obtained from the Arcata Field Office of the USFWS at: http://www.fws.gov/arcata/specieslist/ None of the species listed are known to occur at the project site.
Wild and Scenic Rivers Act [Sections 7(b), (c)]	The project is approximately 1,200 feet from the Klamath River but will not have an effect on the natural, free flowing or scenic qualities of a river in the National Wild and Scenic Rivers System, based on the Wild & Scenic Rivers - California List, found at: http://www.rivers.gov/rivers/rivers/klamath-ca.php
Air Quality [Clean Air Act, Sections 176(c) and (d), and 40 CFR 6, 51, 93]	URBEMIS software modeling indicates that the development will not exceed Federal de minimis levels.
Farmland Protection Policy Act [7 CFR 658]	The project is not located in an area that includes farmland of prime, unique, statewide or locally important farmland.
Environmental Justice [Executive Order 12898]	The project site is not environmentally disadvantaged in any way; therefore the project is in compliance with environmental justice, EO 12898.

HUD Environmental Standards Determination and Compliance Documentation

Noise Abatement and Control [24 CFR 51 B]	FIELD (3/27/13): Evaluation of the site indicates conformity with The Department of Housing and Urban Development's Noise Assessment Guidelines. Short-term construction noise will be mitigated by limiting the operation of heavy equipment in proximity to residential units (within 100 feet) during reasonable hours so as not to disrupt the quiet enjoyment of the tenants.
Toxic/Hazardous/Radioactive Materials, Contamination, Chemicals or Gases [24 CFR 58.5(i)(2)]	FIELD (3/27/13) The subject property appears free of hazardous materials, contamination, toxic chemicals, gases and radioactive substances that could affect the health or safety of occupants or conflict with the intended use of the property. The site reconnaissance conducted on by a Registered Environmental Assessor (REA 02616) of the site revealed no hazardous wastes or waste sites and no evidence of underground storage tanks was evident at the site. Consideration has been given to the proximity of the proposed project to dumps, landfills, industrial sites, and other operations with hazardous wastes. The project is not located within one mile of an NPL ("Superfund") site, within 2,000 feet of a CERCLIS site, nor adjacent to any other known or suspected sites contaminated with toxic chemicals or radioactive materials. This determination is based on a web search of the database found at: http://www.epa.gov/superfund/sites/cursites/index.htm
Siting of HUD-Assisted Projects near Hazardous Operations [24 CFR 51 C]	The proposed project is not located near hazardous operations, and thus would not be sitting HUD-Assisted projects near hazardous operations.
Airport Clear Zones and Accident Potential Zones [24 CFR 51 D]	The subject site is located over 20 miles from the nearest commercial airport. Due to the distance between the project site and the nearest airport, the project will not be affected by airport clear zones or airport accident potential zones.

NEPA Environmental Assessment Checklist

[Environmental Review Guide HUD CPD 782, 24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

Evaluate the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a determination of impact. **Impact Codes**: **(1)** - No impact anticipated; **(2)** - Potentially beneficial; **(3)** - Potentially adverse; **(4)** - Requires mitigation; **(5)** - Requires project modification. Note names, dates of contact, telephone numbers and page references. Attach additional material as appropriate. Note conditions or mitigation measures required.

Land Development	Code	Source or Documentation
Conformance with Comprehensive Plans and Zoning	1	Del Norte County General Plan, Section 3
Compatibility and Urban Impact	1	Ibid.
Slope	1	FIELD: 3/27/13
Erosion	1	Ibid.
Soil Suitability	1	Ibid.
Hazards and Nuisances including Site Safety	1	FIELD: 3/27/13; NPL/CERCLIS database: http://www.epa.gov/superfund/sites/cursites/index.htm
Energy Consumption	1	SITE DESIGN: Renewable energy/energy efficient components

Noise - Contribution to Community Noise Levels	1	FIELD: 3/27/13; HUD Noise Assessment Guidelines
Air Quality Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	1	CONTACT: NCUAQMD (County is in attainment) URBEMIS software modeling
Environmental Design Visual Quality - Coherence, Diversity, Compatible Use and Scale	1	FIELD: 3/27/13

Socioeconomic	Code	Source or Documentation
Demographic Character Changes	1	Sloan; BIA Labor Force Report, 2005
Displacement	1	Ibid.
Employment and Income Patterns	1	Ibid.

Community Facilities and Services	Code	Source or Documentation
Educational Facilities	1	FIELD: 3/27/13
Commercial Facilities	1	Ibid.
Health Care	1	Ibid.
Social Services	1	Ibid.
Solid Waste	1	CONTACT: Del Norte Solid Waste Management Authority (707) 465-1100
Waste Water	1	CONTACT: Fred Stockett of Klamath Community Services District one connection has been allocated
Storm Water	1	EPA's NPDES General Storm Water Discharge Permit for Construction Activities will be required

Water Supply	1	CONTACT: Fred Stockett of Klamath Community Services District; adequate capacity exists for both drinking water and fire protection
Public Safety - Police	1	CONTACT: Del Norte County Sheriff Department and the Yurok Tribe Public Safety Department
- Fire	1	CONTACT: Klamath Fire Protection District (KFPD)
- Emergency Medical	1	Ibid.
Open Space and Recreation - Open Space	1	Del Norte County General Plan, Section 5
- Recreation	1	Ibid.
- Cultural Facilities	1	Del Norte County General Plan, Section 5, pg 5-23 – 5-25
Transportation	1	Yurok Tribe Transportation Plan, pg 5-3

