

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Root Creek Water District Surface Water Supply Project

EA-06-117



U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
South-Central California Area Office
Fresno, California

December 2011

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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List of Acronyms, Abbreviations, and Definitions

AF	acre-feet
AF/Y	acre-feet per year
APE	area of potential effects
CAA	Clean Air Act
CFR	Code of Federal regulations
cfs	cubic-feet per second
CO	carbon monoxide
CO ₂	carbon dioxide
CNDDB	California Natural Diversity Data Base
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
EA	Environmental Assessment
EPA	Environmental Protection Agency
ft	feet
FWCA	Fish and Wildlife Coordination Act
GHG	greenhouse gases
IS	Initial Study
ITA	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
MID	Madera Irrigation District
ND	Negative Declaration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NRHP	National Register of Historic Places
PM ₁₀	particulate matter less than 10 microns in diameter
RCWD	Root Creek Water District
Reclamation	Bureau of Reclamation
ROW	right-of-way
RRA	Reclamation Reform Act of 1982
Section 215	Section 215 refers to a section in the RRA, which defines temporary water supplies that are unusually large and not storable for project purposes and, among other measures, allows non-storable water to be applied to lands otherwise ineligible to receive federal water
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Board
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWID	Shafter-Wasco Irrigation District
U.S.	United States
USFWS	U.S. Fish and Wildlife Services
VOC	volatile organic compounds
Westside	Westside Mutual Water Company, LLC

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Section 1 Purpose and Need

1.1 Background

Root Creek Water District (RCWD) is an agricultural district serving approximately 9,200 acres in Madera County. The lands within RCWD and the surrounding area rely primarily on groundwater for irrigation and as a result, the groundwater basin underlying area is subject to severe overdraft. Groundwater overdraft within RCWD itself is estimated at approximately 3,400 acre-feet (AF) per year (AF/Y). RCWD was formed for the purpose of obtaining surface water supplies and utilizing conjunctive use to reduce overdraft conditions within the district. Although located within the Friant Division Central Valley Project (CVP) service area, RCWD does not have a Federal water supply contract with the Bureau of Reclamation (Reclamation) and must rely on water transfers with willing sellers to obtain surface water supplies.

In 1999, the Friant Water Users Authority, Madera Irrigation District (MID), Chowchilla Irrigation District, and RCWD entered into an agreement that settled certain potential disputes concerning use of water based upon so-called “Holding Contracts” within RCWD. The agreement provided a framework for RCWD to balance its water supply and to obtain supplemental water from other signatories, other members of the Friant Water Authority, and other parties. In particular, the agreement provides that RCWD have the ability to purchase surface water supplies from other members of the Friant Water Authority or other sources so long as RCWD honors its commitment to purchase MID water to the extent that it is reasonably available. The parties also acknowledged, however, that RCWD desires to acquire its own long-term water supplies.

In 2002, RCWD and Madera Irrigation District (MID) reached an agreement where MID would annually transfer a portion of its available CVP supplies to RCWD (Appendix A). In 2006, RCWD reached an agreement with Westside Mutual Water Company, LLC (Westside), a California limited liability company, whereby Westside agreed to sell to RCWD banked groundwater or other non-CVP waters available to Westside each year as requested by RCWD. In 2009, RCWD reached an agreement with MID, Shafter-Wasco Irrigation District (SWID), and Westside that would provide RCWD with annual deliveries of Westside’s non-CVP water via exchange for SWID CVP water supplies (Appendix A). As part of the 2002 agreement, MID has agreed to deliver RCWD’s acquired surface water supplies through the Madera Canal and Lateral 6.2; however, there are no existing facilities in place by which to convey the water from Lateral 6.2 to RCWD’s distribution system.

The Madera Canal and Lateral 6.2 are part of the CVP. Reclamation holds title to both conveyance facilities and Lateral 6.2 is operated and maintained by MID. RCWD and MID have requested Reclamation approval to construct two new turnouts on Lateral 6.2, in addition to approval for water-related actions involving CVP water. In accordance with the California Environmental Quality Act, RCWD prepared an Initial Study (IS) and adopted a Negative Declaration (ND) on November 17, 2010 for this project, which is hereby incorporated by reference (RCWD 2010).

1.2 Purpose and Need

Groundwater overdraft underlying RCWD and the surrounding region has resulted in dropping water levels leading to inoperable agricultural wells, increased pumping costs, and a decrease in water quality and reliability of community well water supplies. RCWD needs to acquire reliable, high-quality surface water supplies to help alleviate the current groundwater overdraft conditions and to maintain viable agriculture.

In order to receive their surface water supplies, RCWD needs to construct facilities that would interconnect their existing, in-district delivery system with that of Lateral 6.2. RCWD and MID needs Reclamation approval for construction-related activities on Lateral 6.2 and associated easements and right-of-way (ROW). In addition, RCWD and the corresponding CVP contractor(s) need Reclamation approval for actions involving CVP water ultimately being delivered to RCWD.

1.3 Scope

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, this Environmental Assessment (EA) has been prepared to analyze the potential direct, indirect, and cumulative impacts resulting from the Proposed Action, which involves approvals for CVP water-related actions and construction activities on Reclamation facilities and associated easements and ROW. This EA has also been prepared to analyze the effects of the No Action Alternative.

RCWD and the corresponding CVP contractor(s) would require Reclamation approval for transfers and/or exchanges of CVP water for ultimate delivery to RCWD. The annual transfers from MID to RCWD would be for up to 10,000 AF, when available, and occur up to Contract Year 2035. The annual exchanges involving RCWD, SWID, Westside, and MID would be for up to 7,000 AF, when available, and occur up to Contract Year 2035. RCWD is also requesting a temporary contract with Reclamation for Section 215 water, if available, for Contract Year 2011 (March 1, 2011 to February 29, 2012). Subsequent temporary Section 215 contracts for RCWD would be approved and covered in a separate annual environmental analysis that Reclamation prepares jointly for all non-CVP contractors. RCWD would use the acquired surface water supplies for existing agricultural uses.

Construction activities would involve two turnouts on Lateral 6.2 and pipelines from the turnouts to RCWD's and MID's existing distribution systems. Construction activities would encompass Reclamation, private, and RCWD lands within Madera County (Figure 1) and would take approximately two months to complete. Use of the Madera Canal would also be required.

