RECLAMATION

Managing Water in the West

Trinidad Rancheria Well Development Project

Trinidad, California

Final Environmental Assessment and Finding of No Significant Impact

U.S. Department of the Interior
Bureau of Reclamation

July 2010

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

MID-PACIFIC REGION

SACRAMENTO, CALIFORNIA

FINDING OF NO SIGNIFICANT IMPACT

Trinidad Rancheria Well Development Project

FONSI 10-28-MP

Recommended by:

Date: 7/29/10

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RECLAMATION
Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Trinidad Rancheria Well Development Project

In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Mid-Pacific Regional Office of the Bureau of Reclamation (Reclamation), has determined that providing funds to install up to four test wells and establish a production well to provide a secure emergency water source for the Trinidad Rancheria during times of service disruption or during drought is not a major federal action that would significantly affect the quality of the human environment and an Environmental Impact Statement (EIS) is not required. This Finding of No Significant Impact is supported by Reclamation's Draft Environmental Assessment (EA), *Trinidad Rancheria Well Development Project,* and is hereby incorporated by reference.

BACKGROUND

Pursuant to the *State's Emergency Drought Relief Act of 1991*, as amended (Drought Act), Reclamation is distributing $40 million from the American Recovery and Reinvestment Act (ARRA) (P.L. 111-5) to fund emergency drought relief projects. In February 2009, while the State of California was in the third consecutive year of a drought, Governor Schwarzenegger declared a drought emergency. In compliance with Section 104 of the Drought Act, the Trinidad Rancheria needs this supply in case of service disruption from the City, or potential shortage during a drought emergency.

The purpose of the Proposed Action is for Reclamation to provide funding to the Trinidad Rancheria for the drilling of up to four new test wells and establishing a production well. Funding is being provided to Trinidad Rancheria for the following reasons: (1) interruptions in water service may occur when water lines fail and the City System drains. (2) The Rancheria is outside the City of Trinidad's limits and could potentially be treated differently than customers inside the city limits during a drought emergency.

Installation of the test wells and development of one production well will provide an emergency water supply to the Reservation.

FINDINGS

Reclamation has prepared an EA which analyzes the impacts of the Proposed Action. Based on the analysis in the EA, Reclamation has found that the drilling of up to four test wells and establishing a production well would not result in significant impacts to the environment and does not require the preparation of an EIS. This Finding of No Significant Impact is based upon the following:

1. ***Wildlife and Vegetation***- Due to the developed nature of the Rancheria, larger animals are likely to use the area for foraging purposes only. Wildlife would very likely evacuate the areas when construction equipment is present. Annual grasses occur at the potential well site locations and would be impacted during test drilling and production well construction. Each test well site would be temporarily disturbed (approximately 2,500 square feet) and there would be a permanent loss of vegetation at the production well site (225 square feet). This amount of disturbance is not significant. According to species list generated United State Fish and Wildlife Arcata Field Office website, special status species are known to occur in the United State Geologic Survey 7.5 Minute Quadrangle Trinidad. However, the project area lacks documented observations of federally-listed special-status species. The California Native Plant Society has identified one plant as rare in the vicinity, the Wolf's evening primrose (*Oenothera wolfii*). Rancheria staff is familiar with the species and would conduct pre-construction surveys to determine their presence and identify measures to minimize or avoid impacts to the plant. The amount of disturbance that will occur during construction would not significantly impact wildlife or vegetation in the area.

2. ***Cultural Resources -*** The Proposed Action is the type of activity that has the potential to affect historic properties on the Rancheria. Reclamation determined that no historic properties will be affected by project implementation; therefore, no cultural resources would be impacted as a result of implementing the Proposed Action. Reclamation consulted with the Tribal Historic Preservation Officer (THPO) regarding this determination. Concurrence from the THPO is pending. The project will not be implemented until the Section 106 compliance process has been completed.

3. ***Water Resources -*** The Proposed Action would neither increase nor decrease surface water in the project area and, therefore, would not result in short-term or long-term adverse impacts to surface water or resources dependent on surface water. Construction activities include drilling, excavation and trenching which have the potential to increase sedimentation into surface waters. Best management practices will be implemented, which includes carrying out the work prior to the rainy season. There would be no impacts to surface water as a result of the Proposed Action.

   The well would be managed to ensure water use efficiency and water conservation and would pump a minimal amount of water (35 gallons per minute) in the area. In addition, the well will not be operated continually each day, but, instead will be operational when there is an emergency situation that requires its use. Due to the minimal amount of water and the limited times for operation, the Proposed Action would not result in short-term or long-term adverse impacts to groundwater resources.

4. ***Global Climate Change*** - The Proposed Action would not include any significant change on the composition of the atmosphere and therefore would not result in significant impacts to climate change.