Natural Features		Source or Documentation
Water Resources	1	Water Quality Control Plan for the Yurok Indian Reservation
Surface Water	1	Ibid.
Unique Natural Features and Agricultural Lands	1	FIELD: 3/27/13
Vegetation and Wildlife	1	FIELD: 3/27/13

Other Factors		Source or Documentation
Flood Disaster Protection Act [Flood Insurance] [§58.6(a)]	1	The subject property falls within designations under FEMA Flood Zone classifications. All of the property is within Flood Zone "C", which is not in a 100-year flood. (FIRM Panel No. 06015C0475E, September 2008).
Coastal Barrier Resources Act/ Coastal Barrier Improvement Act [§58.6(c)]	1	California Coastal Commission's Post LCP Certification Map of July 2005, "North Coast Area." Title 21-Coastal Zoning of the Del Norte County Code
Airport Runway Clear Zone or Clear Zone Disclosure [§58.6(d)]	1	Del Norte County General Plan, Section 7, pg 7-8

Summary of Findings and Conclusions

ALTERNATIVES TO THE PROPOSED ACTION

Alternatives and Project Modifications Considered [24 CFR 58.40(e), Ref. 40 CFR 1508.9]
(Identify other reasonable courses of action that were considered and not selected, such as other sites, design modifications, or other uses of the subject site. Describe the benefits and adverse impacts to the human environment of each alternative and the reasons for rejecting it.)

Several parcels of land were examined by Tribal staff during the effort to identify acceptable areas for the proposed construction of the Culture and Knowledge Park. Initially, a parcel known as the Yurok Lodge site was considered. A design team comprised of members of the Yurok Tribal Council, Tribal staff, LACO Associates, and Jones & Jones Architects reviewed the Yurok Lodge site. This included several site visits and various types of analysis which increasingly affirmed the challenges implicit in developing the Yurok Lodge site. Summarily, these included the steeply sloping terrain which made development possible only for about 3.5 of the approximately 17 acres that comprise the parcel, the inadequate utilities currently serving the parcel, and the presence of delineated wetlands that further limited the potential for

development. Together these issues, along with a host of other more minor complications, suggested to the design team and the Yurok Tribe that the funds necessary to develop the Yurok Lodge parcel for the Yurok Culture and Knowledge Park were prohibitive and could be better invested in an alternative site. Alternative 2 is considered infeasible, and is no longer considered as a viable alternative to the proposed project. Figure 3 shows the location of the alternative site and the preferred site.

No Action Alternative [24 CFR 58.40(e)]
(Discuss the benefits and adverse impacts to the human environment of not implementing the preferred alternative).

The "No Action" alternative would maintain the status quo of the site as an underutilized parcel of land. The No Action Alternative will not link the spectacular scenery of the Yurok ancestral territory with the culture and history of the Yurok people.

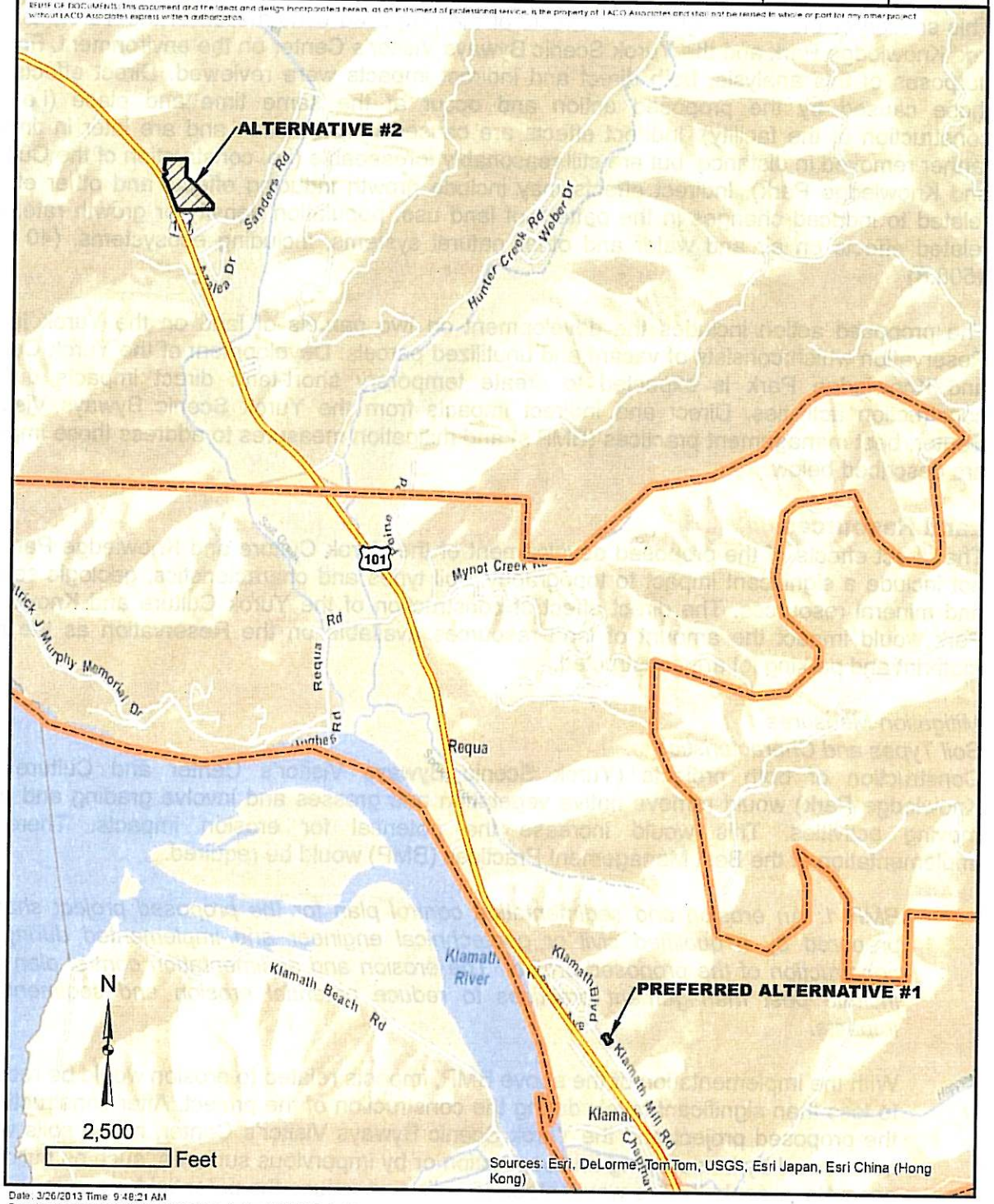
The No Action Alternative will not provide a mechanism to implement the resource protection, road safety, recreation, and facilities improvement plans outlined in the Yurok Transportation Plan. More ever, the No Action Alternative would not allow the Tribe to share its heritage to the general traveler as stated in the Preamble of the Yurok Constitution:

> *Our people have always lived on this sacred and wondrous land along the Pacific Coast and inland on the Klamath River, since the Spirit People, Woge' made things ready for us and the Creator, Kowonnoekcon Nekanupceo, placed us here. From the beginning, we have followed all the laws of the Creator, which became the whole fabric of our tribal sovereignty. In times past and now Yurok people bless the deep river, the tall redwood trees, the rocks, the mounds, and the trails. We pray for the health of all the animals, and prudently harvest and manage the great salmon runs and herds of deer and elk. We never waste and use every bit of the salmon, deer, elk, sturgeon, eels, seaweed, mussels, candlefish, otters, sea lions, seals, whales, and other ocean and river animals. We also have practiced our stewardship of the land in the prairies and forests through controlled burns that improve wildlife habitat and enhance the health and growth of the tan oak acorns, hazelnuts, pepperwood nuts, berries, grasses and bushes, all of which are used and provide materials for baskets, fabrics, and utensils.*

Figure 3 – Preferred and Alternative Action

LACO EUREKA • UKIAH • SANTA ROSA 1-800-515-5054 www.lacoassociates.com	PROJECT YUROK SCENIC BYWAYS VISITOR'S CENTER	BY JB	FIGURE
	CLIENT YUROK TRIBE	CHECK LRU	3
	LOCATION KLAMATH, CA.	DATE 3/26/13	JOB NO.
	ALTERNATIVE SITES		7105.09

RIGHT OF DOCUMENTS: This document and the ideas and design incorporated herein, as an instrument of professional service, is the property of LACO Associates and shall not be reused in whole or part for any other project without LACO Associates express written authorization.



Date: 3/26/2013 Time: 9:48:21 AM
Path: P:\7100\7105 Yurok Tribal Transportation Systems\7105.09 On-Call Engineering Services\00 WO 1 EA for YSBVC\12 Figures_Maps\GIS\7105.09 PLANNING FIGURE 5.mxd

Mitigation Measures Recommended [24 CFR 58.40(d), 40 CFR 1508.20]
(Recommend feasible ways in which the proposal or its external factors should be modified in order to minimize adverse environmental impacts and restore or enhance environmental quality.)

This section of the EA analyzes the effects of the proposed construction of the Yurok Culture and Knowledge Park and the Yurok Scenic Byways Visitor's Center on the environment. For the purposes of this analysis, both direct and indirect impacts were reviewed. Direct effects are those caused by the proposed action and occur at the same time and place (i.e. the construction of the facility). Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable (i.e. construction of the Cultural and Knowledge Park). Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. (40 CFR 1508.8)

The proposed action includes the development on two parcels of land on the Yurok Indian Reservation which consists of vacant and unutilized parcels. Development of the Yurok Culture and Knowledge Park is expected to create temporary short-term direct impacts due to construction activities. Direct and Indirect Impacts from the Yurok Scenic Byways Visitor's Center, best management practices (BMP's) and mitigation measures to address those impacts are described below.

Land Resources

The direct effects of the proposed development of the Yurok Culture and Knowledge Park will not include a significant impact to topography, soil types and characteristics, geologic setting, and mineral resources. The direct effect of construction of the Yurok Culture and Knowledge Park would impact the amount of land resources available on the Reservation as the park footprint and parking lot are constructed.