1.4 Potential Environmental Issues

This EA will analyze the potential effects to the following resources:

- Water Resources
- Land Use

- Biological Resources
- Cultural Resources
- Indian Trust Assets (ITA)
- Indian Sacred Sites
- Socioeconomic Resources
- Environmental Justice
- Air Quality
- Global Climate

1.5 Reclamation's Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action

1.5.1 Temporary Supplies of Water

Under Section 215 of the Reclamation Reform Act of 1982 (RRA) (Public Law 97-293):

- (a) Neither the ownership limitations of this title nor the ownership limitations of any other provision of Federal reclamation law shall apply to lands which receive only a temporary, not to exceed one year, supply of water made possible as a result of -
 - (1) an unusually large water supply not otherwise storable for project purposes; or
 - (2) infrequent and otherwise unmanaged flood flows of short duration.
- (b) The Secretary shall have the authority to waive payments for a supply of water described in subsection (a). *[(43 U.S.C. 390oo)]*

In addition, Section 215 allows the non-storable waters to be applied to lands otherwise ineligible to receive Federal water.

The RRA of 1982 applies to all irrigation land within an irrigation/water district, which has a water service contract with Reclamation and is subject to the acreage limitation and full-cost provisions of Reclamation law. Acquisition of irrigation water by exchange shall not subject the non-CVP users of such water to Federal Reclamation law and the associated rules and regulations.

1.5.2 Contracts for Additional Storage and Delivery of Water

The Central Valley Project Improvement Act (CVPIA) of 1992, Title 34 (of Public Law 102-575), Section 3408(c), Additional Authorities authorizes the Secretary of the Interior to enter into contracts pursuant to Reclamation law and this title with any Federal agency, California water user or water agency, State agency, or private nonprofit organization for the exchange, impoundment, storage, carriage, and delivery of CVP and non-CVP water for domestic, municipal, industrial, fish and wildlife, and any other beneficial purpose, except that nothing in this subsection shall be deemed to supersede the provisions of section 103 of Public Law 99-546 (100 Stat. 3051).

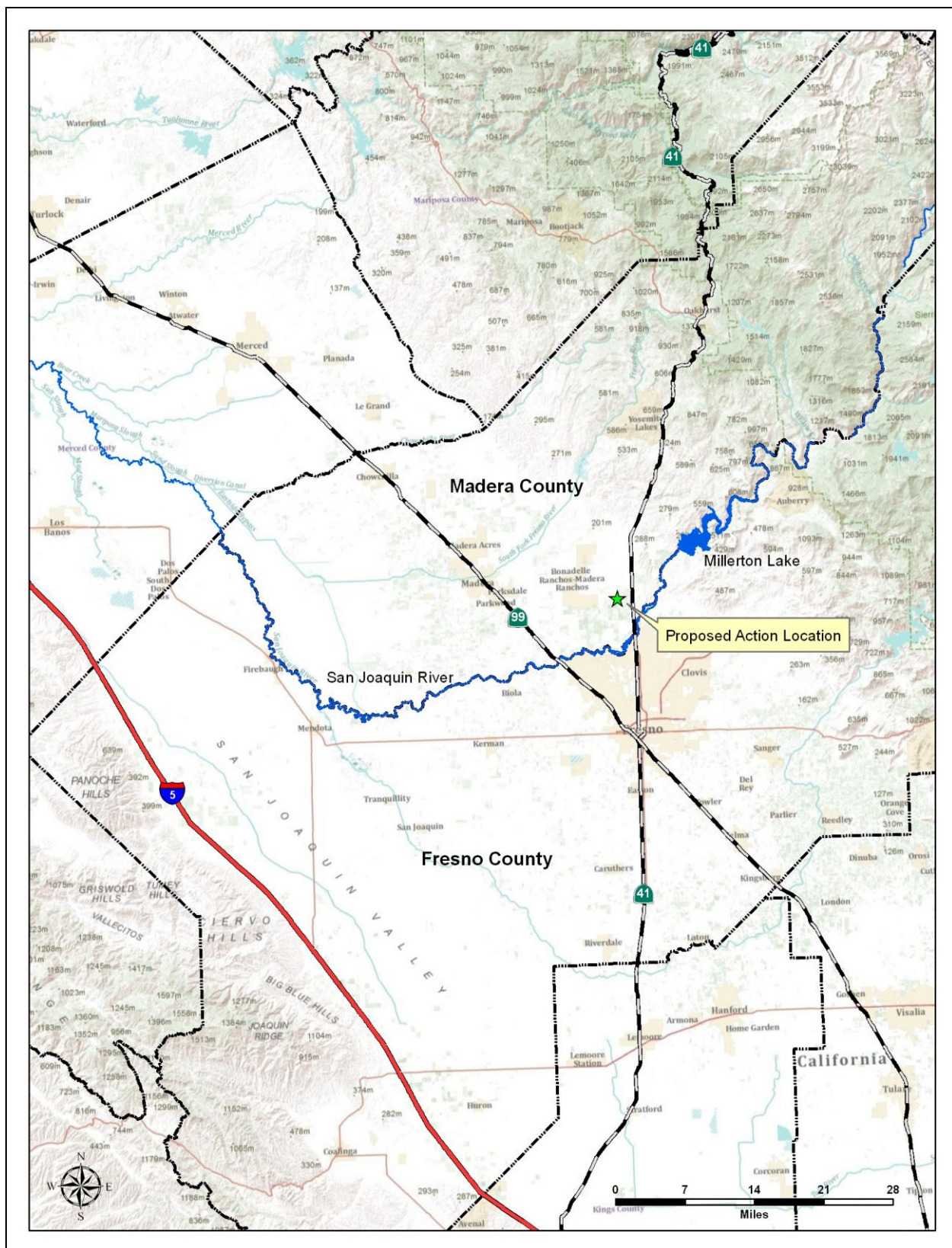


Figure 1. Proposed Action Location/Vicinity Map

Section 2 Alternatives Including The Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve the transfers and/or exchanges involving CVP water that would ultimately be delivered to RCWD. A Section 215 contract would not be executed with RCWD and permits for construction on Reclamation facilities and associated easements and ROW would not be issued. RCWD would need to obtain other sources of surface water supplies and/or methods by which to obtain Westside non-CVP water that does not require Reclamation approval. These actions may require separate environmental review and is not within the scope of this EA.

