

RECLAMATION

Managing Water in the West

Los Carneros Water District Recycled Water Pipeline Project

Final Environmental Assessment

15-13-MP



U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region

July 2015

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.

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Section 1 Introduction

1.1 Background

In conformance with the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508), and Department of the Interior (DOI) Regulations (43 CFR Part 46), the Bureau of Reclamation (Reclamation) has prepared this Environmental Assessment (EA) to evaluate and disclose any potential environmental impacts associated with the Los Carneros Water District's (LCWD) proposed Recycled Water Pipeline Project (Proposed Action). The Proposed Action is located in southwest Napa County (see Figures 1 and 2).

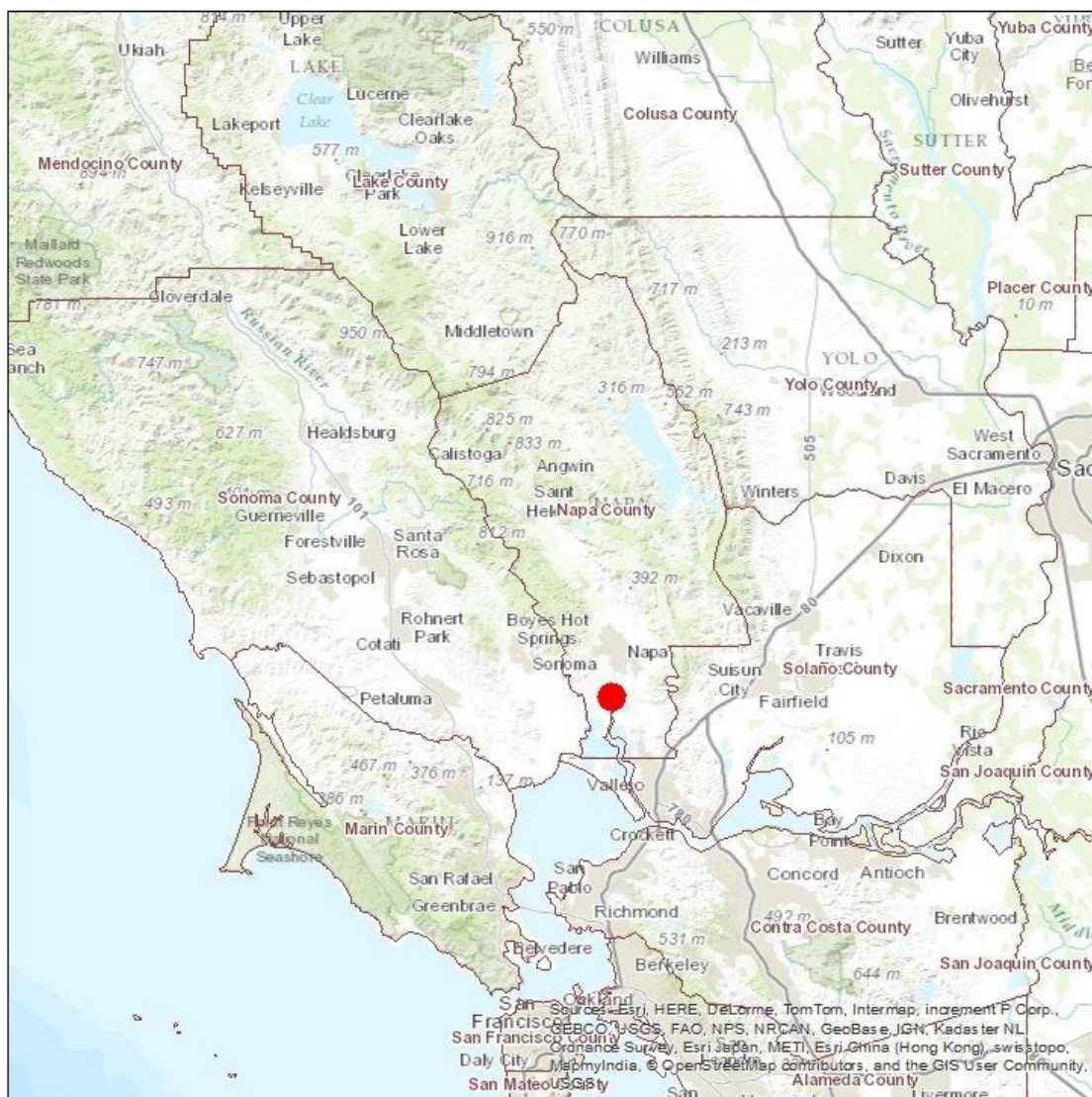
Reclamation proposes to provide federal funding through two Agricultural Water Conservation Efficiency grants to LCWD to help fund the Proposed Action. The Proposed Action would further the goals and objectives of the CALFED/NRCS collaboration by improving water conservation and water use efficiency.

LCWD is located within a renowned winegrowing region. This district was formed in 1978 to provide recycled water service to parts of the unincorporated area of Los Carneros, with the intention of facilitating an agreement with the Napa Sanitation District (NSD) to plan, construct, and operate projects necessary to deliver reclaimed water for agricultural use. A pipeline was installed leading from the NSD wastewater treatment facilities, across the Napa River to the Los Carneros area, but was never extended due to cost considerations. Local property owners currently rely on limited surface water diversions and groundwater withdrawals to satisfy their water needs. The proposed project would make approximately 1,465 acre-feet of recycled water available for use each year.

1.2 Previous Environmental Analysis

The Proposed Action was previously analyzed in the LCWD's Initial Study (IS) for the Recycled Water Pipeline Project (RWPP). The Draft IS was released to the public in December 2013. The Final IS/Mitigated Negative Declaration was released in February 2014. The document analyzed approximately 9.2 miles of 6-inch to 20-inch recycled water pipeline to serve 3,800 acres of residential landscape and agriculture. Slight adjustments to pipeline alignment were made in the final design reducing the overall length of pipe by 405 ft and increasing the area served to 4,050 acres. These changes were described in a CEQA Addendum in April 2014. These documents and the environmental analysis they contain are incorporated by reference into this document.

Vicinity of Proposed Recycled Water Pipeline



Counties FL
 □ Counties

1:1,155,581

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Figure 1. Vicinity of Proposed Recycled Water Pipeline Project

1.3 Need for the Proposed Action

The agricultural community, dominated by vineyards, requires a reliable water source for irrigation during dry months. Surface water is in scarce supply and is unreliable during drought years. Groundwater sources are being depleted, leaving some residential users with dry wells. Rising sea levels, when added to surface water diversion and groundwater extraction, have increased the risk of saltwater intrusion from San Pablo Bay. An alternative water source is needed by growers to maintain crop productivity and health.

Section 2 Alternatives Including Proposed Action

2.1 No Action Alternative

Under the No-Action Alternative, Reclamation would not award two NRCS Water Use Efficiency Grants to partially fund LCWD to construct and operate a recycled water pipeline. LCWD would either need to raise additional money elsewhere to complete the Recycled Water Pipeline, or find alternative sources of water to meet the demand.

2.2 Proposed Action

Under the Proposed Action, Reclamation would award two NRCS Water Use Efficiency Grants to partially fund LCWD to construct and operate a recycled water pipeline in southwest Napa County. The grants total approximately \$1.730 million. LCWD would provide the remaining \$16.015 million (approximate value) to complete the project.

The recycled water pipeline would consist of approximately 9.2 miles of 6-inch to 20-inch pipeline to distribute water from the NSD wastewater facilities to approximately 4,050 acres of residential and agricultural land (Table 1). The water would be used for landscape and agricultural irrigation. Pipeline would be installed in existing roadways and any pumping or water storage would be done using existing facilities requiring no new construction of pump stations or storage facilities.

Water meters would be installed at access points along the pipeline where water users will connect. These meters would connect with short (less than 160 ft) lateral pipelines off the mainline (Figure 2).

Table 1. Proposed Project Pipeline Segment and Roadway

Location/Description	Diameter (in)	Length (ft)
Connection to Existing River Crossing	20	810
Ranch Road/Home Hill Road	20	1,200
Stanly Cross Road	18-20	3,650
Cuttings Wharf Road	6-8-10	5,810
Milton Road	8	2,340
Las Amigas Road	16	13,400
Duhig Road	12	7,700
South Avenue	8	1,260
Los Carneros Avenue	8	3,790
Withers Road	6	3,250
Neuenschwander Road	6	1,220
Private Road (north of Stanly Crossroad)	8	2,000
Total		46,430

The Reclamation action (i.e. \$1.730 million in funding) would fund the purchase and installation of a subset of the Proposed Project, including approximately 37,807 ft of pipe and 59, 1.5-in to 4-in water meters (Table 2, Figure 2). Water users would be responsible for connecting their own pipeline/irrigation systems. Users will apply water and nutrients in quantities mindful of expected crop requirements to avoid: runoff and/or saturation, loading of salts into the soil and surface/ground water, and loading of nutrients into the soil and surface/ground water.