5. ***Environmental Justice*** - The Proposed Action would not disproportionately affect minorities or low-income populations and communities. The Proposed Action would benefit the tribe, a minority population. There would not be significant impacts to human health or environmental effects associated with the Proposed Action.

6. ***Indian Trust Assets*** - The nearest ITA is the QVIR and therefore, the Propsed action would not significantly impact ITAs.

7. ***Cumulative Impacts*** – The Proposed Action would not result in significant cumulative impacts to surface water resources, groundwater resources, geology and soils, land use, biological resources, cultural resources, ITAs, environmental justice, or global climate change.

Table of Contents

1.0 Purpose and Need

1.1 Introduction

Under the *State's Emergency Drought Relief Act of 1991* as amended (Public Law [P.L.] 109-234), the Bureau of Reclamation (Reclamation) is distributing $40 million from the American Recovery and Reinvestment Act (ARRA) (P.L. 111-5) to fund emergency drought relief projects. In February 2009, while the State of California was in its third consecutive year of drought, Governor Arnold Schwarzenegger declared a drought emergency.

The Cher-Ae Heights Indian Community of the Trinidad Rancheria (Tribe)*, is a federally recognized Indian tribe. The Rancheria consists of approximately 83 acres of federal trust lands and six acres of non-federal trust lands in Humboldt County, California. The project area is comprised of 46.5 acres of federal trust lands west of U.S. Highway 101 and south of the City of Trinidad (Figure 1).

The Rancheria was established in 1917 under the authority of the Summary Act of June 21, 1906 (34 Statute 325), which appropriated funds for the purchase of land for California Indian tribes. The Tribal Constitution and by-laws were approved on June 6, 1961 (BIA, 1997).

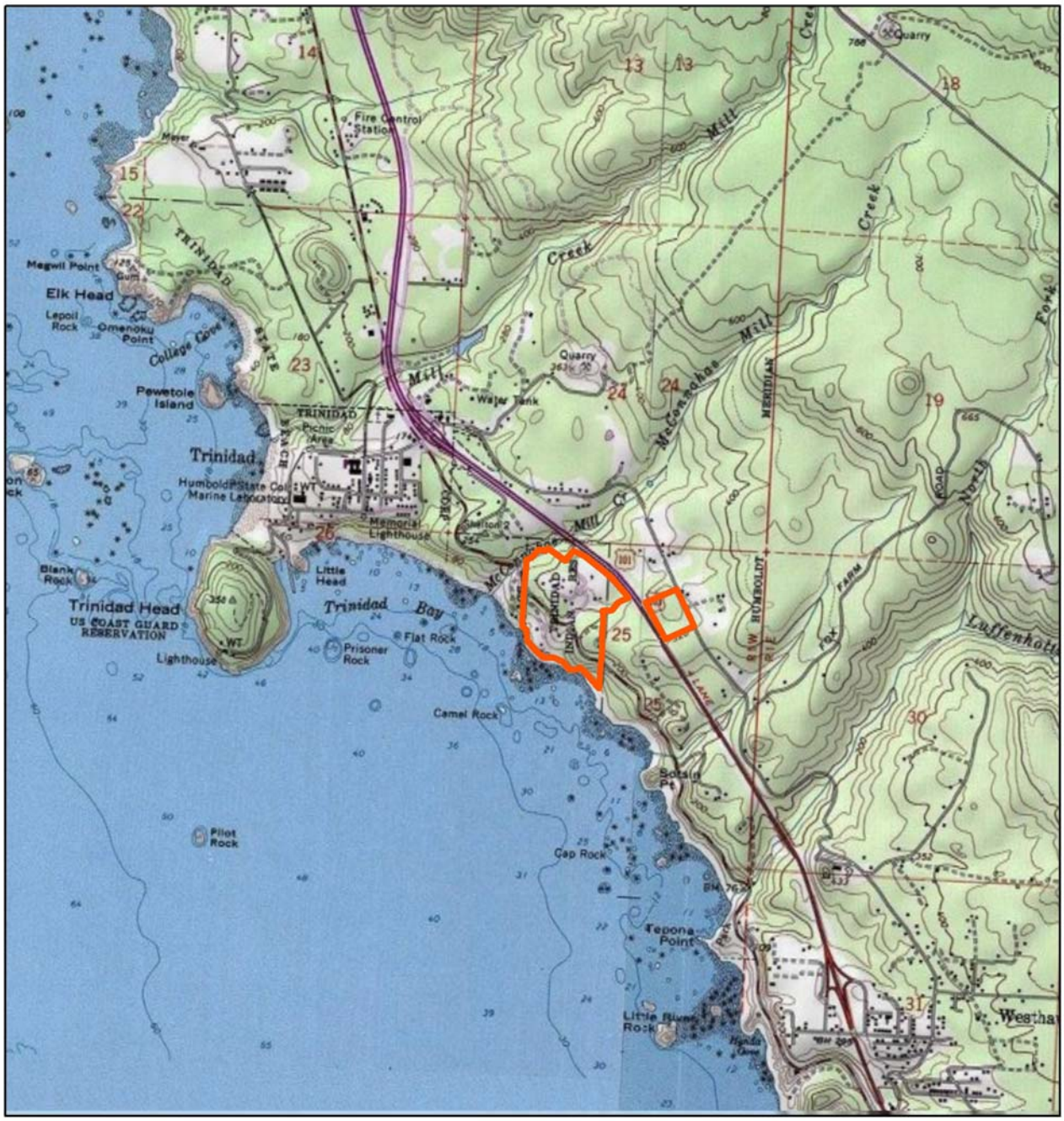
1.2 Purpose and Need

The purpose of the project is for Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well.