2.2 Proposed Action

Reclamation is proposing to approve the following requests made by MID, RCWD, and SWID:

- Issuance of an MP-620 permit (for alteration or modification of Reclamation facilities) to MID to construct two turnouts on Lateral 6.2 (one of the turnouts would be for RCWD and the other would replace an existing MID turnout located approximately 260 feet (ft) down Lateral 6.2);
- Approval of long-term annual transfers of up to 10,000 AF of CVP water from MID to RCWD;
- Execution of a temporary contract for Section 215 water with RCWD for Contract Year 2011; and
- Approval of long-term annual exchanges of up to 7,000 AF of water between SWID and RCWD facilitated by Westside and MID for ultimate delivery of CVP water to RCWD.

The MP-620 permit would be issued to MID and would cover both turnouts and easements for the pipelines within Reclamation easement and ROW. Each turnout would involve excavation and concrete structure on Lateral 6.2. Each pipeline from the turnouts would pass through a meter vault at the edge of Reclamation's ROW. MID's new turnout would include a 24-inch diameter pipeline which would then extend towards MID's existing distribution system approximately 0.25 miles south of Lateral 6.2. This facility would replace MID's existing turnout downstream of the new turnout. The existing turnout would be abandoned and left in place. Excavation to bury the pipeline would be approximately 5 ft deep and 10 ft wide. RCWD's new turnout would include a 36-inch diameter pipeline, which would transition to a 48-inch diameter pipeline at the meter vault, and then extend towards RCWD's existing distribution system roughly 2.75 miles south of Lateral 6.2. Excavation would be roughly 10 ft wide and up to 11 ft deep depending on elevation to allow at least 3 ft of cover. At Avenue 12 and Root

Creek, excavation would involve jack and boring underneath the road and creek (refer to Figure 2 and Appendix B for overview of the pipeline and engineering drawings).

The long-term annual transfers between MID and RCWD would occur up to Contract Year 2035, or sooner as long as there is an existing agreement in place. More specifically, MID would annually transfer up to 25 cubic-feet per second (cfs), less minor Lateral 6.2 conveyance losses as appropriate, from May 1 to August 31 and up to 50 cfs from September 1 to April 30. When available, MID would deliver a portion of its CVP supplies to RCWD via the Madera Canal, Lateral 6.2, and then through the newly built RCWD turnout and pipeline.

The Section 215 contract for RCWD would be for Contract Year 2011, ending on February 29, 2012. As declared available by Reclamation, the Section 215 water would be conveyed through the Madera Canal, Lateral 6.2, and then through the newly built RCWD turnout and pipeline for RCWD's in-district use.

The annual exchanges between RCWD and SWID would occur up to Contract year 2035, or sooner as long as there is an existing agreement in place. More specifically, Westside would transfer to SWID through non-CVP facilities, on RCWD's behalf, up to 3,500 AF for years 1-4, up to 5,000 AF for years 5-9, and up to 7,000 AF for years 10+ of non-CVP water plus an additional amount to compensate for conveyance losses to RCWD's turnout. SWID would then make available a like amount of its CVP supplies stored behind Friant Dam for ultimate delivery to the RCWD turnout without conveyance losses being charged to RCWD. The CVP water would be conveyed through the Madera Canal by Reclamation, Lateral 6.2 by MID for in-district delivery along the newly built RCWD pipeline.

