

US EPA ARCHIVE DOCUMENT

**Environmental Assessment**

**Wastewater Infrastructure Construction – Phase II**

**Smith River Rancheria, Del Norte County, California**

(2009 EPA Appropriation; R-9 Tracking Number XP-09-100)

**February 2010**

**Prepared by:**



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**Prepared for:**



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**Environmental Assessment  
for WASTEWATER INFRASTRUCTURE CONSTRUCTION –  
PHASE II**

**Smith River Rancheria**

(2009 EPA Appropriation; R-9 Tracking Number XP-09-100)

**A: Proposed Project and Funding Status**

**1. Project Purpose and Need (specify which category from “1a” to “1e” your project fits)**

**a) Water Quality /Water Quantity Problems**

n/a

**b) Public Health Concerns**

n/a

**c) Inadequate System or System Components**

The Smith River Rancheria recently completed its new wastewater treatment facility (WWTF) at 250 North Indian Road, Smith River, California. The Smith River Rancheria is proposing to extend the collection system along South Indian Road to serve the existing and future needs of the Rancheria and community of Smith River.

**d) More Stringent Effluent (WW only; Existing Effluent Limitations, Proposed Effluent Limitations)**

n/a

**e) Other (specify)**

n/a

**2. Project Description**

**a) Project Summary**

The proposed project is located in the town of Smith River, in northwestern Del Norte County (Figure 1). The proposed project consists of a collection system that will collect wastewater from multiple locations on or near South Indian Road, and using two pump stations and a forcemain, will pump wastewater to the newly constructed SRR wastewater treatment facility located behind the Lucky 7 Fuel Mart. From the treatment facility, the collection system will extend west on North Indian Road, cross under Highway 101, and continue west and then south down South Indian Road. The collection system will serve the Howonquet Community Hall, the UIHS Health Clinic, residential units, and a new senior housing project currently under construction (see Figure 2a and 2b).

The proposed system extension will entail the installation of approximately 3,400 feet of 3-inch forcemain, 5,200 feet of 6-inch gravity line, 2 lift stations, and stub-outs for at least 40 lateral service lines, and associated appurtenances such as manholes, cleanouts, electrical telemetry, and generators.

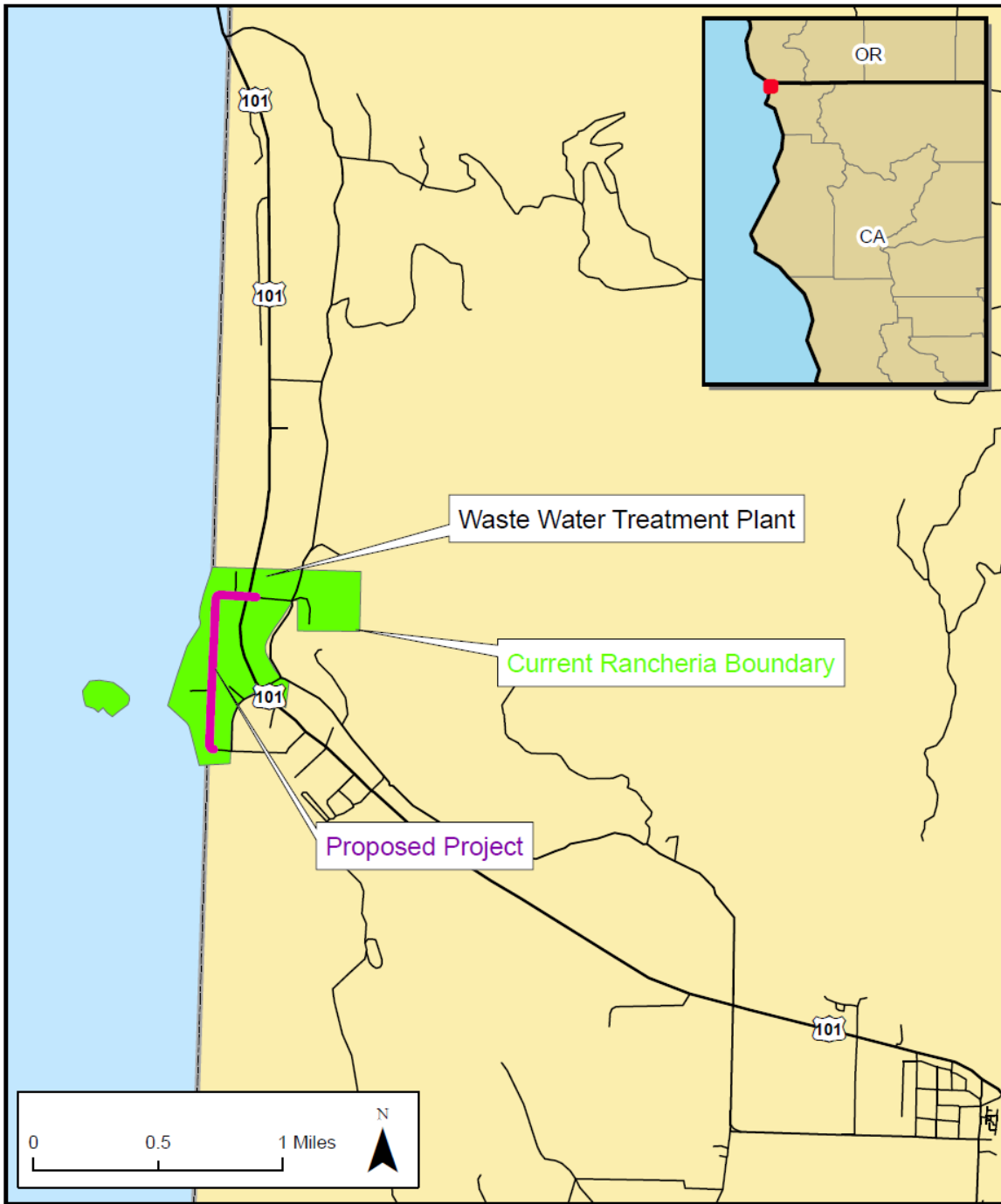


Figure 1. Project Location



Figure 2a. Proposed Project Layout, southern portion



Figure 2b. Proposed Project Layout, northern portion

SRR recently completed its new wastewater treatment facility (WWTF) in April 2009, and the WWTF is currently operational. The WWTF was designed to treat an average daily flow of 25,000 gallons per day (gpd), with the ability to expand to 50,000 gpd in the future with the addition of a second membrane bioreactor (MBR). However, without an adequate collection system in place to deliver the design flows, recirculation is needed to maintain hydraulic loading. In addition, the lack of organic loadings to the WWTF is requiring excessive oversight and maintenance. The WWTF is currently treating approximately 3,200-3,500 gpd (13% of capacity) of wastewater from the Lucky 7

Casino, the Lucky 7 Fuel Mart, and the House of Howonquet Restaurant. The WWTF has considerable excess capacity to serve additional residences and businesses with SRR and the surrounding community, and the WWTF lacks the organic loading needed for an efficient treatment facility.

**b) Planning Area Description (including a map with facilities)**

The Rancheria landholdings are a checkerboard configuration totaling 521 acres split between 45 different parcels with various trust and fee holdings. The Tribe operates a number of different facilities on Rancheria lands including administrative offices, the Lucky 7 Casino, Lucky 7 Fuel Mart, Howonquet Community Center / Headstart and Day Care Facility, elder housing, rental units, United Indian Health Services, and Community and Family Services.

The roads proposed to receive the waste water collection facilities are access roads to housing developments, UIHS center, and Howonquet Community Center. The Project Area’s roads are totally within the Smith River Rancheria boundaries (Figure 2a and 2b); Del Norte County maintains these roads.

**c) Planning Period (time period)**

<b>Task</b>	<b>Time (Days)</b>
FONSI circulation ends, NEPA compliance complete	0
RFP for Design Services prepared by Tribe	10
RFP circulation	20
Design Services Contract awarded	146
Survey	10
Geotechnical analysis	7
50% Plans and specifications	36
Design review	3
90% Plans and specifications	27
Design review	3
100% Plans and specifications completed and certified	28
RFP for construction prepared by consultant	10
RFP approved by Tribe	3
RFP circulated for 30 days	30
Notice of Award	4
Contract Awarded to contractor	120
Notice to Proceed	1
Construction of Phase 1 – Elder Housing Site	25
Construction of Phase 2 – Upper South Indian Road	60
Construction of Phase 3 – Lower South Indian Road	60
Notice of Completion issued	1
Project review & closeout	3

**d) Description of Project Construction Phases**

The first phase will consist of completing NEPA compliance. After NEPA compliance and funding from EPA, the design services contract RFP will be let out for bid. After the design services contract is awarded, the project will commence with survey and geotechnical analyses. Plans and specifications will then be drawn up, reviewed, and

certified. Once the plans and specs have been completed, the construction contract RFP will be let out for bid. Once the contractor is selected, the construction will begin. The first construction phase will be installation of the collection system leading to the Elder Housing site. The second phase will be installation of the collection system leading at upper South Indian Road. The third phase will be installation of the collection system leading at lower South Indian Road. The last phase will be project review and closeout.

**e) Owner and Operator of the Facilities**

The Smith River Rancheria is the owner and operator of the existing waste water treatment facilities and the proposed collection system.

**f) Location of the Facilities (GPS coordinates)**

The location of the new WWTF is directly north of the Lucky 7 Fuel Mart at 41 deg. 57 min. 27.98 sec. North, 124 deg. 12 min. 12.54 sec. West. The proposed collection system will commence in front of the Lucky 7 Fuel Mart on North Indian Road at 41 deg. 57 min. 24.95 sec. North, 124 deg. 12 min. 12.52 sec. West, and will terminate near the intersection of South Indian Road and Mouth of Smith River Road at 44 deg. 46 min. 52.90 sec. North, 124 deg. 23 min. 23.24 sec. West.

**g) 8.5 X 11, B&W Project Map Suitable for Distribution**

See Figures 2a and 2b.

**3. Relevant Design Parameters**

**a) Description of Major Unit Processes**

The Smith River region relies primarily upon private septic tank/leachfield systems. However, the Rancheria operates a private wastewater treatment facility; the existing connected flows on the Rancheria are currently around 3,200 gallons per day. The Tribe has recently finished construction of a new wastewater treatment facility. This new immersed membrane bioreactor tertiary treatment facility is located adjacent to the Lucky 7 Fuel Mart, and will provide for both the current and long-term wastewater needs of the Tribe, according to the Rancheria Master Plan. The wastewater treatment facility has been designed and built as a modular system that can expand up to an ultimate capacity of 50,000 gallons per day and a peakflow 100,000 gallons per day. The collection system will accommodate future expansion in accordance with the Rancheria Master Plan (Smith River Rancheria 2008; Winzler & Kelly 2009).

**b) Flow Diagram**

See Figures 3a and 3b.