The Tribe currently receives all water from the City of Trinidad (City), although the boundary of the Tribe is outside the city limits. The Tribe proposes to develop an additional water supply. This supply is needed in case of service disruption from the City, or potential shortage during a drought emergency.

This environmental assessment (EA): (1) describes the existing environmental resources in the project area; (2) evaluates the effects of the alternatives (including the Proposed Action) on the resources; and, (3) proposes measures to avoid, minimize, or mitigate any adverse effects. This EA is in compliance with the National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508). Reclamation has also prepared a Finding of No Significant Impact (FONSI) which explains why the Proposed Action would not have significant effect on the human environment.

*The terms Tribe and Rancheria will be used interchangeably throughout this document



All maps are for general depiction purposes only.

Figure 1, Vicinity Map

2.0 Alternatives

2.1 Alternative 1 - No Action

Under the No Action alternative, Reclamation would not provide funds to the Tribe under ARRA for the purposes of drilling test wells and establishing a production well.

2.2 Alternative 2 - Proposed Action

The Proposed Action is for Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The production well would be used to supply water to the Tribe if service disruption from the City of Trinidad occurs, or when a drought situation reduces water supply.

Work Period. Work under the Proposed Action could take place between May and December 1, 2010, or prior to September 30, 2011. The work is anticipated to take 60 to 90 days to complete.

Wells. The Tribe has identified ten sites where test wells could be drilled (Figure 2). Eleven sites were initially identified; however, site 10 has been removed as a potential well location. Since project level design plans for the test wells have not been completed, this EA considers the worst-case scenario.

Upon review by an engineering firm, approximately four sites would be selected for the actual drilling. Staging areas would require approximately a 2,500 square feet area. Test wells are anticipated to be 20 inches in diameter and up to 150 feet in depth. After each test well is drilled, water quality testing would be performed by a Environmental Protection Agency certified laboratory. Of the four test wells, one site would be selected to be developed into a production well once it successfully meets water quality standards and shows potential for a minimum yield of 35 gallons per minute (gpm). The production well would be fitted with a submersible pump, and housing. Test wells not capable of producing the desired yield could be completed as monitoring wells. Test holes determined not to be developable would be capped with gravel and concrete, and abandoned in place per applicable requirements Based on recommendations by an engineering firm, more than one test well may be developed into a production well. The number of production wells developed under the Proposed Action would be based on engineering design and amount of funds available under the Tribes' ARRA request (Nesty et al, 2010).

Each potential test well site is located in fairly developed setting. Existing roads would be used to access to test well sites. Staging for construction equipment would require 1,000 square feet per test well site and 1,000 square feet for the production well. New roads or improvements to existing roads are not necessary.

Electrical Power. The Tribe has identified two options for supplying power to the production well. One option is to provide temporary power to the well site during a water emergency with a generator. The second option would be to tie into an existing overhead power source on the

Tribal property (Figure 2). The Tribe presently receives power from Pacific Gas and Electric. In most cases, (9 of 10 sites) a power pole is within 50-100 feet of a test well site. Ideally, the selected location for a production well would be situated near a power source and a tie in would be easily accomplished. Alternatively, some potential well sites would require an underground trench for power. The trench would be adjacent to existing roadways where possible, or would require a short overland segment to reach a well site (Nesty et al, 2010). The trench is anticipated to be two to four feet in depth, three feet wide, and less than 100 feet in length. Once electrical equipment is placed, soil would be placed back on top and compacted. Typical construction equipment could include drill rig, trucks, and backhoe. No construction would occur within streams, riparian corridors or wetlands, and a minimum 200 foot buffer would be maintained adjacent to these areas. A chlorination system would be installed to decontaminate the water and ensure suitability for potable uses.

Water Delivery. The production well would be connected to a stand pipe which would be used for filling trucks to deliver water in case of an emergency. The Tribe may purchase a truck-mounted water holding tank, or rent a water truck. It is unknown if sufficient ARRA funds would be available to be used by the Tribe for the purchase of a truck-mounted water holding tank (Nesty et al, 2010). Water would be delivered to tribal residences and businesses within the Rancheria boundaries. Water would be stored in individual storage containers.