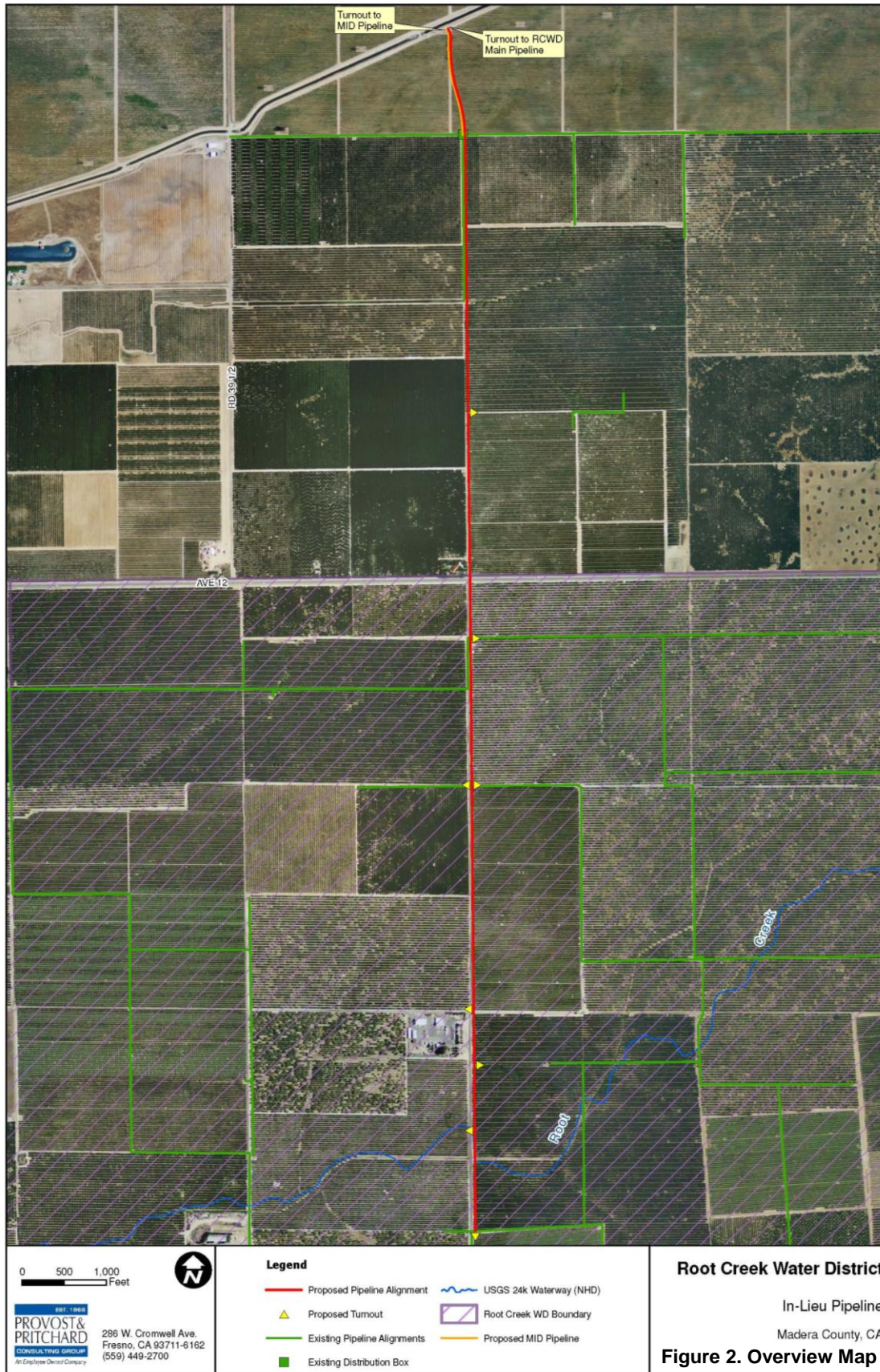
2.2.1 Environmental Protection Measures

RCWD would implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 1. Environmental Protection Measures	
<u>Resource</u>	<u>Protection Measure</u>
Biological Resources*	A biologist shall provide training to all construction project workers to familiarize them with listed species before project activities are begun at Root Creek Water District (RCWD). The biologist shall provide images of, and describe the identifying characters, life history characteristics, biology and ecology, of San Joaquin kit fox (SJKF), California tiger salamander (CTS), San Joaquin Valley orcutt grass, hairy orcutt grass, and succulent owl's clover.
Biological Resources*	A standard survey for SJKF (see attached 2011 kit fox avoidance measures) shall be conducted before activities on the project begin and a report on the findings filed with Reclamation and the U.S. Fish and Wildlife Service (USFWS). Pending the results of that survey, if no evidence of kit fox, their sign, or other evidence of their presence is detected, work may proceed pending completion of environmental compliance and notification of such by Reclamation.
Biological Resources*	Rodent burrows shall be avoided and may not be destroyed. At the time when specific locations for facilities are being identified by on the ground personnel, and also prior to beginning earth disturbing work, all burrows that could be affected by construction activities shall be flagged by a biologist (such as with a surveyor flag). Hi-viz barrier fencing at least 3 feet high shall be erected and maintained around burrows or burrow complexes to identify these sensitive areas which shall be avoided during the period of construction.

Biological Resources*	From June until the first rain even occurring on or after October 1, if an open hole or trench in the earth 6 inches deep or greater is created during construction, and it must remain open overnight, the opening to the trench or hole must either be covered to preclude entry by animals, or escape ramps suitable for CTS and SJKF must be placed at least every 50 lineal feet. If construction occurs between October 1 and May 31, for any hole or trench greater than 6 inches deep that must be left open overnight, such hole or trench must be completely covered to prevent access by animals, including CTS, if any work is conducted subsequent to a rain event.
Biological Resources*	Any open pipe within a trench or hole shall have its opening(s) capped. Each day before work activity occurs in such areas (e.g. for laying pipe), the hole or trench shall be inspected for the presence of listed species. If CTS, SJKF or other listed species is present, Reclamation biologists, the California Department of Fish and Game (DFG) and USFWS shall be contacted immediately and no further action may be taken until further appropriate consultation with the USFWS and DFG are completed.
Biological Resources*	Any pipe or similar tubular material staged or stored overnight at RCWD in an area which could be accessed by SJKF or CTS, shall be capped or covered to preclude entry. Before it is moved or installed, the openings of these materials and the area surrounding the materials must be examined for the presence of SJKF and CTS or other listed species. If a listed species is present, they must be allowed to leave of their own accord. If the animal does not immediately leave the area or there is risk of take, USFWS, DFG and Reclamation biologists shall be contacted immediately and no further action may be taken until further appropriate consultation with the Service and DFG are completed. Additionally, daily, before equipment is operated, the areas underneath such equipment shall be inspected by the operator for the presence of SJKF or CTS.
Biological Resources*	In addition to the pre-activity survey for SJKF, a pre-activity survey prior to construction shall be made for burrowing owls. As applicable, measures for avoidance (see attached DFG 1995) of "take" under the Migratory Bird Treaty Act (MBTA) shall be applied.
Biological Resources*	Furthermore, should construction be required in February through August, a biologist shall conduct a survey to locate nesting birds in the Action Area at RCWD. Those areas in RCWD, where birds or their nests, etc. that may be subjected to "take", as defined under the MBTA as consequence of the Proposed Action, shall be identified and avoidance measures implemented under the guidance of a biologist.
Biological Resources*	No water conveyed in federal facilities and applied to lands in RCWD would be applied to native lands, or to lands fallowed or left untilled for 3 or more years until such lands are first surveyed for listed species. If such lands are determined to be inhabited by listed species, then no water may be applied on them until effects to listed species are consulted upon.
Air Quality	Implement control measures for construction emissions of PM ₁₀ according to the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Regulation VIII – Rule 8021.

*Additional information regarding environmental protection measures can be found in Appendix C



Section 3 Affected Environment & Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 Water Resources

MID and SWID are Friant Division CVP contractors, which can receive Class 1 and Class 2 supplies from Millerton Lake stored behind Friant Dam.

Class 1 water is considered as the first 800,000 AF supply of CVP water stored in Millerton Lake, which would be available for delivery from the Friant-Kern Canal and/or Madera Canals as a dependable water supply during each Contract Year.

Class 2 water is considered as the next 1,400,000 AF supply of non-storable CVP water which becomes available in addition to the Class 1 supply, and because of its uncertainty as to the availability and time occurrence, would not be dependable in character and would be furnished only if and when available as determined by Reclamation per Contract Year.

Class 1 and 2 waters are not inclusive of waters released by Reclamation from Friant Dam for environmental and/or other obligations.