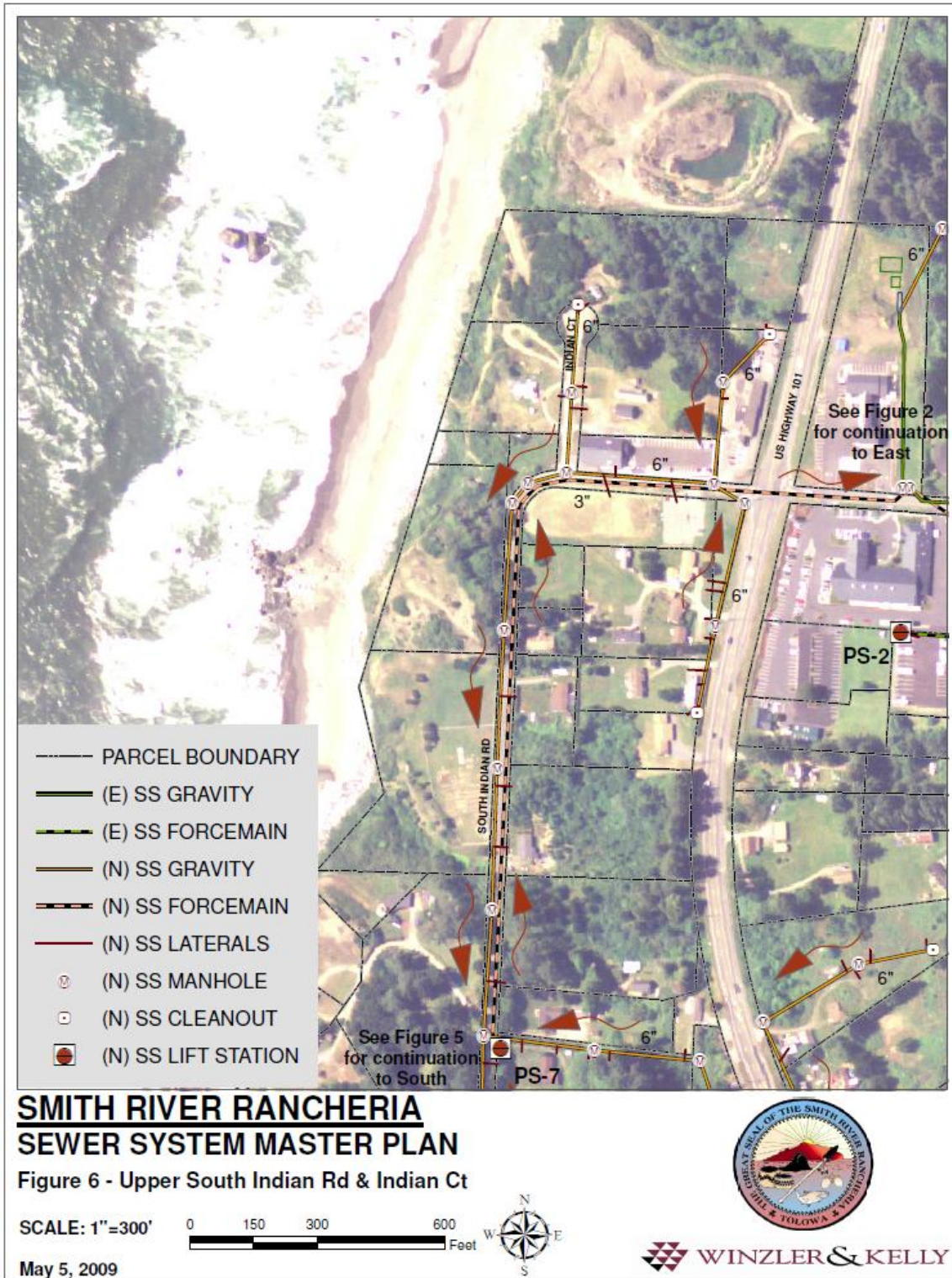


Figure 3b. Flow diagram, northern portion.

### c) Sewer/Water Pipe Lengths, Sizes, and Locations

A 6" gravity line will start on the west side of Highway 101 on South Indian Road. The 6" gravity line will continue south along South Indian Road. Flows will be sent to a pump station (PS-7). A 6" line running east (Tee into 6" line on South Indian Road) will be addressing the needs of the new Elder Housing facility and connected to the 6" line between Prince Island Court and PS-7. Note that between Prince Island Court and PS-7 the gravity line runs north. South of Prince Island Court, another 6" gravity line will run south to a pump station (PS-5). From PS-5 via a 3" Force Main, the wastewater will be pumped to the manhole that is at the intersection of Prince Island Ct. and South Indian Road. From that manhole the gravity line will flow the wastewater toward the north into PS-7. A 3" Force Main will then run north and then east on South Indian Road from PS-7 to Highway 101, proceed east under Highway 101 to North Indian; the Force Main will then run east along North Indian Road to an existing manhole located on Tribal Property (the southeast corner of the Lucky 7 Fuel Mart). This existing manhole then flows via a 6" gravity line into the Wastewater Treatment Facility.

The following appurtenances, at a minimum, will be required: 12 manholes, one clean out, two pump stations, stub-outs for a future 3" Force Main down Prince Island Court, 6" gravity line connection at the Elder Housing site, 6" future stub out/connection to a line running east on the Ray Property, 6" stub out for a gravity line running north down Indian Court, 6" stub out for line running to the United Indian Health Services center; stub out for future Community Family Services building; and up to 40 other stub-outs for future residential hookups along South Indian Road.

### d) Basic Design Criteria

There should not be any significant trenching necessary as everything is planned for directional drilling. A little trenching, perhaps 30' – 50' on South Indian Road just south of Prince Island Ct., may be necessary because the Tribe's contractor ran into bedrock when the Tribe replaced the water line. Normally on the directional drilling the bore pits are about 300' apart and simply cause a cut out of existing pavement which can be repaved/repared when construction is complete.

There presently exists water lines, at 3' – 3.5' in depth, on both sides of North and South Indian Road (one belongs to the Tribe and one belongs to SRCSD). The gravity and force mains will most likely need to be run down the center of the road in order to achieve the 10' separation from drinking water lines. As a part of this project, stub-outs laterals (service connections) will be run to each property along the system. The Tribe has plans to re-pave North and South Indian Road with curb and gutter after the project. Any disturbance from construction to the project area should be kept within the road edge of pavement on either side throughout the project (except where the line runs on the east side of Highway 101 where it will be on Tribal trust property (Lucky 7 Fuel Mart). There may be some small ground disturbance for lateral/service connections and stub-outs.

The proposed project will be constructed according to County ordinances, as well as the latest edition of the Uniform Building Code.

**4. Project Cost**

**a) Proposed Total Project Cost**

The total project cost is approximately \$1,588,000, according to the following tabular estimate:

Item	Description	Budget
EID		
	Complete EID and submit to EPA for NEPA compliance	\$38,225
Upper South Indian Road		
	Phase 1	
	Subtotal	\$692,620
	Contingency (10%)	\$69,262
	Design and Construction Management (10%)	\$76,188
	Total	\$838,070
Elder Housing Site		
	Phase 2	
	Subtotal	\$151,000
	Contingency (10%)	\$15,100
	Design and Construction Management (10%)	\$16,610
	Total	\$182,710
Lower South Indian Road		
	Phase 3	\$330,240
	Subtotal	\$33,024
	Contingency (10%)	\$36,326
	Design and Construction Management (10%)	\$399,590
	Total	
TOTAL		
	Phases 1, 2, 3	\$1,420,371
	TERO tax @ 2.5%	\$39,247
	Project Management	\$50,928
	EID Cost	\$38,225
<b>TOTAL ESTIMATE</b>		<b>\$1,588,000</b>

**b) Portion of Total Project Cost Funded by EPA**

The total project cost is \$1,587,273, with \$714,273 (45%) being provided by NAHASDA and Tribal resources, and \$873,000 (55%) requested from EPA.

**c) List of Amount, Sources, and Status of All Funding Sources**

The amount, sources and status of funding sources is as follows:

	EPA	NAHASDA/Tribe	Totals
<b>TOTAL</b>	<b>\$873,000</b>	<b>\$714,273</b>	<b>\$1,587,273</b>

**B: Existing Environment As Pertains to Project**

**1. Public Health Problems Due to Water Quality**

No specific public health problems have been reported. See next section for a discussion of regional water quality problems.

**2. Water Quality Problems, Fish Kills, etc**

Septic tanks/leachfields are the conventional solution for decentralized wastewater treatment at residences and larger buildings in Indian Country. Conventional onsite wastewater treatment systems often require a lot of space to work properly and there are issues with treatment efficacy for nutrients and pathogens. These concerns about onsite wastewater treatment systems have led to an increased use of wastewater treatment alternatives (e.g., sequencing batch reactors) that use less land and produce effluent of higher quality. However, such effluents still contain high nutrient levels, and such nutrient pollution is not fully attenuated in receiving leachfields. Regional groundwater contamination often occurs as a cumulative impact. To address the issues with conventional treatment solutions, SRR went to extraordinary lengths to build a much more expensive treatment system that employs membrane bioreactors (MBRs). MBRs are suspended growth activated sludge treatment systems that rely upon membrane equipment for solids separation. MBR technology is superior because it removes additional nutrients and bacteria from the effluent. The discharge of higher-quality treated wastewater will result in beneficial impacts upon receiving waters.

No fish kills have been reported in the Project Area or adjacent waterbodies.

### **3. Surface & Groundwater Hydrology**

Rainfall averages 67 inches annually, making Crescent City one of the wettest places in California. The project area lies within the North Coast Hydrologic Region, Smith River Hydrologic Unit, Lower Smith River, and Smith River Plain subunit (Figure 4). The Smith River is designated a Wild and Scenic River; water quality is excellent (North Coast Regional Water Quality Control Board 2007; USEPA 2010). Neither the Smith River watershed nor the Lopez Creek watershed is listed as an impaired waterbody under the Clean Water Act Section 303(d) (USEPA 2010). The Project Area is not located inside a 100-year or 500-year flood zone; the Project Area is designated Zone C on the Flood Insurance Rate Map of the region by the Federal Emergency Management Agency (FEMA).

The project area contains no major streams. The nearest major stream—Lopez Creek—is located about one-quarter mile north of the project area, the Pacific Ocean is one block to the west, and the Smith River estuary is a block to the south (Figure 4). One minor drainage swale crosses under South Indian Road. No wetlands occur within the project area.

The Project Area is located within the Smith River Groundwater Basin; groundwater is relatively shallow, and the quality is excellent (Department of Water Resources 2008). There are no known groundwater management plans, groundwater ordinances, or basin adjudications for this basin. Surface-influenced shallow groundwater is the primary water supply for the region, and is the sole source for the Smith River Community Services District and the tribal water supply system. The California Department of Water Resources reports that water quality in the basin is generally good, and that there are no long-term trends in groundwater levels (California Department of Water Resources 2004). A review of the 2007 data from the Smith River Community Services District safe drinking water information indicates no health-based violations, with the exception

of elevated levels of copper in some households in the district which is easily mitigated (SRCSD 2008).