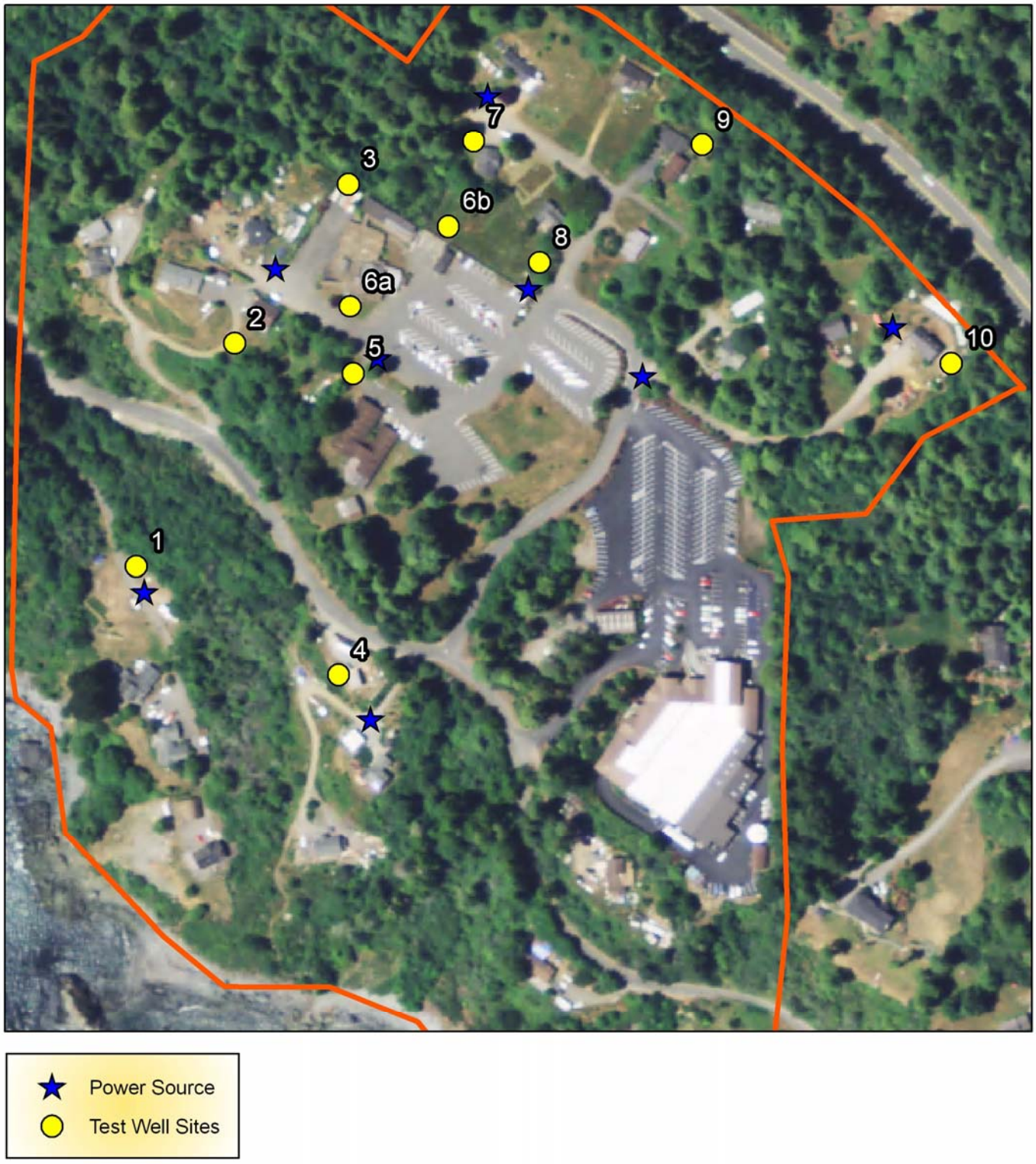


Figure 2, Project Area

3.0 Affected Environment & Environmental Consequences

3.1 Resources Considered

Evaluation of the Proposed Action indicates the following resources could be affected by the project:

- wildlife and vegetation
- cultural resources
- water resources
- climate change
- environmental justice
- Indian Trust Assets

Analysis of effects is based upon NEPAs *context* and *intensity* as described in 40 CFR 1508.27.

3.2 Resources Not Analyzed in Detail

Evaluation of the Proposed Action indicates that there would be little to no indirect, direct or cumulative effects on several resources. The resources include:

- air quality
- geology and soils
- hazards and hazardous materials
- noise
- mineral resources
- traffic and transportation
- recreation
- agricultural resources
- land use
- public services
- utilities
- socioeconomics
- surface water resources

As a result, these resources are not discussed further in this EA.