3.1.1 Affected Environment

Madera Irrigation District

MID has a long-term CVP contract with Reclamation for 85,000 AF/Y Class 1 and 186,000 AF/Y of Class 2 water from the Friant Division. The water is released from behind Friant Dam into the Madera Canal where it is then conveyed throughout MID.

Root Creek Water District

RCWD does not have a contract for surface water supplies and relies primarily on groundwater for irrigation. As a result, RCWD has actively pursued transfers to import surface water supplies and promote conjunctive use within its district.

Shafter-Wasco Irrigation District

SWID has a long-term CVP contract with Reclamation for 50,000 AF/Y of Class 1 and 39,600 AF/Y of Class 2 water from the Friant Division. The water is released from Friant Dam into the Friant-Kern Canal where it is conveyed down to and diverted by SWID.

Westside Mutual Water Company, LLC

Westside has certain rights to stored groundwater in North Kern Water Storage District and has occasionally purchased non-CVP surface supplies from willing sellers. As mentioned earlier, RCWD reached an agreement to purchase water from Westside; however, Westside's water is stored in Kern County and RCWD is located in Madera County, and there are no mechanisms in

place for RCWD to physically obtain this water. As a result, MID and SWID have been included in the agreement to help facilitate the movement of water for ultimate delivery of SWID CVP water supplies to RCWD. The portion of the agreement that involves Westside transferring its water supplies to SWID does not require Reclamation approval. The water can be delivered to SWID via private facilities interconnecting North Kern Water Storage District and SWID, and does not involve the Friant-Kern Canal and/or CVP water. Therefore, this portion of the agreement would not be considered in the environmental consequences section since it could occur without Reclamation approval.

Root Creek

Root Creek is a small, intermittent, ephemeral stream originating in the foothills east of RCWD. The Root Creek watershed encompasses 39 square miles and is bisected by RCWD. Water generally drains from the east to the west. The Root Creek channel has been extensively modified by agricultural operations over a period of decades. Segments of the creek channel has a morphology indicative of typical ‘drainage ditches’; canalized and denuded of natural vegetation. In many other areas the channel is simply a swale between rows of crops, predominately permanent orchards. Some segments of the Root Creek Channel within the project area are about 5 to 15 ft wide and 1.5 to 2 ft deep.

Flows from Root Creek vary considerably between wet and dry years and throughout each year. The creek is typically dry from May through October. Most of the Root Creek flows cannot be used for agricultural purposes since they tend to occur over short time periods and come during the winter when water demands are not high.

Reclamation Conveyance Facilities

The Madera Canal and Lateral 6.2 would be utilized to convey CVP water to RCWD. The Friant-Kern Canal is not involved with the Proposed Action and is therefore not discussed in the environmental consequences section.

The 35.9-mile-long Madera Canal was completed in 1945 and carries water northerly from Millerton Lake to furnish lands in Madera and Merced counties with supplemental and new irrigation supplies. The Madera Canal has a capacity of up to 1,250 cfs. Approximately 79 percent of the Madera Canal is earth-lined.

Lateral 6.2 was completed in 1956 and is approximately 28 miles long. Lateral 6.2 diverts from the Madera Canal at approximately milepost 6.2 and generally flows south and west with a capacity of up to 340 cfs.

Groundwater Resources

Kern County Groundwater Subbasin SWID is located within the Kern County Groundwater Subbasin, which has a surface area of approximately 1,945,000 acres. Review of the subbasin indicates that except for seasonal variation resulting from recharge and pumping, the groundwater levels in wells have remained relatively unchanged from 1970 to 2000. Natural recharge is primarily from stream seepage, mostly from the Kern River; however, recharge due to applied irrigation water is the largest contributor. Water banking projects account for over 3,000,000 AF of storage of the 3,900,000 storage capacity. SWID is one of several entities to implement a groundwater management plan (DWR 2006).

Madera Groundwater Subbasin MID and RCWD are located within the Madera Groundwater Subbasin, which has a surface area of approximately 394,000 acres. The subbasin water level has declined nearly 40 ft from 1970 through 2000. Water level declines have been more severe in the eastern portion of the subbasin from 1980 to 2004 (DWR 2004). Natural recharge is mostly from the San Joaquin River and Fresno River, and applied irrigation water.

The lands within RCWD and the surrounding area rely primarily on groundwater for irrigation and as a result, the groundwater basin underlying area is subject to severe overdraft. Groundwater overdraft within RCWD itself is estimated at approximately 3,400 AF/Y (Schmidt & Associates 1999, 2001).

3.1.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would be no impacts to Reclamation conveyance facilities since no construction would occur. MID and SWID would continue to use their CVP supplies within their districts as has historically occurred. There would be no impact to the Kern County Groundwater Subbasin since conditions would remain as existing conditions. The Madera Groundwater Subbasin would continue to experience overdraft conditions.

Proposed Action

SWID would only make available a like-amount for MID to convey to RCWD from which it receives from Westside and would not experience a net gain or loss in water supply. MID would only transfer their CVP supplies to RCWD after they have determined, at the time, that the district would still be able to provide the landowners within their district with adequate water supplies. Therefore, the Proposed Action would not adversely impact MID or SWID water supplies.

The Section 215 contract is temporary and would be in effect for the remainder of the 2011 Contract Year. If and when determined available by Reclamation, the Section 215 water would be provided to RCWD after all preceding obligations are met. Reclamation has historically entered into one-year Section 215 contracts with CVP and non-CVP contractors who are able to divert this water and put it to beneficial use, which would otherwise be non-storable for CVP purposes and possibly spilled from Friant Dam.

The Proposed Action would involve modifications to Lateral 6.2 and include construction within the O&M road. The excavation would be temporary, backfilled, and recompact back to pre-construction activities. Reclamation engineers have reviewed and approved the designs for the new turnouts. MID has agreed to convey the water to RCWD but only when there is excess capacity as to not interfere with others who receive water from the Madera Canal and Lateral 6.2; therefore, no adverse impacts to Reclamation facilities or water delivery would occur.

Construction is expected to take two months to complete and occur in the fall when Root Creek has been historically dry. In addition, the pipeline alignment would be jack and bored under Root Creek; therefore, no impacts to Root Creek would occur.