Figure 4. USGS 7.5-min Topographic map (Smith River) of the vicinity

**4. Drinking Water Sources and Supply**

The SRR Natural Resource Department is currently developing a Water Master Plan to provide complete water supply services to the entire Rancheria; this Water Master Plan will include a source water protection plan. The Rancheria is served by two different water systems that are capable of serving the future growth of the Tribe, as specified in

the Rancheria Master Plan. The primary system is the Howonquet Community Water System—a tribally-operated system supplied via one groundwater well and an infiltration gallery in Lopez Creek that currently supplies approximately 50 service connections. The remainder of Rancheria residents and the surrounding community are currently served by the Smith River Community Services District (SRCSD). The County (1983) estimates that the SRCSD water demand is at half capacity (550 connections out of about 1,000). No impacts to water supply are expected.

### **5. Physiography, Topography, Geology & Soils**

The Smith River region is situated on a coastal terrace. The climate of the Crescent City area is characterized by cool temperatures and frequent overcast conditions and precipitation. Temperatures in the Crescent City area range from an annual mean high of 66 degrees Fahrenheit (°F) in September to an annual mean low of 40°F in January. Ground surface along the proposed alignment slopes west and southwest, from about 100 feet above sea level east of Highway 101 to about 60 feet along the west side of North Indian Road, to about 40 feet near the intersection of South Indian Road with Mouth of Smith River Road. Immediately south of Prince Island Court, a 500 foot-long section of cut-slope is present along the east side of South Indian Road, where the rock outcrop Sinestia rises to 222 feet (Figure 4). The project area has experienced some historic grading activity. The proposed project does not involve any changes to existing physiography or topography, so no impacts to physiography or topography are expected.

The Smith River region's geologic context is an elevated marine platform set against the mountain belts of the Northern Coastal Range and the Klamath Mountains beyond. The coastal lowlands consist of marine sediments of the Pliocene-aged Saint George Formation and riverine/nearshore marine deposits of the Quaternary-aged Battery Formation; sandstones and shales of the Franciscan Complex are found underneath these marine deposits and constitute the bulk of the surrounding coastal mountains.

The Local Coastal Plan summarizes stability hazards in the Smith River area as follows:

*No slope stability problems are anticipated beneath the developed portions of the town, except for the possibility of undercutting of banks along the drainageways...The possibility of liquefaction beneath the town of Smith River, or immediate environs, is considered minimal...The hills, although liable to landsliding form seismic shaking, are not subject to liquefaction* (pp. 216-217).

Since the proposed development area is not located in a highly sloped area, slope movements are not anticipated to be a factor.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Seismic Hazards Mapping Act, passed in 1990, addresses other earthquake-related hazards, including liquefaction and seismically induced landslides. According to the California Geological Survey (2008a), Del Norte County is not listed as an affected county under these Acts. The site is not located within an Alquist-Priolo special study zone as classified by California Geological Survey. Del Norte County is not listed as an affected county under the Seismic Hazards Zonation Program (California Geological Survey 2008b). However,

there is a fair probability of seismic event in this region in the future, according to the Uniform California Earthquake Rupture Forecast by the 2007 Working Group on California Earthquake Probabilities (California Geological Survey 2008c)(Figure 3-1). In 1992, a series of 3 strong earthquakes shook the Cape Mendocino area.

Numerous tsunamis have hit the northern coast of California over the last century (Del Norte County 1983, 2008). In 1964, an earthquake of magnitude 8.8 on the Richter Scale focused on the Kenai Peninsula, Alaska, and triggered a tsunami that inundated much of Crescent City; the devastation was sufficient for former President Johnson to declare the city a disaster area.

The County's General Plan has a Seismic Safety and Safety Element that requires the inventory of natural hazard areas of the County, and identifies policies and programs to mitigate the hazards. The Project Area would be located in an area that would be subject to ground shaking and potential tsunami hazards. Del Norte County has developed a tsunami warning system in conjunction with the National Oceanic and Atmospheric Administration and the State Office of Emergency Services. In addition, the Smith River Rancheria has its own siren warning system and has its own Emergency Operations Plan that is compliant with the Standardized Emergency Management System / National Incident Management System. Because the County is implementing all possible policies and programs to mitigate natural hazards, and because earthquakes and tsunamis occur infrequently in the County, the earthquake hazard and tsunami hazards are considered an acceptable risk. The County has adopted the Uniform Building Code and enforces the grading provisions therein, which utilizes the most current seismic design criteria for new public buildings. The Proposed Project would be constructed in accordance with the seismic requirements of the Uniform Building Code, which would reduce potential seismic impacts to a less than significant level.

Blackburn Consulting completed a Geotechnical Report for the project site on May 28, 2008. Their findings are that the surface soils at the project site are predominantly Pleistocene age marine terrace deposits associated with the Battery Formation consisting of sand and clay beds with interbedded gravel. The Battery Formation unconformably overlies basement rocks of the Cretaceous age Franciscan complex. The basement rock is comprised of sandstone, shale, and conglomerate east of Ocean View Drive, and greenstone and chert in the southern portion of the project area in the vicinity of the knoll located directly south of Prince Island Court. The main types of soil on the proposed project site are Arcata loam and Hookton Loam.

#### **6. Federally Endangered & Threatened Species**

The Project Area is located in a particular geographic area of vegetation types – the North Coast Ranges Subregion of the Northwestern California Region of the California Floristic Province (Hickman 1993). The regional climate zone is “17 - Marine Effects in Northern California,” characterized by mild and wet winters, usually without any frost, and cool summers with frequent fog or wind (Brenzel 2008). The Project Area appears to have been previously graded, and historic developments include public and private roads, residential housing, gardening, and ranching.



Biological assessments by Winzler & Kelly (2008) of the Project Area were conducted on September 20, 2007, and again on June 3, 2008, which included rare plant surveys (Winzler & Kelly 2008). No special-status habitats or special-status species were detected in the Project Area (Winzler & Kelly 2008). Outside of the Project Area, approximately 0.5 miles north of the North Indian Road/Ocean View Drive intersection, a population of coast checkerbloom (*Sidalcea oregana* ssp. *eximia*) was located (Winzler & Kelly 2008).

Senior botanist Gary Lester describes the plant species and communities in the Project Area as, “*Himalaya berry* (*Rubus discolor*), *coyote brush* (*Baccaris pilularis*), *yarrow* (*Achillea millefolium*), *English plantain* (*Plantago lanceolata*), *velvet grass* (*Holcus lanatus*), *bush lupine* (*Lupinus sp.*), *rescue grass* (*Bromus catharticus*), and *hedgehog dogtail* (*Cynosurus echinatus*). *Woody vegetation included scattered trees of Beach pine* (*Pinus contorta*) and *scattered red alders* (*Alnus rubra*). *A majority portion of the site is vegetated by mowed grass and residential landscaping.*” (p. 2, Winzler & Kelly 2008).

Both of the previous biological assessments determined that no regionally-occurring special-status species had a high probability of occurrence; both assessments also concluded that no federally-listed species, or otherwise special-status species, would be adversely affected.

Consulting biologist Dr. G. O. Graening (Department of Biological Sciences, University of California at Sacramento) conducted reconnaissance-level field surveys of portions of the Project Area at various times on January 6 and 7, 2009, and again on August 20 and 21, 2009, including dawn bird surveys (Natural Investigations Co. 2009a,b). Results of these assessments included the following findings: very few animals were present within the Project Area; no bird nests were detected; no special-status habitats were detected; no federally-listed (or otherwise special-status) plant or animal species were detected.

As a follow-up to the previous assessments, Dr. Graening performed a habitat assessment of the Project Area. Only disturbed habitat types are present within the Project Area. These can be classified as disturbed or converted natural habitats that are now either in a ruderal state (disturbed and weedy), mowed, graded, or urbanized with asphalt pavement, landscaping, and structure and utility placement. Vegetation within this habitat type consists primarily of nonnative weedy or invasive ruderal species or ornamental plants lacking a consistent community structure. Urbanized/ruderal habitat type provides limited resources for wildlife and is utilized primarily by species tolerant of human activities. The disturbed and altered condition of these lands greatly reduces their habitat value and ability to sustain rare plants or diverse wildlife assemblages.

Although there are no marine resources within the Project Area, important marine resources exist in the surrounding area (the Pacific Ocean and Smith River estuary). The Smith River contains protected salmon resources that are part of Salmonid Evolutionary Significant Units that are managed by US Fish and Wildlife Service and National Marine Fisheries Service. No marine resources will be affected by the Proposed Project because

no marine habitat will be affected and the required implementation of a storm water pollution prevention plan will ensure that sediment in storm water is not transported offsite by construction activities.

To determine which special-status species occurred in the vicinity of the Project Area, California Department of Fish & Game’s California Natural Diversity Database (CNDDDB) was queried spatially within a 2-mile radial buffer around the Project Area. A federal list was also generated by querying the USFWS online database for the USGS 7.5 minute quadrangle within which the project parcels occur (Smith River) and the surrounding quadrangles: High Divide, Hiouchi, and Crescent City. The resulting species’ occurrences are mapped in Figure 5 and listed in Table 1. The species identified from this spatial query and other database searches were further assessed for their potential to occur within the Project Area based upon previously documented occurrences, their habitat requirements, and the quality and extent of any available habitat within the Project Area Table 1. No federally-listed (or otherwise special-status) plant or animal species were determined to have a moderate or high potential to exist within the Project Area.

**Table 1. Analysis of Likelihood for Special-status Species to Occur within Project Area**

<b>Scientific Name / Common Name</b>	<b>Status</b>	<b>General Habitat / Microhabitat (quoted from CNDDDB RareFind 3)</b>	<b>Likelihood to Occur in Study Area</b>
<i>Arabis macdonaldiana</i> McDonald’s rock- cress	FE	LOWER MONTANE CONIFEROUS FOREST, UPPER MONTANE CONIFEROUS FOREST. ROCKY OUTCROPS, RIDGES, SLOPES, AND FLATS ON SERPENTINE. 135-1455M.	<b>None.</b> Not detected during plant surveys. No habitat exists within the Project Area or immediate vicinity.
<i>Brachyramphus marmoratus</i> marbled murrelet	FT, CE	(NESTING) FEEDS NEAR-SHORE; NESTS INLAND ALONG COAST, FROM EUREKA TO OREGON BORDER & FROM HALF MOON BAY TO SANTA CRUZ. NESTS IN OLD-GROWTH REDWOOD-DOMINATED FORESTS, UP TO SIX MILES INLAND, OFTEN IN DOUGLAS-FIRS.	<b>None.</b> Not detected during animal surveys. No habitat exists within the Project Area or immediate vicinity.
<i>Charadrius a. nivosus</i> western snowy plover	FE	SANDY BEACHES, SALT POND LEVEES & SHORES OF LARGE ALKALI LAKES. NEEDS SANDY, GRAVELLY OR FRIABLE SOILS FOR NESTING.	<b>None.</b> Not detected during animal surveys. No habitat exists within the Project Area or immediate vicinity.
<i>Coccyzus americanus</i> Western yellow- billed cuckoo	FC, SE	(NESTING) RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS. NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, W/ LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.	<b>Low.</b> No cuckoos were seen during animal surveys. No habitat exists within the Project Area but adjacent parcels have some riparian habitat, but the channel is ephemeral and surrounded by urban development.
<i>Eucyclogobius newberryi</i> Tidewater goby	FE	BRACKISH WATER HABITATS ALONG THE CALIF COAST FROM AGUA HEDIONDA LAGOON, SAN DIEGO CO. TO THE MOUTH OF THE SMITH RIVER. FOUND IN SHALLOW LAGOONS AND LOWER STREAM REACHES, THEY NEED FAIRLY STILL BUT NOT STAGNANT WATER & HIGH OXYGEN LEVELS.	<b>None.</b> No habitat exists within the Project Area or immediate vicinity. Nearest occurrence is to the south in Smith River estuary.