Table 2. Federally-funded portion of the Proposed Action.

Pipe/Meter Description	Length (ft)
Furnish and install 6-in PVC C900 pipe	7,000
Furnish and install 8-in PVC C900 pipe	8,700
Furnish and install 12-in PVC C900 pipe	7,707
Furnish and install 16-in PVC C900 pipe	14,400
Furnish and install 59, 1.5-in to 4-in water meters	-
Total	37,807

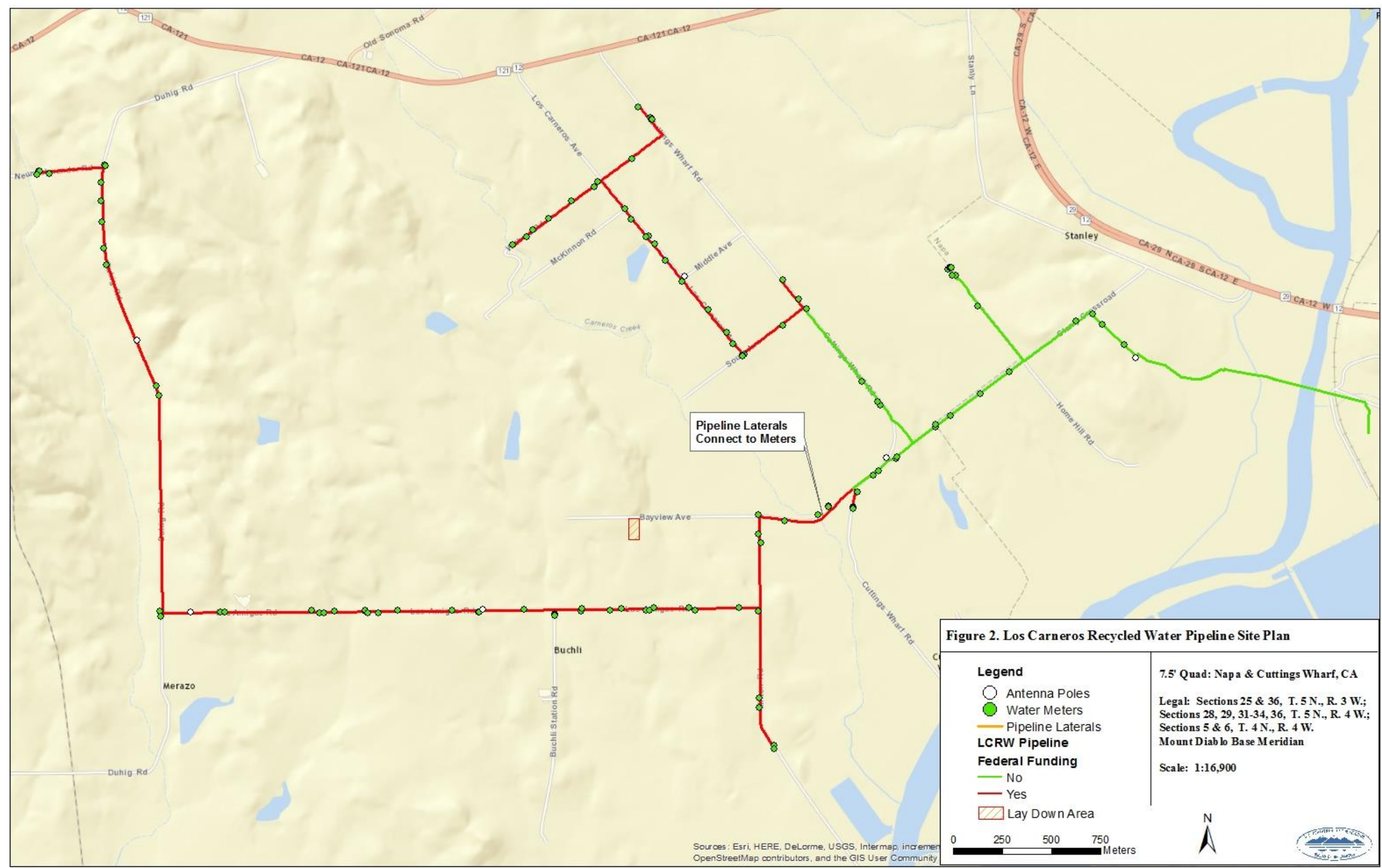


Figure 2. Proposed Project Site Plan

Construction of the non-federal portion of the project began in April 2015. The project should be completed by the fall of 2015. Construction will occur during normal working hours and weekdays, typically between 7 a.m. and 7 p.m. with possibly some work on Saturdays between the hours of 8 a.m. and 5 p.m. Pipelines would be installed within existing roadways; roads would be repaired to pre-construction condition upon completion of the Proposed Action. Implementation of the Proposed Action would provide funds to LCWD to construct the Recycled Water Pipeline; construction would include the following:

- Trenching along the designated project layout using cut and cover construction techniques
 - Trenches would be approximately 6 ft deep
- Approximately 46,430 linear feet of pipe would be laid (see Table 1 for pipe diameter and segment lengths)
- 59 water meters would be installed connected by lateral pipeline less than 160 ft in length
- Construction equipment to be used includes:
 - Track-mounted excavator
 - Backhoe
 - Grader
 - Crane
 - Dozer
 - Compactor
 - Trencher/boring machine,
 - End and bottom dump truck
 - Front-end loader
 - Water truck
 - Flat-bed delivery truck
 - Forklift
 - Compressor/jack hammer
 - Asphalt paver and roller
 - Street Sweeper

The LCWD Recycled Water Pipeline Project Public Draft IS (Section 2.2, Construction Considerations) provides a further description of planned construction, including a discussion of crossing Carneros Creek and crossing of culverts and drainages. It also describes any dewatering of the pipeline during hydrostatic testing, operations, and/or maintenance.

2.2.1 Pipeline Operation

The pipeline would carry and distribute tertiary-treated unrestricted recycled water from the NSD's Wastewater Treatment Plant to residents and landowners within the Los Carneros Water District.

2.2.2 Environmental Protection Measures

The LCWD RWPP Public Draft IS (Section 3.0, Environmental Analysis) provides an integrated discussion of the environmental settings, potential environmental impacts and the appropriate mitigation measures to reduce the significant effects of the RWPP. LCWD adopted all mitigation measures identified in the final LCWD RWPP IS.

Section 3 Affected Environment & Environmental Consequences

3.1 Resources Analyzed

The following resources were analyzed in the LCWD RWPP Public Draft IS:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Noise
- Traffic

Department of the Interior Regulations, Executive Orders, and Reclamation guidelines require a discussion of the following items when preparing environmental documentation:

3.1.2 Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. There are no Indian reservations, rancherias or allotments in the project area. The nearest ITA is the Lytton Rancheria approximately 19 miles south, south-west of the project site. The Proposed Action does not have a potential to affect ITAs and is not analyzed further. (See Appendix B).

3.1.3 Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." The Proposed Action would not affect and/or prohibit access to and ceremonial use of Indian sacred sites, and is not analyzed further.

3.1.4 Environmental Justice

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. Reclamation has not identified adverse human health or environmental effects on any population as a result of implementing the Proposed Action. Therefore, implementing the Proposed Action would not have a significant or disproportionately negative impact on low-income or minority individuals within the Proposed Action area, and will not be analyzed further.

3.2 Aesthetics

The Proposed Action is not located in or near any designated scenic vista or scenic highway. Therefore there should be no impact to these resources. State Route 29 is designated eligible for listing as a scenic highway, but implementation of the Proposed Action would not affect it or its designation. The Proposed Action involves underground construction within existing roadways (not State Route 29), and there are no anticipated impacts to trees, outcroppings, and historic buildings.

During construction there would be a temporary negative impact to general aesthetics, with open trenches and construction equipment/activities. This would be resolved with completion of the Proposed Action. The proposed pipeline would be underground and would not detract from aesthetics.

3.3 Agricultural Resources

The Proposed Action would be constructed in existing roadways and not on agricultural lands. There would be no conversion of agricultural land to non-agricultural as a direct result of implementation of the proposed Action. Implementation of the Proposed Action would provide a reliable source of water for irrigation, creating a positive impact on agricultural resources.

Section 3.2 of the LCWD RWPP Draft IS provides a discussion on application of tertiary-treated recycled water and the accumulation of salts and nutrient loading on the soil. Irrigation with recycled water should not impact total dissolved solid levels in the soil, or in the groundwater. Implementation of the Proposed Action would not change the existing environmental conditions in such a way to result in a conversion from agricultural land to non-agricultural.