3.3 Wildlife and Vegetation

3.3.1 Affected Environment

Setting. The project area consists of approximately 46.5 acres of federal trust lands, west of U.S. Highway 101. The land use on the Rancheria consists of Tribal member housing, office, library, and the Cher-Ae Heights Casino. Located on the coast of the Pacific Ocean, the Rancheria is approximately 40 to 200 feet above sea level. The Project Area is located in the USGS 7.5-Minute quadrangle (Trindad) in the North 1/2 of Section 25, Township 8 North, Range 1 West,

Vegetation. The predominant vegetation community in the project area is the Northern Coastal Scrub. The Rancheria is a mixture of development and patches of red alder (*Albus rubra*), willow (*Salix spp*.), some grand fir (*Abies grandis*), redwoods (*Sequoia sempervirens*) and Sitka spruce (*Picea sitchensis*). The understory can be open, but is typically more closed, and usually consists of Sitka spruce, cascara (*Rhamnus purshiana)*, salmonberry (*Rubus spectabilis)*, California bramble (*Rubus ursinus)*, red elderberry (*Sambucus racemosa* var. *racemosa)*, and, coyote brush (*Baccharis pilularis*). Groundcover along roadways and in developed areas includes non-native plants including Pampas grass (*Cortaderia selloana*), Himalayan blackberry (*Rubus armeniacus*) and annual grasses. McConnahas Mill Creek, a perennial creek, runs through the northwest corner of the Rancheria. This creek supports a more developed riparian vegetation community. Cher-Ae Creek, a perennial creek, runs through the southern portion of the Rancheria. The corridor along this creek is primarily developed, with little developed riparian vegetation.

There is one plant, recognized as rare by the California Native Plant Society that occurs in the project vicinity, the Wolf's evening primrose (*Oenothera wolfii*).). Historically, wolf's evening primrose was found in the Trinidad area. Habitat for Wolf's evening primrose includes moderately disturbed sites within one mile of the coast, primarily in northern foredune scrub, along primary foredunes near the beach strand, along coastal bluffs, and roadsides. It favors sites with moist, well-drained soil, minimal competition, and protection from northwestern exposure. Road construction, coastal bluff stabilization, and housing development have threatened and removed historic occurrences of Wolf's evening primrose, particularly near Trinidad. Hybridization with a garden ornamental primrose (*O. glazioviana*) is the greatest threat to the plant species (BIA, 2006). Although unlikely, the primrose could occur at any of the test well sites. Wolf's evening primrose flowers from May to October. They are conspicuous and easily recognizable, although some care is needed to distinguish between the Wolf's evening primrose, hybrids, and the garden variety (Nesty et al, 2010).

Wildlife. The Rancheria is a developed area although there are patches of tree cover that can provide limited nesting and foraging for wildlife. Mammals that may forage in the project area include the raccoon (*Procyon lator*) and striped skunk (*Mephitis mephitis*). Other animals which could use the project area for foraging include the western garter snake (*Thamnophis elegans*), red-tailed hawk (*Buteo jamaicensis*), Stellar's jay (*Cyanocitta stelleri*), and northern red-legged frog (*Rana aurora aurora*), and Pacific chorus frog (*Pseudacris regilla*) (BIA, 1997).

Special-Status Species. The California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service websites were reviewed for the potential occurrence of federally-listed special-status species. No federally-listed special-status species have been recorded within the project area. There is no designated critical habitat in the project area (CNDDB, 2010; USFWS, 2010).
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Listed/Proposed Threatened and Endangered Species for the TRINIDAD Quad (Candidates Included)

July 12, 2010

Document number: 430626231-93550

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KEY:
(PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction
(PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future
(E) Endangered Listed in the Federal Register as being in danger of extinction
(T) Threatened Listed as likely to become endangered within the foreseeable future
(C) Candidate Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated
*** Denotes a species Listed by the National Marine Fisheries Service**

Type		Scientific Name	Common Name	Category	Critical Habitat
Invertebrates					
	*	***Haliotis cracherodii***	**black abalone**	**PE**	**N**
Fish					
	*	***Acipenser medirostris***	**green sturgeon**	**T**	**Y**
		Eucyclogobius newberryi	**tidewater goby**	**E**	**Y**
	*	***Oncorhynchus kisutch***	**S. OR/N. CA coho salmon**	**T**	**Y**
	*	***Oncorhynchus mykiss***	**Northern California steelhead**	**T**	**Y**
	*	***Oncorhynchus tshawytscha***	**CA coastal chinook salmon**	**T**	**Y**
	*	***Thaleichthys pacificus***	**Southern eulachon DPS**	**PT**	**N**
Reptiles					
	*	***Caretta caretta***	**loggerhead turtle**	**T**	**N**
	*	***Chelonia mydas (incl. agassizi)***	**green turtle**	**T**	**N**
	*	***Dermochelys coriacea***	**leatherback turtle**	**E**	**Y**
	*	***Lepidochelys olivacea***	**olive (=Pacific) ridley sea turtle**	**T**	**N**
Birds					
		Brachyramphus marmoratus	**marbled murrelet**	**T**	**Y**
		Charadrius alexandrinus nivosus	**western snowy plover**	**T**	**Y**
		Coccyzus americanus	**Western yellow-billed cuckoo**	**C**	**N**
		Phoebastris albatrus	**short-tailed albatross**	**E**	**N**
		Strix occidentalis caurina	**northern spotted owl**	**T**	**Y**
		Synthliboramphus hypoleucus	**Xantus's murrelet**	**C**	**N**
Mammals					
	*	***Balaenoptera borealis***	**sei whale**	**E**	**N**
	*	***Balaenoptera musculus***	**blue whale**	**E**	**N**
	*	***Balaenoptera physalus***	**fin whale**	**E**	**N**
	*	***Eumetopias jubatus***	**Steller (=northern) sea-lion**	**T**	**Y**
	*	***Megaptera novaengliae***	**humpback whale**	**E**	**N**
	*	***Physeter macrocephalus***	**sperm whale**	**E**	**N**