<b>Scientific Name / Common Name</b>	<b>Status</b>	<b>General Habitat / Microhabitat</b> (quoted from CNDDDB RareFind 3)	<b>Likelihood to Occur in Study Area</b>
<i>Lilium occidentale</i> Western lily	FE	COASTAL SCRUB, FRESHWATER MARSH, BOGS AND FENS, COASTAL BLUFF SCRUB, COASTAL PRAIRIE, NO. COAST CONIFEROUS FOREST. WELL-DRAINED, OLD BEACH WASHES OVERLAIN W/WIND-BLOWN ALLUVIUM & ORG. TOPSOIL; USU NEAR MARGINS OF SITKA SPRUCE. 2-185M.	<b>Low.</b> Not detected in plant surveys. No habitat exists within the Project Area but adjacent parcels have some coastal scrub and remnants of coastal forest.
<i>Martes pennanti</i> Fisher, West Coast DPS	FC	INTERMEDIATE TO LARGE-TREE STAGES OF CONIFEROUS FORESTS & DECIDUOUS-RIPARIAN AREAS W/ HIGH PERCENT CANOPY CLOSURE. USE CAVITIES, SNAGS, LOGS & ROCKY AREAS FOR COVER & DENNING. NEED LARGE AREAS OF MATURE, DENSE FOREST.	<b>Low.</b> Not detected in animal surveys. No habitat exists within the Project Area but adjacent parcels have some riparian habitat, but it is surrounded by urban development.
<i>Oncorhynchus kisutch</i> <i>coho salmon</i>	FT	REQUIRE BEDS OF LOOSE, SILT-FREE, COARSE GRAVEL FOR SPAWNING. ALSO NEED COVER, COOL WATER & SUFFICIENT DISSOLVED OXYGEN.	<b>None.</b> No habitat exists within the Project Area or immediate vicinity.
<i>Pelecanus occidentalis</i> brown pelican	FE	(NESTING COLONY) COLONIAL NESTER ON COASTAL ISLANDS JUST OUTSIDE THE SURF LINE. NESTS ON COASTAL ISLANDS OF SMALL TO MODERATE SIZE WHICH AFFORD IMMUNITY FROM ATTACK BY GROUND-DWELLING PREDATORS.	<b>None.</b> No habitat exists within the Project Area. The nearest occurrence is the sand spit at the mouth of Smith River.
<i>Phoebastria albatrus</i> Short-tailed albatross	FE	NEST ON SLOPING GRASSY TERRACES ON TWO ISOLATED ISLANDS IN JAPAN. AFTER BREEDING, THEY MOVE TO FEEDING AREAS IN THE NORTH PACIFIC. WHEN FEEDING, ALBATROSSES ALIGHT ON THE OCEAN SURFACE AND SEIZE THEIR PREY, INCLUDING SQUID, FISH, AND SHRIMP.	<b>None.</b> No habitat exists within the Project Area or immediate vicinity.
<i>Polites mardon</i> Mardon skipper	FC	KNOWN FROM WESTERN WASHINGTON STATE AND EXTREME NORTHWESTERN DEL NORTE CO.	<b>Low.</b> This insect was not detected in field surveys.
<i>Speyeria zerene hippolyta</i> Oregon silverspot	FE	COASTAL MEADOWS IN DEL NORTE COUNTY. THE LARVAE FEED ONLY ON THE FOLIAGE OF THE WESTERN DOG VIOLET (VIOLA ADUNCA).	<b>Low.</b> No <i>Viola</i> spp. was identified within the Project Area or immediate vicinity, and no butterflies were detected.
<i>Strix occidentalis caurina</i> Northern spotted owl	FT	OLD-GROWTH FORESTS OR MIXED STANDS OF OLD-GROWTH & MATURE TREES. OCCASIONALLY IN YOUNGER FORESTS W/PATCHES OF BIG TREES. HIGH, MULTISTORY CANOPY DOMINATED BY BIG TREES, MANY TREES W/CAVITIES OR BROKEN TOPS, WOODY DEBRIS & SPACE UNDER CANOPY.	<b>None.</b> No habitat exists within the Project Area or immediate vicinity.
<i>Synthliboramphus hypoleucus</i> Xantus's murrelet	FC	(NESTING COLONY) OPEN OCEAN EXCEPT DURING BREEDING SEASON. BREEDS ON OFFSHORE ISLANDS IN SOUTHERN CALIFORNIA. NESTS IN ROCK CREVICES, UNDER BUSHES, IN OLD BURROWS AND AMONG MAN-MADE DEBRIS.	<b>Unlikely.</b> Not detected in animal surveys. No habitat exists within the Project Area or immediate vicinity.



**Special-status Species**

Coastal and Valley Freshwater Marsh	Pacific gilia	coast sidalcea	northern red-legged frog	tidewater goby
Del Norte salamander	Siskiyou checkerbloom	dark-eyed gilia	rhinoceros auklet	tufted puffin
Fort Dick Imnephilus caddisfly	Wolf's evening-primrose	toothill yellow-legged frog	sand dune phacelia	western snowy plover
Hippolyta fritillary	Yontocket satyr	ghost-pipe	seaside pea	western tailed frog
Howell's jewel-flower	bald eagle	great egret	serpentine sedge	yellow-tubered toothwort
Howell's sandwort	bank swallow	green yellow sedge	short-leaved evax	
Oregon coast paintbrush	coast outthroat trout	leafy-stemmed mitrewort	snowy egret	

Figure 5. Historic Regional Occurrences of Special-status Species (CNDDDB 2009)

### 7. Air Quality (Non-attainment Area Needs State Sign-off)

The Project Area is located in the North Coast Air Basin (Air Basin), which consists of Del Norte, Humboldt, Mendocino, and Trinity Counties and the northern portion of Sonoma County. The physiographic features that give shape to the Air Basin are the Coast Range to the east, the Pacific Ocean to the west, and the San Francisco Bay area to the south. In the Project Area, dominant winds exhibit a seasonal pattern. In the summer months, strong north to northwesterly winds are common; during the winter, storms from the South Pacific increase the percentage of days that winds are from southerly quadrants. Offshore and onshore flows are common along the coast and are associated with pressure systems in the area. Onshore flows frequently bring foggy cool weather to the coast, while offshore flows often blow fog away from the coast and bring sunny warm days. Del Norte County commonly experiences inversions that affect the vertical depth of the atmosphere through which pollutants can be mixed.

The criteria pollutants of greatest concern for the Proposed Project are inhalable particulate matter (PM<sub>10</sub>) and fine particulate matter (PM<sub>2.5</sub>). Ozone and carbon monoxide are of less concern in Del Norte County, due to its rural nature. Other pollutants of concern are toxic air contaminants and asbestos.

In response to being classified as nonattainment for California Ambient Air Quality Standards for PM<sub>10</sub>, the North Coast Unified Air Quality Management District (NCUAQMD) published a Particulate Matter Attainment Plan in 1995. The Plan noted that the Air Basin is not heavily industrialized, with the majority of the industry related to timber. Even though the Air Basin is in nonattainment because PM<sub>10</sub> is a regional pollutant, the PM<sub>10</sub> monitors in Crescent City have never documented an exceedance of the State PM<sub>10</sub> standard.

On a statewide basis, on-road vehicular influence is predominant; however, the rural nature of Del Norte County diminishes that influence. "On-road motor vehicles" contribute only 17 percent of the total NO<sub>x</sub>, but "Other Mobile Sources" contribute 64 percent. Of the "other mobile sources" component, the primary contributor is foreign ocean-going ships. In Del Norte County, wildfires contribute another 17 percent. ROG is largely an evaporative emission. Because of the abundance of flora in Del Norte County, the largest single category of ROG emissions is natural (biogenic) sources, which makes up 84 percent of the total ROG. The largest anthropogenic, or man-caused, sources are from "Miscellaneous Processes," which is 55 percent of the anthropogenic total for NO<sub>x</sub>. Another 17 percent is added by "on-road motor vehicles." The primary "Miscellaneous Processes" component is burning for forest management. On a statewide basis, "On road motor vehicles" are the overwhelming primary contributors of CO; however, Del Norte County's rural nature again shows a different composition. In Del Norte County, only 7 percent of the total CO comes from on-road motor vehicles. The majority of CO emissions in Del Norte County are from "Miscellaneous Processes" (61 percent of the total), with an additional 30 percent coming from wildfires. Again, the primary "Miscellaneous Processes" component is burning for forest management. Particulate matter in Del Norte County is almost completely the result of the

“Miscellaneous Processes” category (controlled burning for forest management and unpaved road dust) and wildfires.

The local air quality can be evaluated by reviewing relevant air pollution concentrations of the ambient air near the Project Area. Existing levels of ambient air quality and historical trends, and projections of air quality in the project area are best documented from measurements made near the project site. The NCUAQMD operates a monitoring station in Crescent City on Northcrest Drive, which is approximately 14 miles south of the project site. This station only measures PM10. The nearest California station that measures other criteria pollutants is located in Eureka, approximately 99 miles south of the project site. The Crescent City station documents the baseline air quality level for the pollutant of concern near the Project Area. The Air Basin (including the Project Area) is currently State-designated as a nonattainment area for inhalable particulate matter (PM10) and as at attainment or unclassified for all other state and national air quality standards.

## **8. Environmental Justice Information**

### **a) Conditions, Minority & Low Income Areas**

The economy of Del Norte County was historically based on timber extraction/milling and commercial fishing; however these segments of the local economy have been declining sharply. Tourism has become the dominant industry, employing approximately 1,760 people in 2006. The largest single employer is the Pelican Bay State Prison, which opened in 1990 and employees approximately 1,500 in Crescent City. In 2008, Del Norte County had an unemployment rate of 8.9 percent, considerably higher than the California average of 7.2 percent (California Employment Development Department 2009). The median household income in Del Norte County in 2000 was \$29,642, well below the state average of about \$53,600. Twenty percent of individuals in the County were living below the poverty level.

Countywide, there are various low-income groups, and as a whole, the County economy is somewhat depressed, as evidenced by the high unemployment rate and low average income. Locally, the Project Area is located within the boundary of Smith River Rancheria, which for the purposes of environmental justice considerations, is considered to be a minority (American Indian) population. In spite of the many injustices suffered by the Tolowa people over the last 150 years, which included forced removal from their homelands and the revoking of their tribal status, the Tribe has preserved their culture, has developed a thriving, self-determined Tribal government, and has begun to reclaim their land base.