3.4 Air Quality

The project site is located in the San Francisco Bay Area Air Basin and is subject to the Bay Area Air Quality Management District (BAAQMD). This air basin is currently in non-attainment for the PM₁₀ and PM_{2.5} state standards, and the state 1-hour ozone standard. The

proposed project would be in compliance with the BAAQMD regional air quality plan, the Bay Area 2000 Clean Air Program, and emissions do not exceed daily and/or annual significance thresholds. The URBEMIS Model was used in the LCWD RWPP Public Draft IS to assess construction emissions of the Proposed Action (Section 3.3); Table 3 is reproduced here for convenience (see Table 3). For a more in depth discussion of potential impacts to air quality see Section 3.3 of the LCWD RWPP Public Draft IS.

Table 3. Proposed Action Construction Emissions

Construction Phase	Construction Emissions (lbs/day)			
	ROG	NO _x	PM ₁₀	PM _{2.5} *
Grubbing/Land Clearing	9.9	47.0	12.8	4.6
Grading/Excavation	11.5	58.4	13.5	5.2
Drainage/Utilities/Subgrade	9.9	44.7	13.0	4.8
Paving	8.6	31.7	2.7	2.4
Maximum (lbs/day)**	11.7	58.4	13.5	5.2
Total Tons/Project/Year	1.4	6.3	1.5	0.6
BAAQMD Thresholds				
Pounds per Day	80	80	80	80
Tons per Project/Year	15	15	15	15
Significant Impact?	No	No	No	No
Notes				
* The BAAQMD does not have a threshold for PM _{2.5} ; however, the same threshold for PM ₁₀ is used herein.				
** Maximum daily emissions refers to the maximum emissions that would occur in one day. Not all phases will be occurring concurrently; therefore, the maximum daily emissions are not a summation of the daily emission rates of all phases.				

The following mitigation measures would be implemented to control dust during all phases of construction:

- Water all active construction sites as necessary
- Cover all trucks containing soil, sand, or other loose material or maintain a minimum of two feet of freeboard
- Apply water as necessary, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites
- Sweep if visible soil is carried into adjacent streets
- Water or apply non-toxic soil binders to exposed soil stockpiles
- Limit traffic speeds on unpaved areas to 15 mph

Once construction of the Proposed Action is complete, emission sources would be minimal, and limited to maintenance and inspection activities (likely 1-3 monthly vehicle trips along the pipeline alignment).

3.5 Biological Resources

There are 31 federally listed (federally listed as endangered, or federally listed as threatened) species that have potential to occur within the vicinity (within five miles) of the Proposed Action (see Table 4). Contra Costa goldfields (*Lasthenia conjugens*), Salt-marsh Harvest Mouse (*Reithrodontomys raviventris*), Steelhead, Central California Coast and Central Valley

(*Oncorhynchus mykiss*), Vernal pool fairy shrimp (*Branchinecta lynchi*), California freshwater shrimp (*Syncaris pacifica*) have potential to occur within the boundaries of the Proposed Action, all of which have resulted in findings of May Affect, Not Likely to Adversely Affect (see Section 4.2 and Appendix A for USFWS and NMFS concurrence letters). A more thorough description of surveys, species, and avoidance measures can be found in the LCWD RWPP Public Draft IS.

Table 4. Federal Special Status Species with Potential to Occur in the Vicinity of the Proposed Action

Common Name	Scientific Name	Status ¹	Effect	Summary of Effects Determination
Plants				
Baker's stickyseed	<i>Blennosperma bakeri</i>	E	No Effect	Unlikely to occur here. Known occurrences in Laguna de Santa Rosa and Sonoma area.
Tiburon Indian Paintbrush	<i>Castilleja affinis</i> ssp. <i>neglecta</i>	E	No Effect	No suitable habitat present.
Sonoma spineflower	<i>Chorizanthe valida</i>	E	No Effect	No known occurrences within Napa County.
Soft bird's-beak	<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	E	No Effect	No suitable habitat present.
Santa Cruz tarplant	<i>Holocarpha macradenia</i>	T	No Effect	Last known natural community in this region was extirpated in 1993.
Contra Costa goldfields	<i>Lasthenia conjugens</i>	E	May Affect, Not Likely to Adversely Affect	No wetlands or vernal pools sufficient to provide habitat are present. Plant surveys conducted in 2011 and 2014 found none present within project area.
Few-flowered navarretia	<i>Navarretia leucocephala</i>	E	No Effect	No suitable habitat present.
Calistoga allocarya	<i>Plagiobothrys strictus</i>	E	No Effect	No suitable habitat present.
Napa bluegrass	<i>Poa napensis</i>	E	No Effect	No suitable habitat present.
Showy Indian clover	<i>Trifolium amoenum</i>	E	No Effect	Thought to be extirpated from Napa County.
Mammals				
Salt-marsh Harvest Mouse	<i>Reithrodontomys raviventris</i>	E	May Affect, Not Likely to Adversely Affect	The proposed action takes place in disturbed upland habitat, and no marsh habitat exists within the project footprint. Avoidance measures and BMP's will be implemented.
Birds				
Western Snowy Plover	<i>Charadrius alexandrinus</i>	T	No Effect	No suitable open nesting habitat present.

	<i>nivosus</i>			
California Brown Pelican	<i>Pelecanus occidentalis californicus</i>	E	No Effect	No suitable habitat present.
California Clapper Rail	<i>Rallus longirostris obsoletus</i>	E	No Effect	No suitable foraging or nesting habitat present.
Reptiles				
Giant garter snake	<i>Thamnophis gigas</i>	T	No Effect	No suitable habitat present.
Amphibians				
California Tiger Salamander	<i>Ambystoma californiense</i>	T	No Effect	Unlikely to occur within the Project Area; annual grassland habitat limited.
California Red-legged Frog	<i>Rana aurora draytonii</i>	T	No Effect	Physical barriers (Napa River and Highway 29) separate the Project Area from nearest documented occurrence. Habitat within the Project Area is unlikely to support the species.
Fish				
Green sturgeon	<i>Acipenser medirostris</i>	T	No Effect	No suitable habitat present.
Tidewater goby	<i>Eucyclogobius newberryi</i>	E	No Effect	No suitable habitat present.
Delta smelt	<i>Hypomesus transpacificus</i>	T	No Effect	No permanent populations are thought to exist in the project area. The Carneros Creek crossing will only temporarily disturb the upper bank areas on either side of the creek. BMP's and erosion control measures will be implemented to keep debris and sediment from entering waterways.
Coho salmon – central CA coast	<i>Oncorhynchus kisutch</i>	E	No Effect	Thought to be extirpated from San Francisco bay drainages.
Steelhead, Central California Coast and Central Valley	<i>Oncorhynchus mykiss</i>	T	May Affect, Not Likely to Adversely Affect	Construction of the Carneros Creek crossing will only temporarily disturb the upper bank areas on either side of the creek. The construction period will be limited to the June 15 to October 15 for this portion of the project, during which the creek will likely be dry. BMP's and

				erosion control measures will be implemented to ensure debris and sediment do not enter the creek.
Central Valley spring-run Chinook salmon	<i>Oncorhynchus tshawytscha</i>	T	No Effect	There is no suitable habitat within the project footprint. BMP's and erosion control measures will ensure no impacts to water quality.
Winter-run Chinook salmon, Sacramento River	<i>Oncorhynchus tshawytscha</i>	E	No Effect	There is no suitable habitat within the project footprint. BMP's and erosion control measures will ensure no impacts to water quality.
Invertebrates				
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E	No Effect	No suitable habitat present.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	May Affect, Not Likely to Adversely Affect	The Proposed Action will not affect any wetlands or vernal pools with potential to provide suitable habitat. The only known occurrence within Napa County is to the south of the NSD facility.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	No Effect	No suitable habitat present, i.e. no elderberry shrubs identified within the project area.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E	No Effect	No suitable habitat present.
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	E	No Effect	The only known population is on the San Bruno Mountain on the San Francisco peninsula.
Myrtle's silverspot butterfly	<i>Speyeria zerene myrtleae</i>	E	No Effect	No suitable habitat present.
California freshwater shrimp	<i>Syncaris pacifica</i>	E	May Affect, Not Likely to Adversely Affect	No suitable habitat occurs within the project footprint. The crossing of Carneros Creek (suitable habitat) will be accomplished using the existing bridge and will avoid effects to the creek bed and banks.