3.3.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. Without the new production well, the Tribe would be incapable of providing Rancheria residents and businesses drinking water in the event of a drought emergency or failure of the water supply from the City. There would be no impacts to wildlife and vegetation under the No Action alternative.

Proposed Action

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well for use during emergency drought, or interrupted supply, situations.

Vegetation. Although the Rancheria is primarily developed, there are patches of tree cover and annual grasses. Areas identified for test wells are made up of primarily annual grasses. There are no sensitive resources in the project area. No new roads would be needed to access the test well sites. During construction, personnel and equipment would cause minor disturbances to vegetation in the immediate area of the well sites. Each test well site would be temporarily disturbed (approximately 2,500 square feet). There would be a permanent loss of vegetation at the production well site (225 square feet). Depending on site selection, a few trees could be removed to provide access to the sites. The vegetation community is common locally and regionally and is not a sensitive resource. There is potential for the Wolf's evening primrose to be present in the project vicinity. Pre-construction surveys by Rancheria environmental staff would be conducted to determine their presence, and measures to minimize or avoid impacts on the plant would be taken, as needed. Adjustments would be made to avoid the plant, if found in the areas.

Wildlife. Due to the developed nature of the Rancheria, larger animals are likely to use the project area only for foraging purposes. During construction, there would be a short-term increase in equipment and personnel, which would cause minor disturbances to wildlife. Most animals would likely avoid foraging in the project area during construction. The well sites are located adjacent to existing roads and development, therefore wildlife is unlikely to nest or den there. After work is completed, wildlife is likely to return to the areas to forage. Depending on the selection of the test well sites, a small number of trees may need to be removed to provide access. Removing the trees could impact nesting migratory birds, if present. Preconstruction surveys would be conducted by Rancheria environmental staff, and appropriate measures implemented to minimize or avoid impacts to nesting birds.

Special-Status Species. The project area lacks documented observations of federally-listed special-status species. The Proposed Action would have no impact on special-status species.

Cumulative Effects

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The Proposed Action would result in the temporary disturbance of vegetation and wildlife. Approximately 1,125 square feet (0.02 acre) of annual grasses would be permanently removed. The Proposed Action would have no significantly cumulative impacts on wildlife and vegetation.

3.4 Cultural Resources

3.4.1 Affected Environment

A cultural resource is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (NRHP). Those resources that are on or eligible for inclusion to the NRHP are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking would have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking would have on historic properties, and consult with the Tribal or State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

In an effort to identify historic properties, a Reclamation Archaeologist searched the cultural resources files located at the Bureau of Indian Affairs. Reclamation initiated an expedited records search by the North Coastal Information Center in Klamath, California, on May 25, 2010 for the Project Area. Reclamation contracted ICF International, who conducted cultural resources surveys of the APE on June 28, 2010. No cultural resources were identified (Crawford 2010).

Consultation. Reclamation sent a letter to the Trinidad Rancheria on June 4, 2010, to invite their assistance in identifying sites of religious and cultural significance pursuant to the regulations at 36 CFR Part 800.3(f)(2) and 36 CFR Part 800.4(a)(4). Reclamation consulted with the Tribal Historic Preservation Officer (THPO) on July 27, 2010 regarding a findings of no historic properties affected pursuant to 36 CFR Part 800.4(d)(1). Concurrence from the THPO and Cedarville Rancheria to conclude the Section 106 compliance process is pending.

3.4.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide funds under ARRA for the purposes of establishing up to four wells. Conditions related to cultural resources would remain the same as existing conditions. There would be no impacts to cultural resources under the No Action alternative.

Proposed Action

The Proposed Action is the type of activity that has the potential to affect historic properties. A records search, pedestrian survey, and Tribal consultation failed to identify any historic properties within the project area. Since no historic properties would be affected, no cultural resources would be impacted as a result of implementing the Proposed Action. Concurrence from the THPO to conclude the Section 106 compliance process is pending.