### **b) Census Maps**

Del Norte County is located in the northwestern corner of California. Approximately 80 percent of the County is public lands, including the Six Rivers National Forest and Redwoods National Park. A quarter of the County's residents live in Crescent City, the only incorporated city in the County (California Department of Finance 2008). The specific population segment for this project is Native American children 18 years and younger located in Del Norte County, CA, Humboldt County, CA, and Curry County,

OR. According to the Center for Economic Development at California State University, Chico, Del Norte County, CA has a total population projection of over 29,000 with 1,900 Native Americans comprising 6.6% of the total County population. Humboldt County, CA with a total population projected of over 132,000 with 8,200 Native Americans which is 6.3% of the total universe for this County. Finally, the U.S. Census Bureau projects Curry County, OR has a projected population of over 22,000 with the Native American population projected at 2.1%.

The Tribe presently has an enrollment of 1,407 persons, with only about 10 percent living within the boundaries of the Rancheria. According to the Tribal Enrollment Census, there are about 380 children from ages 0 to 21 years. The primary employment and income sources within the Rancheria are generated from Tribal government operations and gaming enterprises.

Food and waterborne illness have a higher rate of incidence in the Native American population relative to the general American population (National Institute of Health 2003). The rates among Indian children under the age of 15 are appallingly high. For example, Shigellosis, a gastrointestinal disease related to poor water treatment, occurs over 22 times more frequently in American Indian children. Various regions of our country face problems including dwindling surface and groundwater supplies, non-existent water and sanitation infrastructure, high-density septic system usage, inadequate reinvestment in existing water treatment infrastructure, and expanding contamination of surface water including both biological and chemical (e.g. pharmaceuticals) that all increase the risk of water-borne illness. On SRR, eight single-family residences that are proposed to be served by this project have failed or failing septic systems. The major environmental benefit of the proposed project is a decrease in the risk of waterborne illness on SRR and the surrounding community. The secondary benefit of the proposed project is a reduction in pollutant sources to surface and ground water.

### **9. Land Use & Development**

When the Smith River Rancheria was terminated, this reservation was divided into a number of fee parcels, and brought under County jurisdiction as the Smith River Rancheria Subdivision in 1961. This original subdivision consisted of 52 parcels. This subdivision now has a mixture of zoning categories, ranging from residential to commercial.

The current General Plan land use designation and zoning for the Project Area is Rural Residential. This designation is described in the Local Coastal Plan as follows:

Rural Residential (RR) – This category is intended to maintain the character of rural areas and minimize the services required by smaller lot development. The primary use of these lands is single-family residential (one unit per specified minimum parcel). Uses permitted within residential areas include single-family residences, the keeping of horses for use by the owner, light agricultural activities, and accessory buildings appropriate to residential uses (Del Norte County General Plan, Coastal Element, pg. 330).

The Project Area is located within a residential area of the town of Smith River. North of the Project Area, land use is a mixture of agriculture (primarily nursery crops and cattle grazing) and clusters of rural residential housing; some visitor-serving facilities are located along Highway 101. East of the Project Area is residential housing and the Lucky 7 Fuel Mart and Lucky 7 Casino. To the south of the Project Area, the prominent development is the town of Smith River; beyond, agriculture dominates (dairy farms, nursery crops, and pasture). Other land uses in the vicinity include a lumber mill and several mobile home/RV parks.

#### **10. Identification of Floodplains and Wetlands**

The Project Area was formally surveyed for jurisdictional wetlands on June 3, 2008 (Winzler & Kelly 2008). The consulting botanist determined that only one water feature might qualify as a jurisdictional water feature under Technical Report Y-87-1 of the Corps of Engineers Wetlands Delineation Manual: an ephemeral channel that flows through a 48" corrugated metal pipe culvert on South Indian Road adjacent to the south end of the tribal cemetery. No wetlands were detected during the field survey. NO wetlands were mapped within the Project Area by the USFWS National Wetland Inventory program. The proposed project will not entail any cut or fill of wetlands nor result in the disturbance of the one identified ephemeral channel because directional drilling technology will be employed; the sewer pipes will be installed well under the culvert.

#### **11. Community location-describe location, type of community (urban, rural agricultural, recreational, land use, utilities, transportation and access)**

The County is remote and geographically isolated; much of the land and property tax base is drastically restricted due to Tribal land ownership, federal and state government ownership, and private company ownership. Only 2 major road systems serve the county—US Highway 101 and Highway 199—connecting the county with major urban areas in Oregon, the San Francisco Bay Area and the California Central Valley. The Smith River area is rural in nature with communities bordering on large tracts of public land with spectacular and remote landscapes to the east and the Pacific Ocean to the west. Smith River Rancheria is the largest Indian Rancheria in California, with 560 acres of land in Del Norte County.

### **C: Existing Wastewater/Drinking Water System**

#### **1. General Description of Wastewater Collection & Treatment System**

The existing SRR waste water collection & treatment system consist of 2 separate systems: 1) most residences and commercial buildings are currently on septic tank/leachfield systems (until a collection system is installed that can deliver wastewater to the new WWTF; and 2) the Lucky 7 Casino, the Lucky 7 Fuel Mart, the House of Howonquet Restaurant, and the existing 6-unit elder housing facility are served by the new SRR waste water treatment facility. The new SRR waste water treatment system is guided by the SRR Sewer System Master Plan (Winzler & Kelly 2009).

#### **2. Existing Wastewater System (WW only)**

##### **a) Wastewater Flows: Average, Peak, Wet Weather**



The WWTF was designed to treat an average daily flow of 25,000 gallons per day (gpd), with the ability to expand to 50,000 gpd in the future with the addition of a second membrane bioreactor (MBR). However, without an adequate collection system in place to deliver the design flows, recirculation is needed to maintain hydraulic loading. In addition, the lack of organic loadings to the WWTF is requiring excessive oversight and maintenance. The WWTF is currently treating approximately 3,200-3,500 gpd (13% of capacity) of wastewater from the Lucky 7 Casino, the Lucky 7 Fuel Mart, the House of Howonquet Restaurant, and the 6-unit elder housing. The WWTF has considerable excess capacity to serve additional residences and businesses with SRR and the surrounding community, and the WWTF lacks the organic loading needed for an efficient treatment facility.

**b) Influent Characteristics**

Wastewater influent is typical of residential sources, and is a combination of black water from toilets and gray water from washing machines and sinks. No industrial waste water sources are generated; several commercial sources are generated—the Lucky 7 Fuel Mart and the Lucky 7 Casino.

**c) Major Industrial Users**

There are no industrial users of the Tribal wastewater treatment system. There are 2 commercial users: Lucky 7 Fuel Mart and the Lucky 7 Casino.

**d) Residuals (sludge) Disposal**

Sludge is collected and manifested by a licensed waste-hauler to an approved receiving facility.

**e) Service Area**

The collection system proposed under the Master Plan will serve most of the Rancheria's lands within tribal ownership. These lands include areas west of U.S. Highway 101 including South Indian Road and Mouth of Smith River Road and areas east of U.S. Highway 101 including North Indian Road and Ocean View Drive as far north as the 12-acre site and as far south as Lopez Road.

**f) Infiltration and Inflow**

The existing WWTF has newly installed piping; only 2 manholes exist. There are no adjacent storm sewers to interact with the sanitary collection system. No infiltration or inflow issues have been noted.

**g) Present capacity**

- \* Water and energy conservation considered?
- \* plumbing retrofits considered?
- \* renewal energy production?
- \* Reuse programs implemented
- \* Green infrastructure incorporated?

The recently completed state-of-the-art tertiary treatment wastewater treatment facility will have an ultimate capacity of 50,000 gallons per day and a peakflow capacity of 100,000 gallons per day that will provide for all projected Tribal growth. The wastewater treatment facility is a Membrane Bioreactor (MBR) facility that produces a high quality effluent that meets California Department of Health/Title 22 standards for the reuse of tertiary treated wastewater. The treated effluent is disposed through a new leachfield pursuant to Waste Discharge Requirements set by the North Coast Regional Water Quality Control Board, the agency that oversees implementation of applicable provisions of the federal Clean Water Act and Safe Drinking Water Act within this region of California.

The WWTF is equipped with a reclaimed water re-use facility that can deliver Title 22-approved reclaimed water in the future to Tribal facilities such as the Lucky 7 Casino and other water-intensive needs.

### **3. Existing Drinking Water System (DW only)**

#### **a) Description of Treatment and Distribution System**

#### **b) Water Demand: Average, Peak**

#### **c) Surface Water Source (Intake Locations, Permitted and Actual Withdrawal)**

#### **d) Groundwater Source (Wells & Well Fields)**

#### **e) Water Storage**

#### **f) Raw Water Characteristics**

#### **g) Residuals (sludge) and Backwash Disposal**

#### **h) Service Area**

**i Water and energy conservation considered?**

**ii plumbing retrofits considered?**

**iii renewal energy production considered?**

**iv Reuse programs implemented**

**v Green infrastructure incorporated?**

This project does not involve drinking water systems.

### **4. Existing System Performance (NPDES Violations, Safe Drinking Water Act Violations, Other System Problems)**

There are no NPDES violations, Safe Drinking Water Act violations, or other system problems.

## **D: Need for Proposed Project**

### **1. Expanded Description of Need Identified in Section A.1.**

The overall goal of the project is to address the unmet wastewater treatment needs of the Rancheria and the surrounding Smith River community. In order to meet the wastewater treatment needs of this growing community, and to continue the Rancheria's efforts to protect streams and groundwater in the region, the Rancheria built the new wastewater treatment facility. Now it is imperative to construct the collection system for this new facility.

The proposed collection system for the Rancheria consists of various phases that could be staged in construction and connection to the WWTF. The proposed project consists of the first of three phases of construction identified in the SRR Sewer System Master Plan. The Sewer System Master Plan estimates the proposed build out of this sewer system over a ten-year period at a cost of \$6,000,000. The proposed project represents 27% of the master plan phasing.

The first phase would provide sanitary sewer infrastructure to 45 residential hookups and 3 community facility hookups that are current served with conventional septic and drainfield systems. Many of these septic systems are failing and therefore may be contributing cumulatively to water quality problems on the Rancheria or the region.

The second goal of this project is to serve future residential, commercial, and institutional wastewater needs of SRR and the Smith River community through the construction of an important element of the WWTF—a forcemain with lift stations that will allow for future lateral connections. The Tribal Administrator explains the need:

*“The single greatest obstacle in the pursuit of the goals of the Tribe has been a lack of infrastructure. What exactly is infrastructure and why is it important? Infrastructure is defined as ‘the underlying framework of an enterprise and the network of transportation services provided by a government—roads, bridges, and so forth.’ At the Smith River Rancheria the infrastructure needs that are a current focus is the management of wastewater, the availability of drinking water, roads that are safe and accessible, and the ability to control our own energy costs. The importance of which lies in the Smith River Rancheria’s Constitution and supports the governmental sovereignty that is a central part of the Tribe’s cultural legacy.”*

The objectives of the project are:

- Provide for more stringent effluent limitations by replacing existing septic systems with state-of-the-art MBR wastewater treatment process
- Remove the major source of non-point pollution that may be impacting surface and groundwater resources within the Smith River watershed—septic systems
- Allow for the future and orderly growth of the SRR community and allow for higher density low and moderate income housing for the underserved population of SRR

The Proposed Project will assist in providing essential services and housing for Tribal members by allowing for land development to occur, which is currently limited by restrictions on use of septic tank/leachfield systems.