¹ Status= Listing of Federally special status species

E: Listed as Endangered

T: Listed as Threatened

The following mitigation measures would be implemented to reduce or eliminate potential impacts to federally listed species and to comply with the Migratory Bird Treaty Act:

Plants

- Conduct preconstruction protocol level plant surveys to ensure listed plant species do not exist within the boundaries of the Proposed Action
- If found, a 25-ft exclusion buffer will be implemented and LCWD will contact the USFWS for any further avoidance and mitigation measures

Salt-marsh Harvest Mouse (SMHM)

- Disturbance footprint of all work on the east side of the Napa River shall be flagged prior to construction
 - Any pickleweed within the flagged portion shall be surveyed then removed (with a qualified biological monitor present) with hand tools at least 7 days prior to construction to eliminate food source (attractant)
 - If a potential SMHM is observed the biological monitor will stop work until the mouse has left the flagged area
 - A temporary barrier fence shall be constructed along flagged boundaries of the cleared work area (with a qualified biological monitor present) to prevent SMHM from re-entering
 - No equipment, storage materials, or work shall be allowed within any SMHM habitat identified outside of the cleared work area
 - A biologist shall inspect the integrity of the barrier fence weekly
 - Once construction is complete the barrier fence shall be removed and the area reseeded

Birds

- Conduct preconstruction bird breeding and nesting surveys for all suitable nesting habitat within 250 ft of construction activity, and establish exclusion zones around any nests (50 ft for active, non-special status passerine nests, 200 ft for raptor or special status species nests, and 500 ft for white-tailed kite and golden eagle nests)
 - Survey results are valid for 14 days from survey date
 - Exclusionary zones will remain until young have fledged
 - Surveys not required outside the breeding period from September 1 to January 31
- Conduct nesting surveys for Swainson's hawk within 0.25 mi of disturbance areas for activities between March 15 and September 1
 - A qualified biological monitor shall observe any nests within this area for signs of potential abandonment until construction has been completed or young have fledged

Fish

- Implementation of the SWPPP and its associated best management practices, and erosion controls shall be implemented to reduce erosion and siltation including:
 - construction shall be avoided in inclement weather;
 - construction access routes shall be limited and access points stabilized;

- vegetation buffers, plastic coverings, and ground base shall be used in cleared areas to be paved;
- adjacent properties shall be protected by installing sediment barriers or filters, or vegetative buffer strips;
- stabilization and prevention of sediments from surface runoff from discharging into storm drain outlets;
- use of sediment controls and filtration to remove sediment from water generated by dewatering;
- avoiding entering stream channels or disturbing their banks during construction;
- and returning all drainage patterns to pre-construction conditions.

Invertebrates

- Staging areas will be 100 ft or more from Carneros Creek
- Drainage crossings of existing culverts through roads shall be done during the dry season April 2 through October 14

3.6 Cultural Resources

“Cultural Resources” is a broad term that applies to prehistoric, historic-era, and architectural resources, as well as to traditional cultural properties. Cultural resources can include archaeological sites, which contain evidence of past human lifeways; the built environment, which consists of structures such as buildings, roadways, bridges, dams, and canals; and locations importantly associated with the history or cultural identity of living communities. Historic properties are, by definition, cultural resources that are included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA), requires the Federal government to take into consideration the effects of its undertakings on historic properties. This is accomplished through the Section 106 process as outlined at 36 CFR Part 800.

In an effort to identify historic properties in the proposed action area of potential effects (APE), private consultant SMB Environmental, Inc., on behalf of LCWD, conducted a cultural resources inventory covering the entirety of the RWPP and 0.50-mile surrounding area. These inventory efforts, which included a records search through the Northwest Information Center (NWIC), field reconnaissance surveys of the APE, and outreach to Native American contacts identified by the Native American Heritage Commission (NAHC) as having an interest in the project area. The results of these identification efforts are detailed in a report titled *Los Carneros Water District Recycled Water Pipeline Project Updated Section 106 Cultural Resources Investigation Report* (SMB Environmental, Inc. 2014).

Briefly, according to the SMB Environmental (2014) report, the records search results indicated that 46 previous cultural resources investigations covering approximately 75 percent of the RWPP have been conducted. One historic property and three potential historic properties were identified within the records search area but outside the direct APE. These properties comprise a historic bridge previously determined eligible for inclusion on the National Register of Historic Places (National Register) and three historic-era houses, two of which are unevaluated for

National Register eligibility and one that “appears” eligible for National Register inclusion. The bridge to which the proposed pipeline will be attached (Caltrans bridge #21C0081) was constructed in 1987 and is currently listed on the Caltrans Historic Bridge Inventory as not eligible for the National Register. No historic properties were identified within the APE through the records search or field surveys.

The Federated Indians of Graton Rancheria notified the consultant that the project location is outside their traditional ancestral territory. No other responses were received from the organizations identified by the NAHC and contacted by the consultant (SMB Environmental, Inc. 2014). Pursuant to 36 CFR § 800.3(f)(2) and § 800.4(a)(4), Reclamation contacted the Cortina Band of Indians, the Federated Indians of Graton Rancheria, and the Yocha Dehe Wintun Nation, notifying these Indian tribes of Reclamation’s involvement in funding the RWPP and requesting their assistance in the identification of any known cultural resources of concern that may be affected by the undertaking. To date, Reclamation has received no responses from the Indian tribes contacted. If any concerns related to the proposed action are subsequently identified, Reclamation will consult with the concerned Indian tribe or tribes on a resolution.

Based on the above information, Reclamation reached a finding of no historic properties affected pursuant to 36 CFR § 800.4(d)(1). Reclamation initiated consultation with the SHPO of this finding of effect through correspondence dated July 2, 2015, in which an expedited review of the submission was requested. In correspondence dated July 17, 2015, the SHPO responded with no objection to Reclamation’s finding.

3.7 Geology / Soils

Implementation of the Proposed Action would involve ground disturbing work with potential to create erosion and/or loss of topsoil. This potential is very minimal, as the proposed pipeline would primarily be installed within existing paved roadways. Once the pipeline is in place, trenches would be covered and repaved. An erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) will minimize these impacts.

While the Proposed Action does not cross a known fault line, the general area is susceptible to earthquakes from known faults within the region. Both design and construction of the RWPP must adhere to earthquake building and engineering standards. The Proposed Action may be located on medium dense to dense fine granular soils with potential for perched groundwater. The soils may be highly susceptible to liquefaction during an earthquake. Lateral spreading could be a potential hazard.

The following mitigation measure would be implemented:

- The LCWD shall prepare a design-level geotechnical study prior to construction, and incorporate recommendations of the study into the final design.

For a more thorough description of potential impacts to geology and soils see Section 3.6 of the LCWD RWPP Public Draft IS.

3.8 Hazards/Hazardous Materials

Standard construction materials would be used for implementation of the Proposed Action. Some of these materials are generally regarded as hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, paint, and similarly related materials. These substances would be used at the project site and stored at the NSD's facilities during the course of the construction period.

While construction is occurring, the Proposed Action could block emergency vehicle access to roadways. This is a result of the placing the pipeline within existing roadways.

LCSD shall adhere to the following avoidance and minimization measures:

- all construction-related hazardous materials would be stored, handled, and used in accordance with all applicable federal, state and local laws;
- any construction-related hazardous wastes shall be staged and stored at NSD's facilities and kept at least 100 ft from any stream channels and steep banks to avoid accidental discharges into waters;
- if contaminated soil and/or groundwater is encountered or suspected, work will stop, the contamination and extent will be identified and LCSD will work with appropriate regulatory agencies in a clean-up effort;
- water resulting from dewatering of the pipeline (during hydrostatic testing or operations and maintenance) shall be land discharged only, and will not be discharged into any creeks, drainages, or waterways;
- LCWD shall develop a Traffic Control Plan (see Section 4.7) with comprehensive strategies to maintain emergency vehicle access. This would include keeping steel trench plates at construction sites to allow crossing of open trenches and identification of alternative routing.

For a more thorough description of hazards and hazardous materials associated with the Proposed Action, please refer to the LCWD RWPP Public Draft IS.

3.9 Hydrology

Implementation of the Proposed Action would involve ground disturbing work. This creates potential for erosion and siltation, potentially impacting water quality from wind and runoff. Specifically, total suspended solids (TSS) could increase, as well as nutrient loading.

The use of tertiary treated recycled water has the potential to increase salts and nutrient loadings into the surface and groundwater. The average total dissolved solids (TDS) in NSD's recycled water are 400 to 600 mg/L, which is less than or equal to the groundwater supplies currently used to irrigate. Recycled water does contain higher concentrations of nitrogen, phosphorous, and potassium than the water currently in use. These nutrients are beneficial to plants, and implementation of the proposed action would decrease the need for fertilizer application.