Cumulative Effects

The Proposed Action has the potential to affect cultural resources on the Rancheria. Since Reclamation determined that no historic properties will be affected, no cultural resources would be impacted as a result of implementing the Proposed Action. Reclamation consulted with the THPO on July 27, 2010 regarding this determination. Concurrence from the THPO is pending. The project will not be implemented until the Section 106 compliance process has been completed.

3.5 Water Resources

3.5.1 Affected Environment

Hydrology and Water Quality. The project area is located in the Big Lagoon groundwater basin. The Basin deposits consist of Marine terrace deposits which extend inland from the ocean up to three miles. The deposits are predominantly massive, semi-consolidated clay, silt, sand and gravel and range in thickness from one to 140 feet. Annual precipitation in the Trinidad area is moderate to high from 60 to 75 inches per year, and peak rain fall intensity and surface runoff volume can be considerable. With areas of shallow soils, steeper slopes or with substantial areas of paved surfaces, there can be "flash floods" capable of considerable damage..

Surface water. McConnahas Mill Creek, a perennial creek, runs through the northwest corner of the Rancheria. This creek supports a more developed riparian vegetation community. Cher-Ae Creek, a perennial creek, runs through the southern portion of the Rancheria. The corridor along this creek is primarily developed, with little developed riparian McConnahas

Mill Creek runs through the northwest corner of the Rancheria, entering the ocean about 100 feet west of the APE.

It is not anticipated that activities associated with the Proposed Action would have a significant effect on surface or groundwater resources, nor will they increase water use by the Rancheria.

Wetlands. There are no wetlands present in the area.

Groundwater. Estimates of groundwater extraction are based on a survey conducted by the California Department of Water Resources in 1996. The survey included landuse and sources of water. Estimates of groundwater extraction for municipal/industrial are 240 acre-feet. Deep percolation from applied water is estimated to be 210 acre-feet (DWR, 2004).

3.5.2 Environmental Consequences

No Action

Under the No Action alternative Reclamation would not provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. Without the additional well, in the event of a new drought emergency or failure of the water supply from the City, the tribe would not be able to provide drinking water for the Rancheria. There would be no impacts to water resources under the No Action alternative.

Proposed Action

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The construction of a new production well would result in a negligible increase in draft from the available groundwater. As proposed, the well would be used during drought emergencies, or failure of the City's water system. Best management practices would be implemented to reduce potential for sedimentation, due to run-off from rain during construction, in McConnahas Mill or Cher-Ae Creeks. There would be a minor increase (35 gpm) in pumping groundwater due to operation of the well. The volume of water pumped would not result in a significant impact to surface water or groundwater resources.

Cumulative Effects

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. Implementation of the Proposed Action would result in a negligible increase in the amount of draft of groundwater. The project area has high precipitation rates and soils are conducive to rapid re-charge. The Proposed Action would have no significantly cumulative impacts on water resources.

3.6 Climate Change

3.6.1 Affected Environment

The United Nations Intergovernmental Panel on Climate Change predicts that changes in the earth's climate will continue through the 21st century and that the rate of change may increase significantly in the future because of human activity. Many researchers studying California's climate believe that changes in the earth's climate have already affected California and will continue to do so in the future. Climate change may seriously affect the State's water resources. Temperature increases could affect water demand and aquatic ecosystems. Changes in the timing and amount of precipitation and runoff could occur.

Climate change is identified in the 2005 update of the California Water Plan (Bulletin 160-05) as a key consideration in planning for the State's future water management. The 2005 Water Plan update qualitatively describes the effects that climate change may have on the State's water supply. It also describes efforts that should be taken to quantitatively evaluate climate change effects for the next Water Plan update.

3.6.2 Environmental Consequences

No Action

Under the No Action Alternative, the Tribe would not drill up to four test wells and a production well. The Tribe would not be able to provide more dependable water supplies to the Reservation under emergency conditions. Under this alternative, there would be no effect on climate change.

Proposed Action

The Proposed Action, would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The Proposed Action would not include any significant change on the composition of the atmosphere and therefore would not result in adverse impacts to climate change.

Cumulative Effects

The Proposed Action would not result in adverse impacts to climate change and, therefore, would not contribute to cumulative impacts to climate change**.**

3.7 Environmental Justice

3.7.1 Affected Environment

According to the U.S. Census, in 2000 Humboldt County had a population of 125,543 people. Of that, 82% was white, as compared to the rest of the U.S. which was 75%. The American Indian population was 5.5%, as compared to the rest of the U.S. which was 0.9%. The median

family income (in 2008 adjusted for inflation) was $57,755, as compared to $63,211 for the rest of the U.S. Twelve percent of the population was below the poverty level (U.S. Census, 2000).