## **2. Land Use Projections**

Resource depletion and the cyclical nature of seasonal industries contribute to a depressed economy in Del Norte County. In Curry and Del Norte Counties, the slow development of inland transportation routes kept the counties relatively isolated well into the twentieth century. The rural nature of Del Norte and Curry Counties combined with

the decline of an economy that was largely based on agriculture, fishing and logging will provide additional challenges to Indian families residing in the area.

The Del Norte County region, like much of the Pacific Northwest area, is transitioning from an economy based upon resource extraction to an economy based upon recreation and tourism. The coastal ranges and Klamath Mountains isolate the Smith River region from the more populated areas of California, yet the wilderness setting is a major appeal to nature-based recreation and tourism.

### **3. Population Forecast**

The population of Del Norte County was estimated at slightly more than 28,000 in 2006, with most residents living in the county seat of Crescent City and its surrounding area. The 2008 estimate is 29,419. The community of Smith River, four miles south of the Rancheria, has a population of just over 2,000. The American Indian population in Del Norte County is 1,771. In the year 2003, American Indians accounted for 6.4% of the population of Del Norte County.

### **4. Calculations and Assumptions for Forecasted Flow and Waste load**

The WWTF was designed to treat an average daily flow of 25,000 gallons per day (gpd), with the ability to expand to 50,000 gpd in the future with the addition of a second membrane bioreactor.

### **5. Future Environment Without the Project**

The lack of adequate sewage treatment in the Smith River region limits future development and threatens environmental quality. The future environment without the proposed project is a continuation of the status quo: a limitation on future development and continued contamination of surface and groundwater with leachate from existing septic tanks/leachfields. Furthermore, the new tribal WWTF was designed to treat an average daily flow of 25,000 gallons per day. However, without an adequate collection system in place to deliver the design flows, recirculation is needed to maintain hydraulic loading. In addition, the lack of organic loadings to the WWTF is requiring microbial seeding. Thus, the WWTF lacks the organic loading needed for a "healthy" treatment facility; the future without the proposed project will be a continuation of the WWTF functioning inefficiently.

## **E: Analysis of Alternatives**

### **1. Development of Alternatives**

#### **a) No-action**

The No Action Alternative would consist of no improvements to the sanitary sewer collection system. The No Action Alternative would result in the maintenance of the status quo: a limitation on future development; continued loading of surface and groundwater with leachate from existing septic tanks/leachfields; and a tribal WWTF that is functioning inefficiently.

Because the No Action Alternative does not involve any development or ground-disturbing activities, no new environmental impacts would occur. However,

conventional onsite wastewater treatment systems have issues with treatment efficacy for nutrients and pathogens. Such effluents still contain high nutrient and microbe levels, and such nutrient pollution is not fully attenuated in receiving leachfields. Regional groundwater contamination often occurs as a cumulative impact. Thus, the No Action Alternative contributes to this cumulative impact by foregoing any collection of sewage waste and treatment in the SRR WWTF.

Furthermore, the No Action Alternative fails to meet any of the objectives of the proposed project, and fails to meet any of the objectives of the Tribal Master Plan.

**b) Optimum Utilization of existing facility** (Flow reduction, water and energy conservation)

SRR recently completed its new wastewater treatment facility (WWTF) in April 2009, and the WWTF is currently operational. However, without an adequate collection system in place to deliver the design flows, recirculation is needed to maintain hydraulic loading. In addition, the lack of organic loadings to the WWTF is requiring microbial seeding; the WWTF lacks the organic loading needed for a “healthy” treatment facility.

There is no practical way to reduce the flow of sewage; the Rancheria’s population is growing, and more tribal members are moving to the Rancheria as new tribal housing is built.

**c) New Construction Alternatives**

Other alignment configurations for the collection system were analyzed. Figure 6 shows the Project Alternative Alignment. The Alternative Alignment uses the corridor along Highway 101. This option also requires installation of sewer line along South Indian Road because the Tribe does not own all of the properties necessary to connect directly to Highway 101. This Alternative Alignment would require almost twice the amount of sewer pipe installation. The selection of the Alternative Alignment is unrealistic for other reasons as well. It would require extensive planning including the acquisition of rights-of-way, permitting from the California Department of Transportation, increased cost due to new construction in a new right-of-way along a State Highway, and impacts on the environment due to an extensive construction program. North and South Indian Roads are existing routes which have been utilized for many years for utility alignments. The selection of the Alternative Alignment along Highway 101 would require extensive construction, would impact environmental conditions on the Rancheria, State and County, and would be prohibitive in cost. Due to the increased amount of sewer pipe and construction activity required, the Alternative Alignment is anticipated to result in increased environmental consequences and has been eliminated from further review.



Figure 6. Project Alternative

**2. Alternative Screening (Discussion for each alternative)**

**a) Present Worth or Equivalent Annual Cost**

The No Action Alternative involves no new monies because it involves no development. The No Action Alternative is effectively limiting development, which may result in indirect impacts to the Tribal economy.

The Alternative Alignment, with its inefficient distribution of sewerline (almost twice as much as the Proposed Project alignment), is expected to cost twice as much as the Proposed Project.

**b) Reliability**

The No Action Alternative involves no new sewer systems improvements, and existing septic tank/leachfield systems are not very reliable.

The Alternative Alignment would be built with the same construction techniques and employ the same state-of-the-art technologies; thus it is assumed that the Alternative Alignment would be as reliable as the Proposed Project.

**c) Complexity**

The Alternative Alignment, with its inefficient distribution of sewerline (almost twice as much as the Proposed Project alignment), is expected to be much more complex as the Proposed Project.

**d) Environmental Factors**

Because the No Action Alternative does not involve any development or ground-disturbing activities, no new environmental impacts would occur. However, conventional onsite wastewater treatment systems have issues with treatment efficacy for nutrients and pathogens. Such effluents still contain high nutrient and microbe levels, and such nutrient pollution is not fully attenuated in receiving leachfields. Regional groundwater contamination often occurs as a cumulative impact. Thus, the No Action Alternative contributes to this cumulative impact by foregoing any collection of sewage waste and treatment in the SRR WWTF.

The Alternative Alignment, with its inefficient distribution of sewerline (almost twice as much as the Proposed Project alignment), is expected to anticipated to result in increased environmental consequences.

**e) Feasibility**

The No Action Alternative is not a feasible alternative. The No Action Alternative would limit future development and orderly growth; it would continue the loading of surface and groundwater with leachate from existing septic tanks/leachfields; and it would cause the tribal WWTF to function inefficiently by operating under normal capacity.

The Alternative Alignment, with its inefficient distribution of sewerline (almost twice as much as the Proposed Project alignment), is not considered to be feasible; this alternative would have double the construction cost and double the construction footprint (and thus much greater potential environmental impact). It would also require extensive encroachment permits within the Caltrans right-of-way.

**f) Operation and maintenance requirements**

The No Action Alternative has no operation or maintenance requirements.

The Alternative Alignment, with its inefficient distribution of sewerline (almost twice as much as the Proposed Project alignment), is expected to have considerable operation and maintenance requirements.

**g) Was sustainable infrastructure considered? (water and energy conservation, retrofits, full cost pricing, reuse programs, green infrastructure etc, renewable energy production)?**

Yes. No other feasible alternative is available.

**3. Identification of Selected Alternative**

The Proposed Project Alignment is the preferred alternative.

**F: Environmental Consequences and Mitigation Measures for Selected Alternative**

**1. Evaluation of direct and indirect impacts (direct impacts are caused by construction and operation of the facilities).**

Short-term construction emissions may include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities and operation of grading equipment during site preparation. This is a potential impact before mitigation is implemented.

During construction of the Proposed Project, surface water or ground water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potential impact before mitigation is implemented.

Section F-5-A describes cultural resources in the Project Area; no cultural resources are located within the Project Area, except for the tribal cemetery which is adjacent to the Project Area. However, unreported / unknown cultural resources could be present within the Project Area with no surface manifestation. Potential cultural resources that could exist within the project APE include shell midden deposits, firecracked rock, objects or features associated with traditional Tolowa occupation and use of the area, and historic objects or features associated with historic land use and agriculture. Destruction of cultural resources due to construction activities would be a potential impact before mitigation is implemented. **Consultation with the Smith River Tribal Historic Preservation Office (THPO) indicated that cultural resources will not be impacted** (letter to Russ Crabtree, Tribal Administrator, Feb.5, 2010 – **Appendix A**).

The construction of the Proposed Project would intermittently and temporarily increase ambient noise levels within some areas of the Project Area due to the use of heavy construction equipment and material transport. Several residences and the Howonquet Community Center are located near the proposed construction zones. Although construction noise would be temporary and its intensity would fluctuate by construction activity, this is considered a potential impact before mitigation is implemented.



There is a potential for hazardous materials or petroleum products to be accidentally released during Project construction. This is considered a potential impact before mitigation is implemented.

## **2. Secondary (indirect) Impacts of Future Growth and Development (indirect impacts are those resulting from population growth).**

Implementation of the Proposed Project is anticipated to stimulate growth in the project vicinity. In general, the lack of adequate sewage treatment in Del Norte County limits future development and threatens environmental quality. Implementation of the Proposed Project will allow for orderly growth of the Smith River Rancheria according to the Rancheria Master Plan; future development includes elder housing on the Ray parcel, Ironwood Parcel, and Lopez parcel. Because future growth and development are guided by the Rancheria Master Plan, no secondary adverse impacts are expected. Because the economy of Del Norte County is depressed, and because population growth is below the State average, any stimulation of growth or development caused by the Proposed Project is anticipated to have a beneficial impact upon the County's citizens.

## **3. Unavoidable adverse impacts?**

No unavoidable adverse impacts were identified. All identified adverse impacts are mitigable to a less than significant level, as described below.

## **4. Mitigation of adverse impacts?**

To reduce potential impacts upon air quality, construction Best Management Practices will be implemented, including the following:

- Apply sufficient water to suppress dust on roads used for vehicular traffic and restrict vehicle speed to 15 mph
- When feasible, shut down idling construction equipment
- Revegetate disturbed areas as soon as possible after disturbance
- Cover construction materials and stockpiled soils if they are a source of fugitive dust
- Cover dump trucks before transporting soils offsite
- When possible, schedule construction activities during periods of low winds to reduce fugitive dust
- For all disturbed surface areas apply dust suppression in a sufficient quantity and frequency so as to maintain a stabilized surface.

Implementation of these Best Management Practices will reduce potentially air quality impacts during construction to a less than significant level.

Because the Proposed Project's construction footprint is larger than one acre in area, such construction is regulated by the Clean Water Act under the National Pollution Discharge Elimination System. Tribe and its designated general contractor must enroll under the USEPA's General Storm Water Discharge Permit for Construction Activities (No. CAR10000IF) prior to the initiation of construction. In conjunction with enrollment under this Permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented

during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures would reduce potential construction-related impacts to water quality to a less than significant level.