The following avoidance and minimization measures would be implemented:

- A SWPPP will be obtained and followed

- Best management practices and erosion controls shall be implemented to reduce erosion and siltation including:
 - construction shall be avoided in inclement weather;
 - construction access routes shall be limited and access points stabilized;
 - vegetation buffers, plastic coverings, and ground base shall be used in cleared areas to be paved;
 - adjacent properties shall be protected by installing sediment barriers or filters, or vegetative buffer strips;
 - stabilization and prevention of sediments from surface runoff from discharging into storm drain outlets;
 - use of sediment controls and filtration to remove sediment from water generated by dewatering;
 - avoiding entering stream channels or disturbing their banks during construction;
 - and returning all drainage patterns to pre-construction conditions.
- Water shall be applied consistent with Title 22 requirements and the necessary frequency/intensity required by the plants, but not in excess to avoid salt buildup
- Soil drainage shall be adequately maintained
- Salt sensitive plants shall not be spray wet
- Water and soil amendments, like gypsum, shall be used to address sodium and alkalinity concerns

Prior to use of the recycled water pipeline, LCWD will prepare a recycled water operations and maintenance plan and a recycled water users guide and submit to the San Francisco Regional Water Quality Control Board for approval. This will identify general and site-specific BMPs to protect both ground and surface water (e.g. limiting runoff, detection and correction of leaks, no application during precipitation events, and limit salt and nutrient build-up). LCWD will adhere to these identified BMPs. LCWD will also prepare an antidegradation analysis as part of its Report of Waste Discharge and submit to the San Francisco Regional Water Quality Control Board.

For a more thorough description of potential impacts to hydrology associated with the Proposed Action, please refer to Section 3.8 of the LCWD RWPP Public Draft IS.

3.10 Noise

Typical construction noise would be associated with implementation of the proposed project. This would be temporary and intermittent, occurring during the construction phase only when equipment is in operation. Once the pipeline is complete, there should be no permanent noise impacts. Noise levels would be greatest within the staging area where loading and unloading occurs. The following mitigation measures will be implemented to minimize noise impacts:

- Hours of construction will be limited to between 7 a.m. and 7 p.m. weekdays, and between 8 a.m. and 5 p.m. on Saturdays with no construction on Sundays
- Staging areas will be kept as far as is feasible from sensitive receptors (i.e. residences)
- Noise muffling devices shall be maintained on construction equipment
- Equipment will not be permitted to idle longer than five minutes if not in use

- Any stationary noise-generating equipment (e.g. air compressors) will be located as far as possible from homes and businesses

For a more thorough description of potential noise impacts associated with the Proposed Action, please refer to Section 3.11 of the LCWD RWPP Public Draft IS.

3.11 Traffic

Construction activities occurring under the Proposed Action would temporarily disrupt traffic patterns, as the action involves construction within the existing roadways. During peak construction there would be an average of 40 round-trip truck trips per day. The following mitigation measures will be implemented to minimize traffic impacts:

- All disturbed roadways will be repaired to pre-construction condition or better
- A traffic control plan will be developed and implemented that will likely include:
 - placing construction signs in advance to inform the public
 - the use of flaggers
 - alternating one-way traffic while construction occurs on one half
 - detour signage
 - available equipment to allow for emergency vehicle access and/or passage
 - designated worker parking areas

For a more thorough description of potential traffic impacts associated with the Proposed Action, please refer to Section 3.16 of the LCWD RWPP Public Draft IS.

Section 4 Consultation and Coordination

4.1 Public Involvement

The 30-day public review period for the draft LCWD RWPP IS was held from December 18, 2013, through January 21, 2014. LCWD issued the Final IS February 11, 2014 and signed a Mitigated Negative Declaration on January 30, 2014. A CEQA Addendum was released April 2014 for minor alterations in the pipeline layout that decreased the overall length of pipe to be used and increased the acreage served.

4.2 National Historic Preservation Act (54 U.S.C. § 300101 et seq.)

54 U.S.C. § 304108, commonly known as Section 106 of the NHPA, requires that Federal agencies take into consideration the effects of their undertakings on historic properties. Historic

properties are cultural resources that are included in, or eligible for inclusion in, the National Register. The 36 CFR Part 800 regulations implement Section 106 of the NHPA and outline the procedures necessary for compliance with the NHPA. Compliance with the Section 106 process follows a series of steps that are designed to identify if significant cultural resources are present in the proposed action project area and to what level they would be affected by the proposed Federal undertaking.

Reclamation initiated consultation with the SHPO for this undertaking on July 2, 2015 via a hand-delivered consultation package (See Appendix C). SHPO sent a letter of concurrence July 17, 2015.

Section 5 References

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Appendix A

Indian Trust Assets Compliance Memo



Lang, Kylene <klang@usbr.gov>

ITA Request

STEVENSON, RICHARD <rstevenson@usbr.gov>
To: "Lang, Kylene" <klang@usbr.gov>

Thu, Jun 18, 2015 at 2:20 PM

Kylene,

With regard to the Los Cameros Water District Recycled Water Pipeline Project, the closest Indian Trust Asset to the proposed Recycled Water Pipeline Project is the Lytton Rancheria located about 19 miles to the South South West of the proposed activity. Based in the nature of the planned work it does not appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian Lands. It is reasonable to assume that the proposed action will not have and adverse impacts on Indian Trust Assets.

Richard Stevenson

On Wed, Jun 17, 2015 at 3:17 PM, Lang, Kylene <klang@usbr.gov> wrote:
[Quoted text hidden]

Richard M. Stevenson
Deputy Regional Resources Manager
2800 Cottage Way, MP-400
Sacramento, CA 95825-1898
(916) 978-5264
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rstevenson@usbr.gov

Appendix B

Biological Concurrence Letters



United States Department of the Interior



In Reply Refer to:
8EAMF00-2014-I-
0466

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846

OCT 30 2014

Mr. Cedric S. Irving
Environmental Scientist
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812

Subject: Informal Endangered Species Consultation on the Los Carneros Water District
Recycled Water Pipeline Project, Napa County, California (CWSRF No. C-06-8005-
110)

Dear Mr. Irving:

This letter is in response to the State Water Resources Control Board's (State Water Board) May 14, 2014, request for informal section 7 consultation with the U.S. Fish and Wildlife Service (Service) on the effects of the Proposed Los Carneros Water District Recycled Water Pipeline Project, Napa County, California. The State Water Board's letter was received by the Service on May 16, 2014. At issue are the potential effects of the proposed project on the endangered Contra Costa goldfields (*Lasthenia conjugens*), the endangered California freshwater shrimp (*Syncharis pacifica*), the threatened vernal pool fairy shrimp (*Branchinecta lynchi*), and the endangered salt marsh harvest mouse (*Reithrodontomys raviventris*). The proposed project is not located within designated critical habitat for Contra Costa goldfields or vernal pool fairy shrimp and critical habitat for salt marsh harvest mouse and California freshwater shrimp has not been designated. Therefore no critical habitat will be affected by the proposed project. This response is provided in accordance with the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The proposed project is in line to receive Clean Water State Revolving Fund (CWSRF) financing. The CWSRF program is partially funded by a capitalization grant from the U.S. Environmental Protection Agency (EPA) and issuance of funds from this program is considered equivalent to a federal action. The EPA has designated the State Water Board as their non-federal representative for purposes of conducting informal consultation under section 7 of the Act.

This document was prepared based on: (1) information provided in the State Water Board's May 14, 2014 letter; (2) the *Los Carneros Water District Recycled Water Pipeline Project Federally-Listed Biological Resources Report* dated April 2014; (3) a site visit on October 6, 2014; (4) pipeline bridge crossing designs; and (5) other information available to the Service.

The Los Carneros Water District proposes to construct an approximately 9.2-mile pipeline system to serve residential landscape and agricultural land within the District with tertiary treated recycled water from Napa Sanitation District's (NSD) existing Soscol wastewater treatment plant. The proposed pipeline network will be located almost entirely within existing roadways and will not require any new pump stations or storage facilities. The proposed project will service approximately 106 parcels or 3,800 acres of irrigable land within the District with a recycled water supply of approximately 1,300 acre-feet of water per year that meets Title 22 unrestricted use requirements. Recycled water users within the District will connect their own pipeline, irrigation systems, and facilities to various turnouts to provide the recycled water to their private lands and fields. Table 1 lists the major pipeline segments to be installed. The pipeline across Carneros Creek will be constructed between June 15, 2015 and Oct 15, 2015. The rest of the project will be constructed between April 2015 and April 2016.

Table 1.