According to the U.S. Census, the City of Trinidad had a population of 311 in 2000. Of that, 95% was white, as compared to the rest of the U.S. which was 75%. The American Indian population was 0.3%, as compared to the rest of the U.S. which was 0.9%. The median family income was $50,357, as compared to $50,046 for the rest of the U.S. Two percent of the population was below the poverty level (U.S. Census, 2000).

3.7.2 Environmental Consequences

No Action

Under the No Action, Reclamation would not provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. Without the additional well, in the event of a new drought emergency or failure of the water supply from the City, the tribe would not be able to provide drinking water for the Rancheria. There would be no impacts to environmental justice under the No Action alternative.

Proposed Action

The Proposed Action would not disproportionately affect minority or low-income communities. There would be a negligible increase in employment and income for the Tribe associated with this project, which would be entirely beneficial.

Cumulative Effects

The Proposed Action would not result in adverse impacts to environmental justice and, therefore, would not contribute to cumulative impact on environmental justice.

3.8 Indian Trust Assets

3.8.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property or rights held in trust by the United States for Indian Tribes or individuals. Trust status originates from rights imparted by treaties, statutes, or executive orders. These rights are reserved for, or granted to, tribes.

Reclamation's policy is to protect ITAs from adverse impacts resulting from Reclamation programs and activities whenever possible. Types of action that could affect ITAs include an interference with the exercise of a reserved water right, degradation of water quality where there is a water right or noise near a land asset where it adversely affects uses of the reserved land.

The Trinidad Rancheria is an Indian Trust Asset and consists of approximately 89 acres of federal trust lands and non-federal trust lands. The project area involves 46.5 acres of federal trust land (Figure 1).

3.8.2 Environmental Consequences

No Action

Under the No Action, Reclamation would not provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. Without the additional well, in the event of a new drought emergency or failure of the water supply from the City, the Tribe would not be able to the water supply needs for the Rancheria. There would be no impacts to ITAs under the No Action alternative.

Proposed Action

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The development of a production well would provide the Tribe with a reliable source of water. The Proposed Action would essentially provide a benefit to the Tribe. Construction would not adversely impact the Trinidad Rancheria (an ITA).

Cumulative Effects

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The Proposed Action would have no cumulative impact on ITAs.

4.0 Growth-Inducing and Irreversible and Irretrievable Commitment of Resources

4.1 Growth-Inducing Effects

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The Proposed Action would not directly remove obstacles to growth, result in population increases, or encourage and facilitate other activities that could significantly affect the environment. It is anticipated that land use in the project area would remain the same; therefore, there would be no growth-inducing effects as a result of construction of the proposed alternative.

4.2 Irreversible and Irretrievable Commitment of Resources

The Proposed Action would allow Reclamation to provide ARRA funds to the Tribe for the purposes of drilling up to four test wells and establishing a production well. The installation would require equipment such as a drill rigs, excavator, and backhoe which consumes fossil fuels, and submerged pump which consumes metals such as aluminum and copper. For the operation of the wells, electricity supplied to the wells requires energy that could be supplied by hydropower, renewable sources, or burning of fossil fuels. Hauling water from the production well to facilities where the water would be needed during a drought or water emergency would consume fossil fuels.

5.0 Consultation and Coordination

5.1 Federal Laws and Executive Orders

The following federal laws were considered during the preparation of this EA and the evaluation of the potential impacts from the Proposed Action.

5.1.1 Endangered Species Act (16 USC. 1521 et seq.)

Section 7 of this Act requires Federal agencies to ensure that all federally associated activities within the United States do not jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of the critical habitat of these species. Action agencies must consult with the U.S. Fish and Wildlife Service, which maintains current lists of species that have been designated as threatened or endangered, to determine the potential impacts a project may have on protected species. Reclamation has determined that the Proposed Action would have "no effect" on federally proposed or listed threatened and endangered species or their proposed or designated critical habitat. No further consultation is required under Section 7 of the Endangered Species Act.

5.1.2 Migratory Bird Treaty Act (16 USC § 703 ET SEQ.)

The Migratory Bird Treaty Act implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior (Secretary) may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg would be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns. The project does not include removal of trees that could have an effect on migratory birds.

5.1.3 National Historic Preservation Act (16 USC 470 et seq.)

The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking listed on cultural resources on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion on the National Register are referred to as historic properties.

5.1.4 Environmental Justice (Executive Order 12898)

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, as amended, directs federal agencies to develop an Environmental Justice Strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. According to the Council on Environmental Qualities guidance, agencies should consider the composition of the affected area to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action, and if so where there may be disproportionately high and adverse environmental effects. The Proposed Action could have a negligible beneficial impact on environmental justice by temporarily increasing employment and income during installation of the new well.

6.0 List of Preparers

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Appendix A

Photos

Site #1

Site #2

Site #3

Site #4

Site #5

Site #6a

Site #6b

Site #7

Site #8

Site #9

Site #10