Mitigation Measures
Soil Types and Characteristics
Construction of both projects (Yurok Scenic Byways Visitor's Center and Culture and Knowledge Park) would remove native vegetation and grasses and involve grading and earth moving activities. This would increase the potential for erosion impacts. Therefore, implementation of the Best Management Practices (BMP) would be required.

> *BMP 1: An erosion and sedimentation control plan for the proposed project shall be prepared by a qualified civil or geotechnical engineer and implemented during the construction of the proposed project. The erosion and sedimentation control plan shall include best management practices to reduce potential erosion and sedimentation impacts.*
>
> With the implementation of the above BMP, impacts related to erosion would be reduced to less than significant levels during the construction of the project. After construction of the proposed project and the Yurok Scenic Byways Visitor's Center, native soils would be covered by landscaping and vegetation or by impervious surfaces, such as buildings, concrete or asphalt. This would stabilize soils and reduce the potential for erosion.

Seismic Hazards
The proposed area would be subject to ground shaking if a seismic hazard were to occur. Compliance with the Uniform Building Code and standard engineering design techniques would help to reduce potential impacts related to ground shaking. These site conditions would increase the potential for geotechnical hazards; therefore, BMPs would be required.

> *BMP 2: Prior to construction, a final geotechnical investigation shall be prepared for the proposed project. The design of the project shall incorporate the engineering recommendations from the geotechnical investigation. Recommendations may include (but are not limited to) the export of unstable soils, the use of engineering fill, foundation and retaining wall design requirements, and other related engineering design measures to lessen potential geotechnical hazards at the site.*

Mineral Resources
There are no known mineral or energy resources of local, regional, or national importance on the proposed project site. Therefore, no impacts to mineral or energy resources would occur as a result of the proposed project.

No-Action Alternative
Under the No Action Alternative, the property would remain in the current state. Existing environmental conditions on the site would remain unchanged.

Water Resources
The direct effects of the proposed action will not have an impact to water quality.

The indirect effects on water quality due to urbanization are typical of those for any industrial or commercial development. In general, urbanization has a direct impact on water resources and water quality. Urbanization introduces impervious surfaces to the landscape, including concrete, asphalt, and other building materials. This reduces the amount of pervious surfaces, which are vital for groundwater percolation and the recharge of water aquifers. In addition, urbanization reduces natural vegetation, which plays an important role in reducing erosion and sedimentation, and filtering pollutants from water as it percolates the soil. Urbanization also decreases water quality by increasing the amount of pollutants that enter waterways. Pollutants, including silt, herbicides, pesticides, fertilizers, trash, grease, oil, hydrocarbons, and heavy metals are constantly introduced to the built environment. Stormwater often carries these pollutants from streets, parking lots, and landscaped areas to urban drainage systems that flow to natural streams, rivers, and lakes. These pollutants can pose a serious threat to the water quality of the streams, rivers, and lakes, and can have a negative impact on the ecology.

The construction the Culture and Knowledge Park would involve the removal of native vegetation, grading, and earth moving activities. This would expose native soils and increase the potential for erosion and sedimentation, which could have a negative impact on stormwater runoff and off-site water bodies. In addition, construction sites can also introduce water pollutants to stormwater runoff, including paints, solvents, concrete, drywall, pesticides and fertilizers, construction debris and trash, and spilled oil, fuel, and other fluids from construction vehicles. These activities will be covered by the EPA's NPDES General Storm Water Discharge Permit for Construction Activities that the Tribe will obtain. Therefore, BMP's would be required.

BMP 3: The following BMP's shall be implemented during the construction of the proposed project site to reduce potential water quality impacts:

- *Phase grading operations to reduce disturbed areas and time of exposure. Avoid grading and excavation during wet weather.*
- *Construct diversion dikes and drainage swales to channel runoff around the construction site.*
- *Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive of unnecessary disturbances and exposure.*
- *Plant vegetation on exposed slopes or use erosion control blankets (e.g., jute matting, glass fiber or excelsior matting, mulch netting) to reduce the potential for erosion.*
- *Once grading is complete, stabilize the disturbed areas with permanent vegetation as soon as possible.*
- *Cover stockpiled soil and landscaping materials with secured plastic sheeting and divert runoff around them.*
- *Protect drainage courses, creeks, or catch basins with straw bales, silt fences, and/or temporary drainage swales.*
- *Protect storm drain inlets from sediment-laden runoff with sand bags barriers, filter fabric fences, block and gravel filters, and excavated drop inlet sediment traps.*
- *Prevent construction vehicles from tracking soil onto adjacent streets by constructing a temporary stone pad with a filter fabric underliner near the exit where dirt and mud can be washed from vehicles.*
- *Use dry-sweep methods to clean sediments from streets, driveways, and paved areas of the construction site.*
- *Maintain all construction vehicles and equipment. Inspect frequently for and repair leaks.*
- *Designate specific areas of the construction site, located well away from creeks or storm drain inlets, for auto and equipment parking and routine vehicle maintenance.*
- *Perform major maintenance, repair, and vehicle and equipment washing off site or in designated and controlled area. Clean up spills immediately.*
- *When vehicle fluids or materials such as paints, solvents, fertilizers, and other materials are spilled, cleanup immediately. Use dry cleanup techniques whenever possible.*
- *Store wet and dry building materials that have the potential to pollute runoff under cover and/or surrounded by berms when rain is forecast or during wet weather months.*
- *Cover and maintain dumpsters.*
- *Collect and properly dispose of construction debris, plant and organic material, trash, and hazardous materials as soon as possible.*
- *Plan roadwork and pavement construction to avoid stormwater pollution during wet weather months.*

With the implementation of the above BMP's measures, water quality impacts during construction would be reduced to a less than significant level.