Location/Description	Pipe Diameter (inches)	Length (feet)
Connection to Existing River Crossing	20	810
Ranch Road/Home Hill Road	20	1,200
Stanly Cross Road	12-20	3,650
Cuttings Warf Road	6-8-10	5,810
Milton Road	8	2,340
Las Amigas Road	16	13,400
Duhig Road	12	7,700
South Avenue	8	1,260
Los Carneros Avenue	8	3,790
Withers Road	6	3,250
Neuenschwander Road	6	1,220
Private Road (north of Stanly Crossroad)	8	2,000

Project Construction

- The majority of the pipelines will be installed in existing roadways. The construction of new pipelines will include excavation, pipe placement, backfilling, and the restoration of roads damaged by construction. Excavated materials resulting from site preparation will either be used on-site during construction or disposed of at a fill area authorized by the Napa County Department of Public Works. In some instances, up to a 50-foot wide construction corridor will be used. However, in most places a 25-foot construction corridor will be used. It is anticipated that excavation will typically be no more than 6 feet deep.
- The proposed project will include connecting a section of pipeline from near the NSD pump station to the east end of the existing NSD pipeline that crosses under the Napa River. The proposed connection with the existing pipeline is located near salt marsh wetland habitat but all project-related work will take place outside of wetland and pickleweed habitat.

- The proposed project will involve one creek crossing (Carneros Creek at Las Amigas Road). The district will install the pipeline on the side of the existing bridge and will not disturb the bed or banks of the creek. The crossing will consist of a self-supporting 16-inch steel pipe with two concrete pipe supports with drilled piers at each end. The concrete pipe supports are approximately 4 feet, 6 inches wide, approximately 8 feet long and 2 feet deep. The drilled piers are 24 inches in diameter and will be approximately 25 feet deep. The easterly pipe support is estimated to be 7 feet behind the top of bank and the westerly pipe support is approximately 4 feet, 6 inches behind top of bank. Each pipe support structure will have a small retaining wall approximately 8-inches wide and 18-inches tall. To address seismic design criteria two 16-inch ductile iron ball joints will be installed behind each pipe support. The steel pipe span and the drilled piers will be installed with a crane from the bridge deck. During installation of the pipe bridge and concrete supports, no construction activities will take place in the bed, bank or channel of Carneros Creek. All construction activities will take place in the County Road right-of-way and behind top of bank.
- Pipeline installation at culvert and drainage crossings will be done using conventional cut and cover construction techniques, but will be done in the dry season (between October 15 and April 1) and will not occur during rainy weather.
- Dewatering of the pipeline to conduct hydrostatic testing during construction will be discharged to land and not into any creeks, drainages, vernal pools, or waterways.
- Five staging areas located within the existing NSD facility and within parcels along the pipeline alignment have been proposed for use as needed to support project construction.

The following avoidance measures will be implemented to prevent take and avoid adverse effects to listed species:

1. To reduce potentially significant erosion and siltation, the District and/or its contractor(s) will obtain a Stormwater Pollution Prevention Permit (SWPPP) and implement Best Management Practices and erosion control measures as required.
2. Prior to starting work activities for the pipeline segment on the east side of the Napa River, the footprint of the work area will be flagged. The work area will include the minimum area necessary to complete work. No work will take place outside of the flagged area. A temporary barrier fence will be installed between the work area and any nearby salt marsh or wetland habitat to prevent salt marsh harvest mice from entering the work area. Fencing will be installed under the supervision of a Service-approved biologist and the approved biologist will conduct weekly inspections of the work area and fencing. The fencing will be removed when work is complete.

Salt marsh harvest mice are known to occur in marshes associated with the Napa River in the northern San Pablo Bay including in Fagan Marsh and Bull Island located immediately south of the NSD facility. The existing NSD pipeline under the Napa River is located in a transition zone between saline tidal marsh to the south and freshwater riverine marshes to the north. The eastern

end of the existing pipeline is within marsh habitat where salt marsh harvest mice have been documented (CDFW 2014). However, all work proposed to tie in to the existing pipeline will take place outside of marsh habitat in previously disturbed upland habitat. Based on the location of project work outside of marsh habitat and the incorporation of the avoidance measures described above, the Service concurs with your determination that the proposed Los Carneros Water District Recycled Water Pipeline Project, if implemented as proposed, may affect, but is not likely to adversely affect the salt marsh harvest mouse.

California Freshwater Shrimp are known to occur in the portion of Huichica Creek (a tributary to the Napa River) located to the west of the westernmost extent of the proposed pipeline alignment. Carneros Creek at the proposed pipeline crossing at Las Amigas road also provides suitable habitat for California freshwater shrimp. However, proposed project work will not affect either creek. None of the proposed pipeline alignments cross Huichica Creek. The Carneros Creek pipeline crossing will be installed on the side of the existing bridge with supports outside the top of bank on either side and will avoid effects to the creek bed and banks. Based on the location of project work outside of creek bed and banks and the incorporation of the avoidance measures described above, the Service concurs with your determination that the proposed Los Carneros Water District Recycled Water Pipeline Project, if implemented as proposed, may affect, but is not likely to adversely affect California freshwater shrimp.

Two occurrences of Contra Costa goldfields are documented within less than 1 mile of the proposed project and designated critical habitat Unit 3 for Contra Costa goldfields is located approximately 0.5 mile northeast of the NSD plant. However, no wetlands or vernal pools that could provide habitat for Contra Costa goldfields are located within the project area. Based on the lack of wetland or vernal pool habitat in the project area and the results of plant surveys conducted in 2011 and 2014 which did not find Contra Costa goldfields to be present in the proposed project area, the Service concurs with your determination that the proposed Los Carneros Water District Recycled Water Pipeline Project, if implemented as proposed, may affect, but is not likely to adversely affect Contra Costa goldfields.

Vernal pool fairy shrimp designated critical habitat Unit 17 is located directly to the south of the NSD facility; this critical habitat unit includes the only documented occurrence of vernal pool fairy shrimp in Napa County. Because the proposed project will not affect any wetlands or vernal pools that could provide habitat for vernal pool fairy shrimp, the Service has determined that the proposed Los Carneros Water District Recycled Water Pipeline Project, if implemented as proposed, may affect, but is not likely to adversely affect vernal pool fairy shrimp.

This letter does not provide authorization for the incidental take of any listed species. Unless new information reveals effects of the proposed action that may affect listed or proposed species in a manner or to an extent not considered, or a new species or critical habitat is designated or proposed that may be affected by the proposed action, no further action pursuant to the Endangered Species Act of 1973, as amended, is necessary.

Mr. Cedric S. Irving

5

If you have any questions regarding our response on the Los Carneros Water District Recycled Water Pipeline Project, Napa County, please contact Stephanie Jentsch (Stephanie_Jentsch@fws.gov) or Ryan Olah, Coast Bay Division Chief, (Ryan_Olah@fws.gov) at (916) 414-6600.

Sincerely,



Eric Tattersall
Deputy Assistant Field Supervisor

cc:

Adam McKanny, California Department of Fish and Wildlife, Napa, CA

LITERATURE CITED

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404-4731

September 30, 2014

Refer to NMFS No: WCR-2014-862

Douglas E. Eberhardt
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter for the Los Carneros Water
District Recycled Water Pipeline Project

Dear Mr. Eberhardt:

On May 2, 2014, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the U.S. Environmental Protection Agency's (USEPA) implementation of the Los Carneros Water District (District) Recycled Water Pipeline Project (Project) is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Public Consultation Tracking System [<https://pcts.nmfs.noaa.gov/pcts-web/homepage.pcts>].¹ A complete record of this consultation is on file at the NMFS North-Central Coast Office in Santa Rosa, California.

Proposed Action and Action Area

USEPA proposes to provide funding to the District to install 9.2 miles of 6 to 20-inch diameter recycled water pipeline in the Los Carneros region of southwest Napa County, California. The pipeline will tie-into an existing Napa Sanitation District (NSD) pipeline. Recycled water will be pumped from the NSD Soscot Wastewater Treatment Plant to 106 residential and agricultural parcels within the Los Carneros region—serving a land area of approximately 3,800 acres with

¹ Once on the PCTS homepage, use the following PCTS tracking number within the Quick Search column:
WCR-2014-862



approximately 1,300 acre-feet of water per year. Water produced at the facility meets the requirements for disinfected tertiary recycled water “unrestricted use” as defined in Chapter 3 of Division 4 of the California Code of Regulations Title 22. Recycled water users within the District will be responsible for connecting their own pipeline/irrigation systems and facilities to the District’s pipelines to utilize the recycled water for residential or agricultural use.

The District does not currently supply these 106 residential and agricultural parcels with water and has no plan to do so in the future beyond that of recycled water via the NSD’s facilities and pipelines. Existing water sources in the region come from limited surface water storage and groundwater. The District’s land owners in parts of unincorporated Los Carneros currently use local streams, including Carneros and Huichica creeks, for irrigation, and groundwater for irrigation and potable uses.