The Proposed Action would help RCWD promote conjunctive use within its district and help alleviate the surrounding region's dependence on groundwater. There would be slight beneficial

impacts to the Madera Groundwater Subbasin. There would be no impact to the Kern County Groundwater Subbasin since no net water is entering or leaving the region.

3.2 Land Use

3.2.1 Affected Environment

Much of the landscape within the San Joaquin Valley has been converted from native lands to agriculture uses and lands in SWID, MID, and RCWD, as well as lands held by Westside are primarily agricultural; less than 5 percent of the valley floor was left uncultivated by 1979 (USFWS 1998). Besides agricultural uses, other major land uses include urbanized areas and land for transportation.

Land use within RCWD is predominantly agriculture consisting of grapes, almonds, citrus, pistachios, pastures, olives, and with associated domestic and agricultural support facilities.

The pipeline alignment would extend through Reclamation property for Lateral 6.2, across private property, along an existing, earthen farm field road, and along the earthen County Road #40.

3.2.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would be no construction of turnouts or of new pipelines and land use conditions would remain the same as existing conditions. There would be no impacts to land use.

Proposed Action

The Proposed Action would supply reliable, high-quality surface water to RCWD to sustain existing agriculture. There would be temporary construction within Reclamation property and along an existing dirt farm road during excavation; however, these areas would be returned to pre-construction conditions upon completion of the Proposed Action. The pipeline would extend into private land; however, the landowner has given approval for the pipeline alignment into his property and would also benefit from having a more reliable distribution system and surface water supply for agricultural irrigation. As a result, the Proposed Action would not result in adverse impacts to lands use.

3.3 Biological Resources

3.3.1 Affected Environment

Most of the valley's native habitat had been altered by man by the mid 1940's, and as a result, severely degraded or destroyed habitat for native species. When the CVP began operations, over 30 percent of all natural habitats in the Central Valley and surrounding foothills had been converted to urban and agricultural land use (Reclamation 1999). Prior to widespread agriculture, land within the Proposed Action area provided habitat for a variety of plants and animals, especially those associated with valley grasslands. With the advent of irrigated agriculture and urban development over the last 100 years, many species have become threatened and endangered because of habitat loss. Of the approximately 5.6 million acres of valley

grasslands and San Joaquin saltbrush scrub, the primary natural habitats across the valley, less than 10 percent remains today. Much of the remaining habitat consists of isolated fragments supporting small, highly vulnerable populations (Reclamation 1999).

Reclamation generated an official species list on June 23, 2011, for counties in the Proposed Action area in Madera, Fresno, Kings, Tulare and Kern County using the U.S. Fish and Wildlife Service (USFWS) Sacramento Field Office's website:

http://www.fws.gov/sacramento/es/spp_lists/auto_list_form.cfm (Document # 110623063137).

Species and critical habitat present in quadrangles which include lands belonging to Westside located outside the San Joaquin Valley, in Santa Barbara, Ventura, Riverside, Imperial and San Diego Counties also were included. Species and critical habitat located within quadrangles in Santa Barbara, Ventura, Riverside, and Imperial counties were identified using the California Natural Diversity Database (CNDDDB) Quad Mapper:

http://imaps.dfg.ca.gov/viewers/cnddb_quickviewer/app.asp (accessed 6/17/2011-6/20/2011),

Ventura Fish and Wildlife Serve website:

<http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action> (accessed 6/21/2011), and the Carlsbad Fish and Wildlife Service Offices website:

http://www.fws.gov/carlsbad/TEspecies/CFWO_Species_List.htm (accessed 6/20/2011), in addition to other information within Reclamation's files. Reclamation also queried the CNDDDB for records of listed species and critical habitat in the vicinity of RCWD (CNDDDB 2011). The list developed from the above, was compiled and is presented in Table 2. This list includes all federally and state listed species, as well as other species considered when evaluating effects of the Proposed Action. This Action Area for the Proposed Action includes lands in the following USGS 7½ minute quadrangles: Iris, Oasis, Valerie, Mecca, Newbury Park, Camarillo, Oxnard, Val Verde, Piru, Fillmore, Moorpark, Simi, Saticoy, Santa Paula, Goleta, Dos Pueblos Canyon, Arvin, Tejon Hills, Conner SW, Coal Oil Canyon, Pentland, Oildale, Rosedale, Rio Bravo, Stevens, Tupman, Oil Center, Gosford, Belridge, Caneros Rocks, Deepwell Ranch, McFarland, Famoso, North of Oildale, Pond, Wasco NW, Wasco, Wasco SW, Lost Hills NW, Lost hills, Antelope Plain, Emigrant Hill, Shale Point, Blackwells Corner, Sawtooth Ridge, Ducor, Sausalito School, Richgroove, Lone Tree Hill, Dudley Ridge, Los Viejos, Avenal Gap, West Camp, Success Dam, Lindsay, Porterville, Gujarral Hills, Avenal, La Cima, Woodlake, Ivanhoe, Exeter, Rocky Hill, Monson, Traver, Stokes Mountain, Orange Cover North, Wahtoke, Reedley, Orange Cover South, Sanger, Friant, Lanes Bridge, Gregg, Herndon, Fresno North, Madera, Bonita Ranch, Gravelly Ford, Biola, Firebaugh NE, Poso Farm, Firebaugh, Mendota Dam, Daulton, Raynor Creek, Berenda, Kismet, and Chowchilla.