After future development, the site could include buildings and paved surfaces, and would be landscaped with native vegetation and ground cover. This would greatly reduce the potential for water quality impacts related to erosion and sedimentation. In addition, the introduction of access roads on the proposed project site would also increase the potential for stormwater

quality impacts. Access roads would collect oil, grease, transmission and brake fluid, solvents, heavy metals, and other pollutants that are typically concentrated on surface streets. Because these pollutants are typically washed directly from impervious surface areas and are transported to storm drains, the increase of impervious surfaces on the site would result in potentially adverse water quality impacts. Therefore, BMP's specified below would be required.

> *BMP 4: The drainage plan for any future project shall include feasible post construction stormwater quality control measures. Such measures shall include any combination of the following techniques:*
>
> - *Design the proposed project to locate impervious surfaces as far away from natural drainage channels as possible and utilize vegetation and grass swales to decrease runoff velocity and filter stormwater pollutants.*
> - *Install drop inlets that channel stormwater to a sedimentation trap and then to a new detention pond. Detention ponds should be designed to allow sediments and pollutants to settle, to release runoff at pre-development levels, and to filter nutrients in the runoff by including wetland plants.*
> - *Install and regularly maintain catch basin or inlet inserts, grease/oil water separators, or media filters to capture and filter stormwater pollutants.*

With the implementation of the above BMPs, stormwater quality impacts would be considered less than significant.

No-Action Alternative
Under the No Action Alternative, the properties would remain unchanged. Existing environmental conditions on the site would remain the same.

Air Quality

The direct effects of the proposed action will not impact air quality thresholds.

For the indirect effect of the project, air quality impacts will require evaluation. The 1990 amendments to federal Clean Air Act Section 176 required the EPA to promulgate rules to ensure that federal actions conform to the appropriate State Implementation Plan (SIP). These rules, known together as the *General Conformity Rule* (40 CFR §§ 51.850-.860 and 40 CFR §§ 93.150-160), require any federal agency responsible for an action in a nonattainment or maintenance area to determine that the action is either exempt from the General Conformity Rule's requirements or positively determine that the action conforms to the applicable SIP. In addition to the roughly 30 presumptive exemptions established and available in the General Conformity Rule, an agency may establish that forecast emission rates would be less than the specified emission rate thresholds, known as *de minimis* limits. An action is exempt from a conformity determination if an applicability analysis shows that the total direct and indirect emissions from the project would be less than the applicable *de minimis* thresholds and would not be regionally significant, which are defined as representing ten percent or more of an area's emissions inventory or budget.

From the perspective of the NCUAQMD, compliance with the control measures described in BMP 5 below would constitute sufficient BMP's to reduce PM_{10} and $PM_{2.5}$ impacts to a level considered less than significant.

BMP 5: The following control measures shall be implemented during the construction of the Yurok Culture and Knowledge Park is considered to reduce construction emissions of PM_{10} and $PM_{2.5}$*:*

- *All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover, or vegetative ground cover.*
- *All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.*
- *All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.*
- *When materials are transported off-site, all materials shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of container shall be maintained*
- *All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden).Following the addition of materials to, or the removal of materials from, the surface or outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer or suppressant. Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each work day.*
- *Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.*
- *Limit traffic speeds on unpaved roads to 15 mph.*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.*
- *Suspend excavation and grading activities when winds exceed 20 mph.*
- *Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.*

With the implementation of the above measures, construction emission impacts would be considered less than significant.

No-Action Alternative
Under the No Action Alternative, the existing environmental conditions on the site would remain unchanged.

Living Resources

As a direct effect, the proposed development is not expected to impact rare or endangered plant or animal species.

An Endangered Species List was obtained from the United States Fish & Wildlife Service (USFWS) on March 22, 2013, and reviewed for habitat potential. A site review was conducted on March 27, 2013. Based on those reviews, it was determined that the site is within a developed and urbanized area.

The Yurok Tribe, as the agency involved in the approval of the project, has engaged in a consultation process with the U.S. Fish and Wildlife Service (USFWS). During this consultation,

the Yurok Tribe and the USFWS have worked together to avoid or minimize the impact on listed species and their habitat. The USFWS determined that the proposed project may affect but is not likely to adversely affect federally- listed species and the project is in compliance with Section 7 of the Endangered Species.

No-Action Alternative
Under the No Action Alternative, the existing environmental conditions on the site would remain unchanged.

Cultural Resources

A separate report entitled "A Cultural Resource Inventory for the Yurok Tribe Visitor Center" analyzed potential resources in the vicinity and recommended a "no adverse effect" determination in accordance with section 106 of the National Historic Preservation Act. The Yurok Tribal Heritage Preservation Officer signed a concurrence letter agreeing with the determination on April 2, 2013 with a copy of the letter in Appendix C.