During Project construction, ground disturbing activities could uncover previously unidentified cultural resources – a potential impact. Any inadvertent discovery of any historic resources in future project implementation is subject to the requirements of 36 CFR 800.13 (post-review discoveries). Any such discovery will require the immediate cessation of all construction activities, and the notification of the Smith River Rancheria. Appropriate mitigation, as recommended by the THPO, shall be implemented. Pursuant to Native American Graves Protection and Repatriation Act of 1990, if skeletal remains or bones of unknown origin are found during construction, all work will stop in the vicinity of the find and the County Coroner will be contacted immediately. If the remains are determined to be Native American, the coroner should notify the THPO, who will then notify the person that is the most likely descendant. The most likely descendant will work with the Tribe or contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work will take place within the immediate vicinity of the find until the identified appropriate actions have been implemented. Implementation of these mitigation measures would reduce ground disturbing impacts to a less than significant level.

To reduce potential noise impacts, construction noise will be controlled by limiting construction activity to the least noise-sensitive daytime hours; specifically, the hours from 7:00 a.m. to 6:00 p.m. on weekdays and from 8:00 a.m. to 5:00 p.m. on Saturdays. Construction equipment shall be muffled and shrouded to minimize noise levels. With the implementation of these mitigation measures, construction-related noise impacts would be reduced to a less than significant level.

To reduce potential hazardous materials impacts, the Tribe and its contractor will enroll in the USEPA's Construction General Permit, which requires the preparation and proper implementation of a Storm Water Pollution Prevention Plan, Hazardous Materials Management and Spill Response Plan, and related Best Management Practices, which will avoid or minimize the potential for accidental release of hazardous materials during construction. Implementation of these required measures would reduce potential impacts of accidental release of hazardous materials during Project construction to a less than significant level.

**Table 2: Summary of Project Impacts and Mitigation**

Potential Impacts and Project Effects	Mitigation
The Project Area would be located in an area that would be subject to potential tsunami hazards and ground shaking.	County and Rancheria have tsunami warning systems. County and Tribe have adopted the Uniform Building Code, which utilizes the most current seismic design criteria. No additional mitigation is necessary.
Short-term construction emissions may include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities and operation of grading equipment during site preparation. This is a potential impact.	To reduce potential impacts upon air quality, construction Best Management Practices will be implemented, including implementation of an effective SWPPP and dust control measures (e.g. water truck spraying)
During construction of the Proposed Project, surface water or ground water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potential impact.	Tribe and its designated general contractor must enroll under the USEPA’s General Storm Water Discharge Permit for Construction Activities (No. CAR10000IF) prior to the initiation of construction. A Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management / Spill Response Plan must be implemented. Implementation of this mitigation would reduce impacts to less than significant.
Previously unknown cultural resources could be present within the Project Area with no surface manifestation. Potential cultural resources that could exist within the project APE include shell midden deposits, firecracked rock, objects or features associated with traditional Tolowa occupation and use of the area, and historic objects or features associated with historic land use and agriculture. This would be a potential impact.	Any discovery of any historic resources will require the immediate cessation of all construction activities, and notification of the Tribal Historic Preservation Officer. Appropriate mitigation shall be implemented. If skeletal remains or bones are found during construction, all work will stop in the vicinity and the County Coroner contacted immediately. The most likely descendant will work with the contractor to re-inter human remains and associated artifacts. Implementation of this mitigation would reduce impacts to less than significant.
Construction of the Proposed Project would intermittently and temporarily increase ambient noise levels due to use of heavy construction equipment and material transport. Several residences and the Howonquet Community Center are located near the construction zone. This is considered a potent impact.	Construction noise will be controlled by limiting construction activity to the least noise-sensitive daytime hours; specifically, the hours from 7:00 a.m. to 6:00 p.m. on weekdays and from 8:00 a.m. to 5:00 p.m. on Saturdays. Construction equipment shall be muffled and shrouded to minimize noise levels. With implementation of this mitigation, impacts would be reduced to less than significant.
There is a potential for hazardous materials or petroleum products to be accidentally released during Project construction.	The Tribe and contractor will enroll in the USEPA’s Construction General Permit, which requires the proper implementation of a Storm Water Pollution Prevention Plan, Hazardous Materials Management and Spill Response Plan, and related BMPs, which will minimize the potential for accidental release of hazardous materials. Implementation of this mitigation would reduce potential impacts to less than significant.
Implementation of the Proposed Project is anticipated to stimulate growth in the project vicinity. This is a potential impact	Poor sewage treatment in the County limits future development and threatens environmental quality. The Proposed Project will allow for orderly growth of the Rancheria and reduce organic pollution of the environment. Because the County economy is depressed and population growth is below the State average, any stimulation of growth /development caused by the Project is anticipated to be beneficial.

## **5. Cross-Cutting Environmental Laws and Sources Consulted**

### **a) Archeological & Historic Preservation Act of 1974, Pub. L. 86-523, as amended**

A cultural resources assessment of the Project Area was performed in 2007 (BIA 2008). This assessment included an archaeological literature search at the North Coast Information Center of the California Historical Resources Information System and a field survey (BIA 2008). Results of this literature search resulted in no known archaeological resources or cultural resources within the Project Area, except for the Tribal cemetery. Only one recorded archaeological resource, CA-DNO-047, was recorded within a three-mile radius of the site (BIA 2008). One previous archaeological survey had been conducted immediately adjacent to the Project Area along U.S. Highway 101, and another nine surveys had been conducted within the 1-mile record search radius between 1982 and 1998 (PacifiCorp 2007). In addition, the Tribe's THPO reviewed the safety improvements proposed for South Indian Road and North Indian Road and concurred with the BIA's determination of no effect (BIA 2008).

The Smith River Rancheria developed four facilities where cultural resource surveys were conducted that included portions of the Project Area or are near/adjacent to the Project Area (BIA 2008). These facilities include the Tribal Offices on North Indian Road directly across the street from the Project Area, the Howonquet Health Centers located on U.S. Highway 101 across from the Project Area, the 12-acre and 6 acre parcels along Ocean View Drive. According to all of these surveys, archaeological resources were not encountered as the sites have been severely disturbed (BIA 2008).

The Project Area was also assessed as part of larger Areas of Potential Effect for cultural resources assessments for the Ray, Ironwood, and North 40 parcels (Sloan 2006a,b, 2007) and for the Lopez parcel (Sloan 2009). The field survey findings were negative. No historic properties, potentially eligible historic properties, archaeological resources, or cultural resources were located within the APEs during the field surveys. Consulting archaeologist K. Sloan recommended that a determination of No Historic Properties Affected per 36 CFR 800.4 (d)(1) be made for these undertakings. The BIA concurred, and the Tribal Historic Preservation Officer made findings of no historic properties affected and no adverse effect within the APEs.

A request was sent on January 25, 2010, to the Native American Heritage Commission to search the Sacred Lands File for any resources within the Project Area (**Appendix A**). The Native American Heritage Commission responded on January 28, 2010. No historic properties, potentially eligible historic properties, archaeological resources, or cultural resources were located within the Project Area, but the following are known in the vicinity: Shaker Church, Smith River Rancheria Cemetery, and How-On-Quet (Mountain Valley). One resource in particular—the Tribal cemetery—exists adjacent to the Project Area on South Indian Road. Because the limits of ground disturbance do not extend to this cemetery or any other resource, implementation of the Proposed Project will have no adverse effect on the Tribal cemetery or any other known cultural resource.

In December 2009, Smith River Rancheria Natural Resources Department Director Brad Cass requested review of the Proposed Project by the Tribal Historic Preservation Officer

in compliance with the National Historic Preservation Act (**Appendix A**). In February 2010, Tribal Historic Preservation Officer Suntayea Steinruck made a finding of no historic properties affected and no adverse effect within the APE (**Appendix A**).

**b) Clean Air Act, Pub. L. 84-159, as amended**

An air quality analysis for the Proposed Project was performed; this analysis consisted of unmitigated construction and operational air quality modeling using CARB’s URBEMIS2007 for Windows Version 9.2.4 model. The URBEMIS model methodology is provided by Jones and Stokes (2007). Results indicate that the Proposed Project’s construction emissions would not exceed the comparative BAAQMD emissions thresholds. With the implementation of best management practices, there would be a less than significant impact from dust and exhaust from construction activities. Thus, construction emissions are considered to have a less than significant impact. Results of the analysis also indicate that the Proposed Project’s daily operational emissions would not exceed the comparative BAAQMD thresholds for any pollutant. Therefore, project operational emissions are considered to have a less than significant impact upon air quality, and no mitigation is necessary.

**c) Coastal Barrier Resources Act, Pub. L. 97-348**

There are no coastal barriers in the Project Area; the Project Area does not have any coastal resources.

**d) Coastal Zone Management Act, Pub. L 92-583, as amended**

The Project Area is located within a Coastal Zone. The Coastal Element of the Del Norte County General Plan serves as Local Coastal Plan (LCP). The LCP sets forth policies to guide development in the County’s Coastal Zone. The LCP addresses the preservation of coastal resources including public access, scenic character, environmental quality, and compatible land uses. The LCP generally addresses the immediate coastline and specifically addresses special area of concerns. The following LCP polices have been identified as being applicable to the Proposed Project, and a consistency analysis was performed on each policy (Table 1):

Table 1. Proposed Project’s consistency with applicable Local Coastal Plan policies

Applicable Local Coastal Plan Policy	Project Consistency
<b>Marine &amp; Water Resources</b>	
All surface and subsurface waters shall be maintained at the highest level of quality to insure the safety of public health and the biological productivity of coastal waters (VI.C.3).	Mitigation measures have been identified to ensure that surface waters would not be adversely affected. Measures include the enrollment in the USEPA Construction General Permit and implementation of a Storm Water Pollution Prevention Plan and erosion control plan, and implementation of Best Management Practices.
Wastes from industrial, agricultural, domestic or other uses shall not impair or contribute significantly to a cumulative impairment of water quality to the extent of causing a public health hazard or adversely impacting the biological productivity of coastal waters (VI.C.4).	
Riparian vegetation shall be maintained along streams, creeks and sloughs and other water courses with the Coastal Zone for their qualities as	One ephemeral channel flows through a culvert in the Project Area; no riparian vegetation exists in the Project Area. Directional drilling technology will be

wildlife habitat, stream buffer zones, and bank stabilization (VII.E.4.a)	employed to completely avoid all water features and riparian vegetation.
<b>Visual Resources</b>	
Proposed development within established highly scenic areas shall be visually compatible with their scenic surroundings, by being reflective of the character of the existing land uses while conforming to the land use criteria. As set forth in the land use component and subsequent zoning ordinance (V.C.2).	The Project Area is near, but not within, the established scenic corridor (Highway 101 north of Indian Road). The Proposed Project will temporarily create a disturbed landscape during construction. Once the Proposed Project is complete, the roads will be resurfaced with new asphalt and no change to the viewshed/aesthetics will occur.