The proposed pipeline network will be located within existing roadways and would not require any additional pump stations or storage facilities. The pipeline alignment will be located near Carneros and Huichica creeks, and will cross Carneros Creek adjacent to an existing free-spanning concrete bridge on Las Amigas Road. The Carneros Creek pipeline crossing will consist of a 16-inch diameter steel pipeline supported by concrete pipe supports on each bank. The pipeline will be free spanning and will not be attached to the Las Amigas Road Bridge. The concrete pipe supports will be approximately 4.5 feet wide, 8 feet long and 2 feet deep. The concrete supports will be held in place by 24-inch diameter piers drilled approximately 25 feet deep. The easterly pipe support will be located 7 feet above the top of the bank, and the westerly pipe support will be located 4.5 feet above the top of the bank. The suspended pipeline and piers will be installed with a crane from the bridge deck. No trees will need to be removed to install the pipeline crossing.

All construction activities will take place at the top of the bank, outside of creek channels. All construction activities would occur between April 1 and October 15. Installation of the concrete pipe supports, piles, and pipeline at the Las Amigas Road pipeline crossing will be further limited to the period between June 15 and October 15. Construction of the entire 9.2 miles of recycled water pipeline will occur over a two- to three-year period. The District will develop and implement erosion control best management practices (BMPs) and a Stormwater Pollution Prevention Plan (SWPPP) that includes BMPs for minimizing stormwater runoff, erosion, and potential water quality impacts associated with construction activities.

Although the project consists of 9.2 miles of pipeline, only 56 feet of the pipeline extends over Carneros Creek. Thus, the vast majority of the project’s action area affects upland areas which will have no impact on NMFS-listed fish or designated critical habitat. For the purpose of assessing effects in this consultation, NMFS evaluated the potential effects of the project on Carneros Creek adjacent to the Las Amigas Road Bridge and through the adjacent riparian corridor. At the project site Carneros Creek functions as a migration corridor for steelhead, but does not provide adequate summer rearing habitat due primarily to the absence of stream flow (Koehler 2003). Riparian vegetation on the creek banks consists of mature trees (primarily oak species and bay laurel) as well as grasses.

Action Agency's Effects Determination

USEPA determined that the project is NLAA listed salmonids and their critical habitat. The rationale for the USEPA's determinations was that the proposed minimization measures will avoid and minimize the potential effects on listed species and critical habitat.

Available information indicates the following listed species (Evolutionarily Significant Units (ESU) or Distinct Population Segments [DPS] under the jurisdiction of NMFS may be affected by the proposed project:

Central California Coast steelhead (*Oncorhynchus mykiss*) DPS
threatened (71 FR 834; January 5, 2006)
critical habitat (70 FR 52488; September 2, 2005).

The Carneros Creek watershed supports a population of CCC steelhead. The life history of steelhead in California is summarized in Busby *et al.* (1996). CCC steelhead are anadromous fish, spending some time in both fresh- and saltwater. The older juvenile and adult life stages occur in the ocean, until the adults ascend freshwater streams to spawn. Eggs (laid in gravel nests called redds), alevins (gravel dwelling hatchlings), fry (juveniles newly emerged from stream gravels), and young juveniles all rear in freshwater until they become large enough to migrate to the ocean to finish rearing and maturing to adults. Juveniles migrating to the ocean are called smolts. Fukushima and Lesh (1998) describe typical migration timing for steelhead in many California streams. In Central California, adult steelhead migrate into freshwater from the ocean between December and April, peaking in January and February; whereas, juvenile smolts emigrate from February through May. Migration timing is dependent on water year type, precipitation patterns, water temperature, photoperiod and other factors. This project's proposed construction activities to occur near Carneros Creek are scheduled to occur between June 15 and October 15. Stream flow in Carneros Creek is expected to be extremely low or dry during the construction period.

Consultation History

Between August 25, 2014, and September 17, 2014, USEPA and the District provided information to NMFS regarding the Project via electronic mail messages and phone conversations. NMFS participated in a site visit with representatives of the District, State Water Resources Control Board, Napa Valley Sanitation District, and consultants working with the District on September 15, 2014.

Effects of the Action

Under the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

The effects of project construction are reasonably likely to include temporary disturbance of upper bank areas along each side of Carneros Creek for installation of the concrete pipeline supports. The stream channel is likely to be dry during the June 15 to October 15 construction period and activities will be limited to areas at the top of the bank. No heavy equipment will contact the live stream, and no fish handling is required for this project. Implementation of BMPs are expected to effectively prevent the introduction of sediment, construction debris, and contaminants into the stream channel. These measures are expected to prevent water quality from being degraded and avoid excessive disturbance to instream habitat in Carneros Creek. For these reasons, project construction is expected to have insignificant effects on steelhead.

Primary constituent elements (PCEs) of designated critical habitat for CCC steelhead include water quality and quantity, foraging habitat, natural cover including large substrate and aquatic vegetation, and migratory corridors free of obstructions. Construction of the project will be limited to areas above the top of bank where concrete supports for the free spanning pipeline will be placed. The project will not require the removal of riparian vegetation. During construction, the proposed use of BMPs is expected to effectively prevent sediment and contaminants from entering the waters of Carneros Creek. Post-construction, the project may have beneficial effects to CCC steelhead critical habitat, because the pipeline will provide recycled water as an alternative water source for land owners in the region. This could reduce the amount of groundwater withdrawal and water diverted from local streams in the Los Carneros area. For the above reasons, the project is not expected to degrade PCE's for CCC steelhead or adversely affect designated critical habitat.

Conclusion

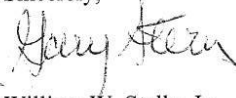
Based on this analysis, NMFS concurs with the USEPA's determination that the proposed action is not likely to adversely affect CCC steelhead and designated critical habitat.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by USEPA or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16).

Please direct questions regarding this letter to Amanda Morrison, North-Central Coast Office, at 707-575-6083 or amanda.morrison@noaa.gov.

Sincerely,


William W. Stelle, Jr.
Regional Administrator

cc: Cedric Irving, SWRCB, Sacramento
 John Stewart, Los Carneros Water District
 Copy to ARN # 151422SWR2014SR00104
 Copy to Chron File

References Cited

- Busby, P.J., T.C. Wainwright, G.J. Bryant, L. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review of West Coast steelhead from Washington, Idaho, Oregon and California. United States Department of Commerce, National Oceanic and Atmospheric Administration Technical Memorandum NMFS-NWFSC-27.261 pages.
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Appendix C

Cultural Resources Compliance Memo

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
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(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
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July 17, 2015

In reply refer to: BUR_2015_0702_001

Ms. Anastasia T. Leigh
Regional Environmental Officer
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

Re: National Historic Preservation Act (NHPA) Section 106 Consultation for the Los Carneros Water District (LCWD) Recycled Water System Pipeline Project (RWPP), Napa County, California (14-MPRO-232)

Dear Ms. Leigh:

Thank you for your letter dated July 2, 2015, requesting my review and comment with regard to the proposed Los Carneros Water District (LCWD) Recycled Water System Pipeline Project (RWPP) in Napa County, California. The Bureau of Reclamation (Reclamation) is consulting with me pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations found at 36 CFR Part 800 (as amended 8-05-04), for the proposed funding of the construction of a recycled water system. Along with your consultation letter, you also provided the following document:

- *Los Carneros Water District Recycled Water Pipeline Project, Updated Section 106 Cultural Resources Investigation Report* (SMB Environmental, June 2014).

Reclamation, as part of the National Drought Resilience Partnership, proposes to provide grant funding to the LCWD through two Natural Resources Conservation Service (NRCS) Water Use Efficiency Grants to partially fund construction of the RWPP. Reclamation, through the award of approximately \$1.7 million to the LCWD, proposes to fund the purchase and installation of a subset of the approximately \$20 million, 9.2-mile-long RWPP, portions of which, funded through state and local programs, currently exist or are under construction. Specifically, Federal funding through Reclamation would be used to purchase and install approximately 37,807 feet of 6- to 16-inch-diameter pipe, short (less than 160 feet long service laterals off the mainline, associated water meters with Samar Meter technology, and repeater antennae to relay Smart Meter data to the Napa Sanitation District (NSD) for use by LCWD irrigators. It is anticipated that, upon completion, the RWPP water conveyance and metering system will result in the conservation of approximately 1,375 acre-feet of water per year.

Reclamation has determined that the area of potential effects (APE) for this undertaking is approximately 55 acres consisting of discontinuous locations (as illustrated in the provided technical documents) and includes all ground-disturbing activities associated with project implementation, construction staging areas, and access routes. The vertical APE varies depending upon construction activity and extends to a maximum depth of 6 feet to account for all trenching activities.