Any additional facilities that may be constructed on the subject property will need to be assessed for potential impacts on Cultural Resources.

It is possible that unrecorded prehistoric and historic cultural resources exist in parts of the parcels that have not been disturbed

In the event of any inadvertent discovery of cultural resources during development of the building, access roads and infrastructure, all such finds shall be subject to the Yurok Tribe's Inadvertent Discovery Policy.

Protection Measures
To keep with a "No Adverse Effect" determination the following protection measures will be followed:

- Contact the THPO if any of the project details change
- The Yurok Tribe's Inadvertent Discovery Policy will be followed if Cultural Resources are encountered.

No-Action Alternative
Under the No Action Alternative, the property would not be developed and would remain unchanged.

Community Infrastructure

The Klamath Community Services District (KCSD) provides wastewater services in the project area, with exception of the Yurok Tribal offices. The system consists of a 20,000-gallon septic tank, a pressure fed line underneath U.S. 101 and three leachfields located on a 25-acre parcel west of U.S. 101.The Tribe has one connection available to the KCSD system and has allocated it to the project. KCSD also supplies water in the project area. Water is supplied by three wells. There are two primary wells and one well that serves as a backup. Only one well operates at a time. The three wells have capacities that range from 100 gallons per minute (gpm) to 250 gpm. Daily demand on the system is approximately 20,000 gallons per day (gpd) and consists mainly of individual residential users (approximately 45). KCSD will be providing domestic water to the project.

The indirect effect of development of the site involving future facilities could have an impact as the demand for community infrastructure will increase and current capacity is being reached for wastewater services.

Mitigation Measures

Fire Protection

The proposed and future facilities might increase the demand for fire protection and emergency medical services in the area. Therefore, protective measures would be required:

> *BMP 6: Future development shall be designed in compliance with the following fire safety standards:*
>
> - *All structures shall be designed in compliance with the Uniform Fire Code. Compliance with the Uniform Fire Code may require the use of fire-safe building materials.*
> - *Emergency access shall be ensured by a minimum 18-foot road or driveway width with surfaces accommodating conventional vehicles and 40,000 pound loads, grades not exceeding 16 percent, curve radii of at least 50 feet, dead ends meeting maximum length requirements with turnouts and turnarounds, and roadway structures and gate entrances that do not obstruct clear passage of authorized vehicles.*
> - *Signing and building numbering shall facilitate locating a fire and avoiding delays in response times by being sufficiently visible, non-duplicative, and indicative of location and any traffic access limitations.*
> - *Emergency water sources shall be available and accessible in adequate quantities to combat wildfire with labeled hydrants meeting uniform specifications.*
> - *Flammable vegetation shall not be planted adjacent to structures and in the general vicinity of the development. Fuel modification practices shall be practiced to reduce the volume and density of flammable vegetation on the proposed project site.*

Law Enforcement

The project will not increase the demand for law enforcement services in the area.

Emergency Medical Services

No impacts to emergency medical services would likely occur as a result of the proposed project or any future development.

Schools

The project is not anticipated to result in an increase in the population of the area. Therefore, no impacts to schools would likely occur.

Solid Waste Disposal

The proposed project would not substantially increase the amount of solid waste generated at the proposed project site and disposed of at the Dry Creek Landfill, located near Medford, Oregon. Therefore, no significant impacts to the capacity of regional landfills would likely occur as a result of the proposed project.

Gas & Electric Services

No impacts to gas and electrical services would likely occur as a result of the project or any future development.

Communications Service
There exists adequate capacity to serve any future development.

No-Action Alternative
Under the No Action Alternative, the properties would not be developed existing environmental conditions on the site would remain unchanged.

Transportation Networks
A Traffic Impact Study Report was prepared for the Hotel/Casino proposed for construction in April 2013. The TIS determined that the Level of Service (LOS) analysis for the daily peak-hour at the project intersection with U.S. 101 will remain within acceptable limit of C for existing-plus-proposed project traffic volumes and concluding that there is only a slight increase in average delay at the site, with the largest increase in delay totaling 1.5 seconds for the westbound traffic. Since the proposed special events at the cultural and knowledge park will be seasonal and occasional in nature, no impacts to the circulation of the area will be realized.

BMP 7: The following controls will be initiated as part of the construction of the project.
- Traffic controls will be required during construction of the facility.

No-Action Alternative
Under the No Action Alternative, the project would not be developed. Existing environmental conditions on the site would remain unchanged.

Sound and Noise
The noise analysis completed for this environmental assessment indicates that the existing combined noise level is 67.7374 DNL. With the project, the DNL will increase by 0.0275 which is insignificant.

However, the Tribe believes that a sound wall built along the U.S. 101 portion of the parcel will be constructed to enhance the park and learning experience of the Yurok Culture and Knowledge Park as well as provide visual screening.

Future development may generate indirect effects such as minor construction-level or post-operational noise; however, no new significant sensitive receptors will be created or impacted.

No-Action Alternative
Under the No Action Alternative, the properties would not be developed. Existing environmental conditions on the site would remain unchanged.

Aesthetic Value
Prominent visual features on the project site would remain the same, and would not be impacted. As a result, no significant impacts to the existing aesthetic value of the subject parcels would occur as a result of the proposed conveyance.