The Project Area is located within a coastal zone (Coastal Zone of Del Norte County, North Coastal Subarea - Area 1 Planning Unit). The implementing regulations of the federal Coastal Zone Management Act of 1972, as amended (CZMA), and the policies of the California Coastal Commission apply to lands within coastal zone boundaries. Under Section 307 (c) (1) of the CZMA, 16 USC Section 1456 (c) (1), federal activities that affect any land or water use or natural resource of the coastal zone are required to be consistent with the affected state's coastal management program to the "maximum extent practicable." The standard of review for federal consistency determinations consist primarily of the policies of Chapter 3 of the CZMA. CZMA Section 304(1) excludes from the coastal zone all lands held in trust by the federal government, but if activities on excluded lands affect natural resources of the coastal zone, they must be reviewed for consistency with the California Coastal Management Program. Section A(6) of the California Coastal Management Program states that certified Local Coastal Programs "will be used in making federal consistency determinations." The Del Norte County Local Coastal Program (LCP) was certified in 1983 (Del Norte County 1983). This LCP will be revised as part of the County's General Plan revision process currently underway. A complete consistency determination was performed.

The Proposed Project has been evaluated and has been found to be consistent to the maximum extent practicable with the California Coastal Management Program, pursuant to the requirements of the Coastal Zone Management Act of 1972, as amended, and the California Coastal Act of 1976, as amended. The Proposed Project has been found to be maximally consistent with these coastal zone policies including public access, marine and water resources, recreation, land resources, hazard areas, visual resources, public works, housing/new development, and land use policies.

**e) Endangered Species Act, Pub. L. 93-205, as amended**

The Project Area contains only disturbed habitats. No special-status habitats were detected. No federally-endangered species, or otherwise special-status species, were detected in various biological surveys. The Project Area is unlikely to support any federally-listed or special-status species. No federally-listed species or habitat will be adversely affected by Project implementation. No mitigation is necessary. Smith River Rancheria Natural Resources Department Director Brad Cass sent an informal consultation letter to the US Fish and Wildlife Service's Arcata Field Office on January 25, 2010; the letter included this EA and a determination of no adverse effect on any

listed species or critical habitat. The USFWS responded to the request for informal consultation on February 16, 2010 and rendered a determination of No Effect. (**Appendix B**)

**f) Environmental Justice, Executive Order 12898**

Social and economic impacts resulting from the Proposed Project are expected to be generally beneficial to the Tribe and the surrounding community. The Proposed Project would enable the construction of additional housing for Tribal members. Pursuant to Executive Order 12898 (Environmental Justice, 59 Fed. Reg. 7629 [1994]), no minority or low-income populations would be adversely affected by the Proposed Project. While the Tribe's members living in the vicinity represent a minority population, no significant environmental impacts (such as noise or air pollution) would occur to the surrounding community.

**g) Floodplain Management, Executive Order 11988 as amended by EO 12148**

The Project Area is not located inside a 100-year or 500-year flood zone.

**h) Protection of Wetlands, Executive Order 11990**

The Project Area was formally surveyed for jurisdictional wetlands in 2008 (Winzler & Kelly 2008). The consulting botanist determined that only one water feature might qualify as a jurisdictional water feature: an ephemeral channel that flows through a 48" corrugated metal pipe culvert on South Indian Road adjacent to the south end of the tribal cemetery. No wetlands were detected during the field survey. NO wetlands were mapped within the Project Area by the USFWS National Wetland Inventory program. The proposed project will not entail any cut or fill of wetlands nor result in the disturbance of the one identified ephemeral channel because directional drilling technology will be employed; the sewer pipes will be installed well under the culvert.

**i) Farmland Protection Policy Act, Pub. L 97-98**

Agriculture and forestry are two of the County's most important economic enterprises. The Project Area and the larger Rancheria are both situated between two designated agricultural districts, which support nursery crops (especially lily flower bulb production) and cattle pasture (for dairy and beef) (Del Norte County 1983). The Project Area is not currently designated as prime farmland, and the Project Area does not qualify as prime farmland under the criteria of the LCP or the Williamson Act of 1965. No parcels within the Project Area are under a Williamson Act contract. The soil series within the Project Area are not one of the five prime agricultural soils identified in the LCP (Del Norte County 1983). The Project parcels have no known historical use of commercial agriculture. The Project Area contains no coastal forests and the Project Area is not located within, or directly adjacent to, a Timber Preserve Zone or Special Treatment Area (Del Norte County 1983). The nearest commercial forestland is located to the east in the Rowdy Creek watershed.

**j) Fish and Wildlife Coordination Act, Pub. L. 85-624, as amended**

The Project Area contains only disturbed habitats. No special-status habitats were detected. No federally-endangered species, or otherwise special-status species, were

detected in various biological surveys. The Project Area is unlikely to support any federally-listed or special-status species. No federally-listed species or habitat will be adversely affected by Project implementation. No mitigation is necessary.

**k) National Historic Preservation Act of 1966, PL 89-665, as amended**

Numerous cultural resource assessments of the Project Area have been performed. Results of these assessments and consultation with the Smith River Tribal Historic Preservation Office resulted in no known archaeological resources or cultural resources within the Project Area. The tribal cemetery is in the vicinity of the project area, but because the limits of ground disturbance do not extend to this cemetery, implementation of the Proposed Project will have no adverse effect on the Tribal cemetery or any other known cultural resource. Mitigation measures have been identified in the event that unknown or unrecorded cultural resources are encountered during ground disturbance.

**l) Safe Drinking Water Act, Pub. L 93-523, as amended**

The Proposed Project does not involve drinking water systems. No drinking water systems will be adversely affected.

**m) Wild and Scenic Rivers Act, Pub. L. 90-542, as amended**

The Project Area does not contain a Wild or Scenic River, and is not adjacent to a Wild or Scenic River. The Smith River is designated a Wild and Scenic River; the Smith River has no hydrological connection to the Project Area. No Wild or Scenic Rivers will be adversely affected.

**5. State Clearing House**

All necessary documents will be submitted to the State Clearing House in a timely fashion according to the requirements of NEPA and CEQA.

**6. Necessary Permits (NPDES, 404, etc.) Issued**

Smith River Rancheria was recently issued a permit for the new WWTF:

- Waste Discharge Requirements Order No. R1-2009-0090 for the Smith River Rancheria Wastewater Treatment Facility. North Coast Regional Water Quality Control Board. December 24, 2009.

Other permits that are anticipated to be needed are:

- A Caltrans encroachment permit to directional drill under Highway 101
- A Del Norte County encroachment permit to install sewerline under North Indian Road and South Indian Road

**7. Necessary Inter-municipal Agreements Executed**

The Safety and Traffic Improvements Project on South Indian Road was formally coordinated by the execution of a Memorandum of Agreement by and between the County of Del Norte and the Smith River Tribal Government.

A similar Memorandum of Agreement may be executed to coordinate the installation and maintenance of sewerlines under South Indian Road and North Indian Road, which are under County jurisdiction.



## G: Cumulative Impacts

### **1. Identify the combined impacts of other activities besides those recommended by the proposed project (the activities do not necessarily have to be federally funded).**

Growth in the Smith River/Crescent City area is occurring at a much slower pace than the rest of the State. Many factors inhibit growth in the region: the stringent regulations of the Local Coastal Program/Coastal Zone Act; the lack of suitable soils to use septic tank/leachfield systems effectively; the lack of efficient transportation networks to other major cities; the small tourist and resident population base to support commercial enterprises. These factors that limit growth also limit cumulative impacts from growth-inducing factors such as the Proposed Project.

Other development projects in the Smith River region include:

- widening and other improvements to Highway 101 by Caltrans
- future construction of single-family and multi-family residences on the Smith River Rancheria (Manning parcel, Haswell parcel, Bartley parcel, Bridge parcel, Eller parcel, Lopez parcel)
- future construction of tribal administrative center and retail space on the Dunroven parcel
- Transfer of UIHS to a new and larger facility on the North 40 parcel
- improvements to the Lucky 7 Casino entrance and traffic circulation
- other non-tribal residential, commercial, industrial development in Del Norte County

Continuing and future development in the region could impact stormwater quality and flow characteristics by increases in ground disturbance and in impermeable surfaces. The Proposed Project, like other projects that are constructed in the region, would be required to comply with the Clean Water Act, the National Pollutant Discharge Elimination System, and state water quality regulations. Because of the regulatory structures in place, no cumulative impacts to water quality are anticipated. No additional mitigation is required.

Development in Del Norte County causes an incremental loss of wildlife habitat and open space by land conversion, which can significantly impact special-status habitats and special-status species. The Proposed Project involves no land conversion.

Cumulative socioeconomic impacts could occur in the region as the result of developments that affect the lifestyle and economic well being of residents. The Proposed Project is expected to have beneficial impacts upon socioeconomic conditions and environmental justice for both the Tribe and the Smith River community. The Proposed Action would stimulate the development of needed housing for Tribal members, as well as remove pollutant sources. No significant adverse cumulative socioeconomic impacts would occur.

**2. Identify impacts from multiple activities which are greater than the sum of the impacts of the individual activities.**

No synergistic impacts were identified beyond the combined impacts mentioned above.

**3. Identify impacts resulting from the interaction of the two activities**

No interactions with other development projects were identified.

## H: Documentation

Bureau of Indian Affairs. 2008. Final Environmental Assessment North/South Indian Roads - Circulation and Safety Improvements, Smith River Rancheria Tribe of Tolowa Indians, Smith River, California. Prepared by Winzler & Kelly.

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Sloan, K., Ph.D. 2006b. Cultural Resources Study for North 40 Property, APN 102-750-01, 12650 Highway 101 N., Smith River Rancheria, Del Norte County, CA.

Sloan, K., Ph.D. 2007. Cultural Resources and Historic Properties Inventory for the Ironwood Property, APN 102-750-01, 12990 Highway 101 N., Smith River Rancheria, Del Norte County, CA.

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Winzler & Kelly Consulting Engineers. 2008. Smith River Rancheria APNs #101-010-011, 101-020-010 & 102-030-015 North and South Indian Roads Addendum Biological Survey Results. Prepared by Gary Lester, Senior Botanist.

## I: Appendices

### **Appendix A: Cultural Resources Consultation Correspondence for NHPA**

**Compliance** (Copies may be obtained by contacting Janis Gomes at (415) 972-3517 or at [gomes.janis@epa.gov](mailto:gomes.janis@epa.gov))

1. Smith River Rancheria, [bcass@tolowa.com](mailto:bcass@tolowa.com). Brad Cass request for THPO review. January 4, 2010.
2. Smith River Rancheria, Suntayea Steinruck, Tribal Historic Preservation Officer. Response letter to Russ Crabtree, Tribal Administrator. February 5, 2010.
3. Native American Heritage Commission, Sacramento, CA. Response letter to Brad Cass. January 28, 2010.

**Appendix B: Biological Resources Consultation Correspondence for Endangered Species Act Compliance** (Copies may be obtained by contacting Janis Gomes at (415) 972-3517 or at [gomes.janis@epa.gov](mailto:gomes.janis@epa.gov))

1. Brad Cass to: [david\\_imper@fws.gov](mailto:david_imper@fws.gov). Smith River Rancheria project notification to USFWS of the proposed project. January 26, 2010
2. David \_Imper@fws.gov. USFWS messages to Brad Cass, Smith River Rancheria, February 16, 2010.