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area

Common Name	Scientific Name	Listing	Determination	Basis for Determination
PLANTS				
Bakersfield Cactus	<i>Opuntia treleasei</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Brand's phacelia	<i>Phacelia stellaris</i>	FC	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				affecting this species would occur.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
California jewelflower	<i>Caulanthus californicus</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
California Orcutt grass	<i>Orcuttia californica</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Coachella Valley milk-vetch	<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Coachella Valley milk-vetch	<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Coastal dunes milk-vetch	<i>Astragalus tener</i> var. <i>titi</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Conejo buckwheat	<i>Eriogonum crocatum</i>	SR	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Del Mar manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Encinitas baccharis	<i>Baccharis vanessae</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Gambel's water cress	<i>Nasturtium gambellii</i> (= <i>Rorippa gambellii</i>)	FE, ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Gambel's water cress	<i>Nasturtium gambellii</i> (= <i>Rorippa gambellii</i>)	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Greene's tuctoria	<i>Tuctoria greenei</i>	FE, SR	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Greene's tuctoria	<i>Tuctoria greenei</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Hairy Orcutt grass	<i>Orcuttia pilosa</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Hairy Orcutt grass	<i>Orcuttia pilosa</i>	CH	NE	No critical habitat would be disturbed. No land use changes would occur as a result of this action. No conversion of habitat.
Hartweg's golden sunburst	<i>Pseudobahia bahiifolia</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Hidden Lake	<i>Trichostema</i>	FT	NE	No suitable habitat would be converted

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
bluecurls	<i>austromontanum ssp. compactum</i>			or disturbed. No land use changes affecting this species would occur.
Hoover's spurge	<i>Chamaesyce hooveri</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Hoover's spurge	<i>Chamaesyce hooveri</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Keck's checker-mallow	<i>Sidalcea keckii</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Keck's checker-mallow	<i>Sidalcea keckii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Kern mallow	<i>Eremalche kernensis</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Marcescent dudleya	<i>Dudleya cymosa ssp. marcescens</i>	FT, SR	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Mariposa pussy-paws	<i>Calyptridium pulchellum</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Mexican flannelbush	<i>Fremontodendron mexicanum</i>	FE, SR	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Mexican flannelbush	<i>Fremontodendron mexicanum</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Munz's onion	<i>Allium munzii</i>	FE, ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Munz's onion	<i>Allium munzii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Nevin's barberry	<i>Berberis nevinii</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Nevin's barberry	<i>Berberis nevinii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Orcutt's hazardia	<i>Hazardia orcuttii</i>	ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Otay Mesa mint	<i>Pogogyne nudiuscula</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Otay tarplant	<i>Deinandra conjugens (=Hemizonia conjugens)</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				affecting this species would occur.
Otay tarplant	<i>Deinandra conjugens</i> (= <i>Hemizonia conjugens</i>)	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Palmate-bracted bird's-beak	<i>Cordylanthus palmatus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Peirson's milk-vetch	<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Peirson's milk-vetch	<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Ramshaw sand-verbena	<i>Abronia alpine</i>	FC	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Salt marsh bird's-beak	<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Bernardino blue grass	<i>Poa atropurpurea</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Bernardino blue grass	<i>Poa atropurpurea</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Benito evening primrose	<i>Camissonia benitensis</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Diego ambrosia	<i>Ambrosia pumila</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Diego mesa mint	<i>Pogogyne abramsii</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Diego thorn-mint	<i>Acanthomintha ilicifolia</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Diego thorn-mint	<i>Acanthomintha ilicifolia</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Jacinto Valley crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Jacinto Valley crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				habitat.
San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Joaquin Valley Orcutt grass	<i>Orcuttia inaequalis</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Joaquin Valley Orcutt grass	<i>Orcuttia inaequalis</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Joaquin woolly-threads	<i>Monolopia congdonii</i> (=Lembertia congdonii)	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Santa Ana River woollystar	<i>Eriastrum densifolium</i> ssp. <i>sanctorumJ</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Spreading navarretia	<i>Navarretia fossalis</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Spreading navarretia	<i>Navarretia fossalis</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Benito evening primrose	<i>Calyptidium pulchellum</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Springville clarkia	<i>Springville clarkia</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Succulent (=fleshy) owl's-clover	<i>Castilleja campestris</i> ssp. <i>succulenta</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Succulent (=fleshy) owl's-clover	<i>Castilleja campestris</i> ssp. <i>succulenta</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Triple-ribbed milk-vetch	<i>Astragalus tricarinatus</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Vail Lake ceanothus	<i>Ceanothus ophiochilus</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Vail Lake ceanothus	<i>Ceanothus ophiochilus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				habitat would occur. No conversion of habitat.
Ventura Marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Ventura Marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Willow monardella	<i>Monardella linoides</i> ssp. <i>viminea</i> (=M. <i>viminea</i>)	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Willow monardella	<i>Monardella linoides</i> ssp. <i>viminea</i> (=M. <i>viminea</i>)	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
INVERTEBRATES				
Casey's June beetle	<i>Dinacoma caseyi</i>	FPE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Casey's June beetle	<i>Dinacoma caseyi</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Hermes copper butterfly	<i>Hermelycaena (Lycaena) hermes</i>	FC	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Kern Primrose sphynx Moth	<i>Euproserpinus euterpe</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Laguna Mountains skipper	<i>Pyrgus ruralis lagunae</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Laguna Mountains skipper	<i>Pyrgus ruralis lagunae</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	E	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Quino checkerspot	<i>Euphydras editha quino</i> (=E.e. <i>wrighti</i>)	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Quino checkerspot	<i>Euphydras editha quino</i> (=E.e. <i>wrighti</i>)	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				habitat.
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Diego fairy shrimp	<i>Branchinecta sandiegoensis</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
San Diego fairy shrimp	<i>Branchinecta sandiegoensis</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT	NE	No elderberry bushes occur in RCWD in areas that would be disturbed. No land use changes would occur as a result of this action. No conversion of habitat.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
FISH				
Bonytail Chub	<i>Gila elegans</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Bonytail Chub	<i>Gila elegans</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Central Valley steelhead	<i>Onchorhynchus mykiss</i>	FT	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species, including water quality in the Delta.
Colorado squawfish	<i>Ptychocheilus lucius</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Colorado squawfish	<i>Ptychocheilus lucius</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Delta smelt	<i>Hypomesus transpacificus</i>	FT, ST	NE	No suitable habitat would be disturbed. No change to waters of aquatic habitat for this species, including water quality in the Delta.