Attitudes, Expectations, and Cultural Values
Tribal Members are very supportive of the proposed project as area means of strengthening cultural awareness and knowledge. Because the proposed project celebrates the Yurok culture, the lifestyle and cultural values of the Tribal community is not anticipated to negatively change

as a result of the proposed action. No significant impacts to the attitudes, expectations, and cultural values of the Tribe would occur as a result of the proposed project.

No-Action Alternative
Under the No Action Alternative, the properties would not be developed. Existing attitudes, expectations, and cultural values of the Tribe would remain unchanged.

Socioeconomic Impacts

Tribal Members are very supportive of the proposed project as a area means of strengthening cultural awareness and knowledge. However, the proposed project will not have any significant impact on the socioeconomic conditions of the Tribe as a whole as the number of employment positions within the community will not be significantly increased.

No-Action Alternative
Under the No Action Alternative, the properties would not be developed. Existing socioeconomic conditions on the site would remain unchanged.

Coastal Zone Management

As the project is within the coastal zone, the Tribe will comply with the Code requirements of Del Norte County under the Local Coastal Program (LCP). The proposed project is an eligible activity and principal permitted use as a commercial recreation facility. According to Title 21, Chapter 44, of the Del Norte County Codes "In all districts, in connection with every industrial, business, institutional, recreational, residential, or any other use, there shall be provided, at the time any building or structure is erected, or is enlarged, or increased in capacity, off-street parking spaces for automobiles in accordance with the requirements set forth in this chapter."

The Tribe will comply with all building and set-back requirements of the LCP, including parking, and will submit an application to Del Norte County for a Coastal Development Permit and a Coastal Grading Permit.

Environmental Justice

Environmental Justice encompasses a broad range of impacts covered by NEPA, including impacts on the natural and physical environment and related social, cultural, and economic effects. Environmental Justice concerns may arise from impacts to such things as human health on minority populations, low-income populations, and Indian Tribes. Executive Order 12898 (Environmental Justice, 59 Fed. Reg. 7629 [1994]) requires each federal agency to achieve environmental justice by addressing "disproportionately high and adverse human health and environmental effects on minority and low-income populations."

The question of whether a proposed project raises environmental justice issues is highly sensitive to the history or circumstances of a particular community or population, the particular type of environmental or human health impact, and the nature of the proposed project itself. There is no standardized methodology for identification or analysis of Environmental Justice issues.

The demographics of the affected area have been examined to determine whether minority populations, low-income populations, or Indian tribes are present in the area impacted by the proposed project. Based on the demographics of the area, a determination was made that the project will not cause a disproportionately high or adverse impact on human health or environmental effects on minority populations, low-income populations, or the Tribe.

There is no indication that the development of the property would impact a higher minority population component or low-income population component than the general population of the surrounding area.

No-Action Alternative
Under the No Action Alternative, the properties would not be developed and would be unchanged. Existing environmental conditions on the site would remain unchanged.

Cumulative Impacts

NEPA includes cumulative impacts within the scope of impacts to be considered in an environmental document. The regulations define cumulative impacts as "the impacts...which result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions."

The proposed action was analyzed to determine whether less than significant environmental effects that would be experienced locally could become significant when considered in combination with other reasonably foreseeable future projects in the project area. NEPA defines reasonably foreseeable future projects as projects in progress or that may occur in the near future. Impact issues considered in this context include aesthetics, takings of agricultural land, impacts to biological resources, impacts to cultural resources, contributions to incompatible development, and environmental justice. The cumulative impacts of incorporating the Yurok Scenic Byways Visitors Center onto the project site in 2013 have been analyzed as an incremental impact.

Based on the analyses it was determined that the following environmental resources would not contribute to existing or future cumulative impacts by the proposed action: topography, geology, soils, wetlands, cultural resources, climate, biological resources, and visual resources

Traffic, air quality, noise, land use, socioeconomics, and environmental justice are resources that could have cumulative impacts, although environmental justice and socioeconomic impacts were determined to be beneficial in nature, both locally and region-wide. Potential impacts associated with air quality, noise, and traffic would be short- and long-term in nature. However, proposed mitigation measures incorporated into future design specifications would serve to reduce impacts to levels below significance.

Additional Studies Performed

None

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]

Data Sources:

"59 IAM ", U.S. Department of Interior, Bureau of Indian Affairs, 2012.

"A California Flora Supplement", University of California Press, 1968.

"A Field Guide to Pacific States Wildflowers", Theodore F. Niehaus AND Charles L. Ripper, February, 1992.

"A Field Guide to the Mammals", William Henry Burt and Richard Philip Grossenheider, 1976.

"California Flood Management: An Evaluation of Flood Damage Prevention Programs", Bulletin 199, California Department of Water Resources, 1978.

"California Patterns: A Geographical and Historical Atlas", David Hornbeck, Phillip Kane, David L. Fuller, Mayfield Publishing Company, 1993.

"***California's Groundwater – Bulletin 118***", California Department of Water Resources, Update 2003.

"Del Norte County General Plan", Del Norte County, 2003. Available Online at: http://www.co.del-norte.ca.us/index.php?option=com_docman&Itemid=255, Accessed April, 2013.