The cultural resources identification effort included a records search, cultural resources survey, and Native American coordination performed by SMB Environmental (Consultant), and Native American consultation initiated by Reclamation. A records search completed on April 14, 2014 indicated that no previously recorded historic properties were identified within the APE. A cultural resource pedestrian survey conducted in 2011 and again on April 15, 2014 did not result in the identification of cultural resources within the APE.

The Native American Heritage Commission (NAHC) was contacted by the consultant on May 12, 2014 to request a search of the Sacred Lands File for known sacred sites in the project area and to request a list of Native American organizations and individuals who may have knowledge of cultural resources within the APE. NAHC records indicated that no previously identified sacred lands or areas of cultural importance are located within the APE. Likewise, Native American coordination initiated by the consultant on May 16, 2014 did not result in the identification of potential historic properties within the APE. Additionally, Reclamation initiated consultation with the Native American individuals/groups identified by the NAHC, to request their assistance in the identification of sites of religious or cultural significance or historic properties that may be affected by the proposed undertaking. Native American consultation efforts have not resulted in the identification of potential historic properties within the APE.

No historic properties were identified in the APE and, pursuant to 36 CFR 800.4(d)(1), Reclamation has found that no historic properties will be affected by the proposed undertaking. Reclamation is requesting my review and comment on the delineation of the APE and their efforts to identify historic properties. After reviewing your submission I have the following comments:

- Pursuant to 36 CFR 800.4(a)(1), I have no objections to the APE as defined.
- Pursuant to 36 CFR 800.4(b), I find that Reclamation has made a reasonable and good faith effort to identify historic properties within the area of potential effects.
- Pursuant to 36 CFR 800.4(d)(1)(i), **I do not object with your finding of no historic properties affected for this undertaking.**

Thank you for seeking my comments and considering historic properties as part of your project planning. Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, Reclamation may have additional future responsibilities for this undertaking under 36 CFR Part 800. If you have any questions, please contact Patrick Riordan of my staff at (916) 445-7017 or Patrick.Riordan@parks.ca.gov.

Sincerely,



Jenan Saunders
(for) Julianne Polanco
State Historic Preservation Officer



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

IN REPLY REFER TO:

MP-153
ENV-3.00

'JUL 02 2015

SPECIAL DELIVERY - HAND DELIVERED

Ms. Jenan Saunders
Acting State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: **DROUGHT RELIEF PROJECT**—National Historic Preservation Act (NHPA) Section 106 Consultation for the Los Carneros Water District (LCWD) Recycled Water Pipeline Project (RWPP), Napa County, California (14-MPRO-232)

Dear Ms. Saunders:

The Bureau of Reclamation is initiating consultation under Title 54 USC § 306108, commonly known as Section 106 of the NHPA, and its implementing regulations found at 36 CFR Part 800, for Reclamation-funded portions of the RWPP. The RWPP is a recycled water distribution system that will convey water supplied by the Napa Sanitation District (NSD) to approximately 4,000 acres of irrigable land in Napa County, California (Figures 1 and 2, enclosed). Reclamation, as part of the National Drought Resilience Partnership, proposes to provide grant funding to the LCWD through two Natural Resources Conservation Service (NRCS) Water Use Efficiency Grants to partially fund construction of the RWPP. Reclamation determined that the expenditure of Federal funds for this project is an undertaking as defined in 36 CFR § 800.16(y) and a type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a). We are entering into consultation with you on this undertaking and notifying you of a finding of no historic properties affected. Due to a short construction window and the drought-related nature of the undertaking, Reclamation is requesting an expedited review of this submission.

Reclamation, through the award of approximately \$1.7 million to LCWD, proposes to fund the purchase and installation of a subset of the approximately \$20 million, 9.2-mile-long RWPP, portions of which, funded through state and local programs, currently exist or are under construction. Specifically, Federal funding through Reclamation would be used to purchase and install approximately 37,807 feet of 6- to 16-inch-diameter pipe, short (less than 160 feet long) service laterals off the mainline, associated water meters with Smart Meter technology, and repeater antennae to relay Smart Meter data to NSD for use by LCWD irrigators. Once this infrastructure is in place, private landowners will have the option of connecting to the RWPP using their own funding source or through other Federal (e.g., NRCS), state, or local cost-share

programs. It is anticipated that, upon completion, the RWPP water conveyance and metering system will result in the conservation of approximately 1,375 acre-feet of water per year.

The RWPP, located within existing roadways, will convey water from the existing NSD Waste Water Treatment Plant, storage facilities, pumping stations, and pipelines, to parcels within the LCWD service area for landscaping and agricultural use. Pipeline installation within roadways and across dry culverts and drainage facilities would involve cut and cover trenching up to approximately 6 feet deep using a truck-mounted excavator and/or backhoe. A single creek crossing, of Carneros Creek at Las Amigas Road, would be accomplished by attaching the pipeline to the side of the existing bridge (Caltrans bridge #21C0081).

Reclamation has determined that the discontinuous area of potential effects (APE) for the undertaking is confined to the locations where Reclamation funding will be used for pipeline and metering system installation. The APE includes a 50-foot buffer (25 feet on either side of the pipeline and lateral center lines) that encompasses and exceeds the location of all construction and staging activities (Figure 2, enclosed). The maximum vertical extent of proposed construction activities is approximately 6 feet below the existing ground surface. The APE is located in Sections 25 and 36, T. 5 N., R. 3 W.; Sections 28, 29, and 31-34, T. 5 N., R. 4 W.; and Sections 5 and 6, T. 4 N., R. 4 W., Mount Diablo Base Meridian, as depicted on the Napa and Cuttings Wharf U.S. Geological Survey 7.5' quadrangle. The direct APE, which is situated in an area characterized by agriculture and low-density residential development, is approximately 55 acres in total. Given that the proposed pipelines and laterals tie in to existing infrastructure and (with the exception of the bridge crossing mentioned above) will be buried upon completion, and the indirect visual effects of the proposed undertaking are considered temporary and minimal.

In an effort to identify historic properties in the APE, private consultant SMB Environmental, Inc., on behalf of LCWD, conducted a cultural resources inventory covering the entirety of the RWPP and 0.50-mile surrounding area. These inventory efforts, which included a records search through the Northwest Information Center (NWIC), field reconnaissance surveys of the APE, and outreach to Native American contacts identified by the Native American Heritage Commission (NAHC) as having an interest in the project area, are detailed in the enclosed report titled *Los Carneros Water District Recycled Water Pipeline Project Updated Section 106 Cultural Resources Investigation Report* (SMB Environmental, Inc. 2014).

Briefly, the records search results indicated that 46 previous cultural resources investigations covering approximately 75 percent of the RWPP have been conducted. One historic property and three potential historic properties were identified within the records search area but outside the direct APE. These properties comprise a historic bridge previously determined eligible for inclusion on the National Register of Historic Places (National Register) and three historic-era houses, two of which are unevaluated for National Register eligibility and one that "appears" eligible for National Register inclusion. The bridge to which the proposed pipeline will be attached (Caltrans bridge #21C0081) was constructed in 1987 and is currently listed on the Caltrans Historic Bridge Inventory as not eligible for the National Register. No historic properties were identified within the APE through the records search or field surveys.

The Federated Indians of Graton Rancheria notified the consultant that the project location is outside their traditional ancestral territory. No other responses were received from the organizations identified by the NAHC and contacted by the consultant (SMB Environmental, Inc. 2014). Pursuant to 36 CFR § 800.3(f)(2) and § 800.4(a)(4), Reclamation contacted the Cortina Band of Indians, the Federated Indians of Graton Rancheria, and the Yocha Dehe Wintun Nation, notifying these Indian tribes of Reclamation's involvement in funding the RWPP and requesting their assistance in the identification of any known cultural resources of concern that may be affected by the undertaking. If any concerns about the project are subsequently identified, we will work with the concerned Indian tribe or tribes to resolve them and notify your office as appropriate.

Based on the information provided above and in the enclosed report, Reclamation finds that the proposed undertaking will result in no historic properties affected. We invite your comments on the delineation of the APE and the appropriateness of the historic properties identification efforts. Pursuant to 36 CFR § 800.4(d)(1), we are also notifying you of a finding of no historic properties affected. In the event of any post-review discoveries, Reclamation will follow the process outlined at 36 CFR § 800.13(b) and notify your office accordingly. If you have any comments or questions, please contact Ms. Joanne Goodsell, Archaeologist, at 916-978-4694 or jgoodsell@usbr.gov. Thank you for your consideration and expedited review of this submission.

Sincerely,



Anastasia T. Leigh
Regional Environmental Officer

Enclosures - 3

cc: Mr. David White
Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way, MP-400
Sacramento, CA 95825
(w/o encl)