"Districts of California", State of California, Division of Mines and Geology, 1970.

"Earthquakes", Bruce A. Bolt, Copyright 1978, 1988 by W.H. Freeman and Company.

"Enhancing Cultural Resources Management and Improving Tribal Involvement in the NEPA Process through the Development of a Tribal Environmental Policy Act", Kathleen M. Sloan, Dissertation for Doctor of Philosophy in Environmental Science, 2007.

"Ethnographic Riverscape: Regulatory Analysis". Yurok Tribe Heritage Preservation Office in conjunction with FERC Project No. 2082, Thomas Gates. 2003.

"Fault-Rupture Hazard Zones in California, Earl W. Hart and William A. Bryant, 1997.

"Geologic Map of California", Olaf P. Jenkins Edition, Fresno Sheet, 1965.

"Handbook of the Indians of California", A. L. Kroeber, Dover Publications, Inc., 1976.

"Highway Traffic Noise: Analysis and Abatement Guidance", Federal Highway Administration (FHWA-A-HEP-10-025), December 2011.

"Inventory of Rare and Endangered Vascular Plants of California", California Native Plant Society, 1980.

"National Environmental Policy Act; Revising Implementing Procedures", U.S. Department of Interior, FR 10438/Vol. 53, No. 62, March 31, 1988.

"Preliminary Fault Activity of California", Jennings, Department of Mining and Geology OFR 92-03, 1992.

"Siting of HUD-Assisted Projects Near Hazardous Facilities", U.S. Department of Housing and Urban Development, No Date.

"The Noise Guidebook", U.S. Department of Housing and Urban Development, No Date.

"The North American Breeding Bird Survey Results and Analysis, Version 96.4", Sauer, J. R., J. E. Hines, G. Gough, I. Thomas, and B. G. Peterjohn Patuxent Wildlife Research Center, Laurel, MD, 1997.

"Traffic Impact Study, Yurok Visitor's Center and Cultural Knowledge Park Project", LACO Associates, February, 2012.

"Water Quality Control Plan for the Yurok Indian Reservation" Yurok Tribe Environmental Program, August 2004.

"Wetland Values: Concepts and Methods for Wetlands Evaluation", U.S. Army Corps of Engineers, February 1979.

Agencies and Persons Consulted:

The Hon, Thomas O'Rourke
Chairman
Yurok Tribe
P.O. Box 1027
Klamath, California 95548

Robert McConnell, Tribal Historic Preservation Officer
Yurok Tribe
P.O. Box 1027
Klamath, California 95548

National Marine Fisheries Service
Arcata Field Office
1655 Heindon Road
Arcata, California 95521

Rosie Clayburn, Cultural Resources
Yurok Tribe
P.O. Box 1027
Klamath, California 95548

US Fish & Wildlife Services
Arcata Field Office
1655 Heindon Road
Arcata, California 95521

Appendix
A – THPO Concurrence Letter

YUROK TRIBE

190 Klamath Boulevard • Post Office Box 1027 • Klamath, CA 95548
Phone: (707) 482-1350 • Fax: (707) 482-1377

Yurok Tribe
P.O. Box 1027
Klamath, CA 95548

Robert McConnell
P.O. Box 196, Highway 96
Hoopa, CA 95546

April 2, 2013

Dear Mr. McConnell:

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR 800, "Protection of Historic Properties," and as authorized by the U.S. Department of Housing and Urban Development (HUD) as an applicant for an Indian Community Development Block Grant for a project titled "Yurok Cultural and Knowledge Park" we are seeking to finalize our consultation with your office regarding the above mentioned project.

Based on our initial research, we have made the required determinations and findings, which we now ask you to review. We are seeking concurrence of a **"No Adverse Effect"** determination.

The proposed Center is located within the area of the Klamath Townsite. In addition to consultation with the THPO, the Yurok Tribe's Archaeologist, Rosie Clayburn also conducted a historic properties record search through the Yurok Tribal Inventory on November April 2, 2013, which produced no records. In addition to the historic properties record search, Ms. Clayburn consulted with elders from the Yurok Tribe Culture Committee on the area for the Yurok Tribal Casino Project. The results of the consultation determined that there are the potential for cultural resources in the vicinity associated with the pre-contact Yurok occupation as well as the historic town of Klamath. However these deposits are under a layer of fill placed on the area after the 1964 flood, therefore a separate report Titled "A Cultural Resource Inventory for the Yurok Visitor Center, Klamath Townsite Location" recommends a determination of "*No Adverse Effect*" if the following measures are followed:

- Contact the THPO if any of the project details change
- Follow the Yurok Tribe's Inadvertent Discovery Policy if cultural resources are encountered.

If you concur with the findings in this submission, please sign and date on the line below and return as noted above. If you do not concur, we request that you express your concerns and objections clearly in writing to the Yurok Tribe so we may continue the consultation process as needed. Please also indicate in your non-concurrence letter if there are other sources of information that should be checked, and if there are other parties, tribes, or members of the public you believe should be included in the consultation process. Thank you for your prompt attention to this matter.

Sincerely,

Thomas P. O'Rourke, Chair
Yurok Tribal Council

CONCURRENCE: Robert B. McCornell 4/2/13
Tribal Historic Preservation Officer Date