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
Desert pupfish	<i>Cyprinodon macularius</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Desert pupfish	<i>Cyprinodon macularius</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Lahontan cutthroat trout	<i>Onchorhynchus(=Salmo) clarki henshawi</i>	FT	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Paiute cutthroat trout	<i>Onchorhynchus(=Salmo) clarkis seleniris</i>	T	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Little Kern golden trout	<i>Onchorhynchus(=Salmo) aquabonita whitei</i>	T	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Little Kern golden trout	<i>Onchorhynchus(=Salmo) aquabonita whitei</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Razorback sucker	<i>Xyrauchen texanus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Razorback sucker	<i>Xyrauchen texanus</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Santa Ana sucker	<i>Catostomus santaanae</i>	FT	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Santa Ana sucker	<i>Catostomus santaanae</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Steelhead-Central Valley DPS	<i>Oncorhynchus mykiss</i>	FT	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species, including water quality in the Delta.
Steelhead-Southern California DPS	<i>Oncorhynchus mykiss</i>	FE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Steelhead-Southern California DPS	<i>Oncorhynchus mykiss</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Tidewater goby	<i>Eucyclogobius newberryi</i>	FE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
Tidewater goby	<i>Eucyclogobius newberryi</i>	CH	NE	No critical habitat would be disturbed. No change to waters of critical habitat or to waters flowing to critical habitat.
Unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No change to waters of aquatic habitat for this species.
AMPHIBIANS				
Arroyo toad	<i>Bufo californicus</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area

Common Name	Scientific Name	Listing	Determination	Basis for Determination
Arroyo toad	<i>Bufo californicus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
California red-legged frog	<i>Rana draytonii</i>	FT	NE	No known extant populations within 30 miles. No land use changes affecting this species would occur. No conversion of habitat.
California red-legged frog	<i>Rana draytonii</i>	CH, PCH	NE	No critical or proposed critical habitat would be disturbed. No land use changes affecting critical habitat would occur.
California tiger salamander, central population	<i>Ambystoma californiense</i>	FT, SCE	NLAA	No vernal pool habitat would be disturbed. No effects to wetland habitat for this species. Nearest record to area of disturbance is approximately 1.8 miles; nearest potential breeding pond to area of disturbance is approximately 0.8 miles. Burrows would be avoided. Movement would not be impeded.
California tiger salamander, central population	<i>Ambystoma californiense</i>	CH	NE	Designated and proposed critical habitat would not be disturbed. No disturbance of suitable wetland habitat and no land use changes. Avoidance of burrows. Movement would not be impeded.
Desert slender salamander	<i>Batrachoseps aridus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Mountain yellow-legged frog – Southern California DPS	<i>Rana muscosa</i>	C, SCE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Mountain yellow-legged frog – Southern California DPS	<i>Rana muscosa</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Yosemite toad	<i>Bufo canorus</i>	C	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
REPTILES				
Blunt-nosed leopard lizard	<i>Gambelia (=Crotaphytus) sila</i>	FE, SE	NE	No open scrub, grassland or other suitable habitat would be disturbed. Small area of canal bank to be disturbed canal bank is more than 15 miles from nearest record and other suitable habitat is not available nearby.
Coachella Valley fringe-toed lizard	<i>Uma inornata</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Coachella Valley fringe-toed lizard	<i>Uma inornata</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Desert tortoise	<i>Gopherus agassizii</i>	FT, ST	NE	No suitable habitat would be converted

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				or disturbed. No land use changes affecting this species would occur.
Desert tortoise	<i>Gopherus agassizii</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Flat-tailed horned lizard	<i>Phrynosoma mcallii</i>	FPT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Giant garter snake	<i>Thamnophis gigas</i>	FT, ST	NE	Nearest record for the species is at Mendota Pool, approximately 30 miles from site of disturbance on Lateral 6.2. Lateral 6.2 is not connected hydrologically to Mendota Pool. Population at Mendota is small.
BIRDS				
Bald Eagle	<i>Haliaeetus leucocephalus</i>	MBTA, FD, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Bank swallow	<i>Riparia riparia</i>	MBTA, ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Bank swallow	<i>Riparia riparia</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	MBTA, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
California black rail	<i>Laterallus jamaicensis coturniculus</i>	ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
California condor	<i>Gymnogyps californianus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
California condor	<i>Gymnogyps californianus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
California least tern	<i>Sternula antillarum browni</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Golden Eagle	<i>aquila chrysaetos</i>	SC, MBTA	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				habitat would occur. No conversion of habitat.
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Marbled murrelet	<i>Brachyramphus marmoratus</i>	FT, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Marbled murrelet	<i>Brachyramphus marmoratus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Mountain plover	<i>Charadrius montanus</i>	FPT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Mountain plover	<i>Charadrius montanus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Short-tailed albatross	<i>Phoebastria albatrus</i>	FE	NE	No suitable habitat would be disturbed. No conversion of habitat.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Swainson's Hawk	<i>Buteo swainsoni</i>	MBTA, SC, ST	NE	Land disturbance to canal bank would be a minimal area and mostly temporary. Species is unlikely to occur in area of disturbance. Avoidance measures implemented for any nesting individuals.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	C, SE	NE	No suitable habitat would be disturbed. No land use changes would occur as a result of this action. No conversion of habitat.
Western Burrowing Owl	<i>Athene cunicularia hypugea</i>	MBTA,	NE	Surveys for the species in area of land disturbance. Avoidance measures would be implemented. Burrows avoided. Land disturbance to canal bank would be a minimal area and mostly temporary.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	C	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	FE, ST	NE	No suitable habitat would be converted or disturbed. No land use changes

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				affecting this species would occur.
MAMMALS				
Buena Vista Lake shrew	<i>Sorex ornatus relictus</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Buena Vista Lake shrew	<i>Sorex ornatus relictus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Fisher	<i>Martes pennant</i>	C	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Fresno kangaroo rat	<i>Dipodomys nitratooides exilis</i>	FE, SR	NE	No known extant populations. No disturbance of grassland or sink shrubland habitat. No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur.
Fresno kangaroo rat	<i>Dipodomys nitratooides exilis</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
Giant kangaroo rat	<i>Dipodomys ingens</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
Peninsular bighorn sheep DPS	<i>Ovis canadensis cremnobates</i>	FE, ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
Peninsular bighorn sheep DPS	<i>Ovis canadensis cremnobates</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	CH	NE	No critical habitat would be disturbed. No land use changes affecting critical habitat would occur. No conversion of habitat.
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE, ST	NLAA	Land disturbance would be temporary, and limited primarily to vineyard, roadways and a small section of canal levee. Species records nearest to disturbance area date from the 1990's and are approximately 5 and 6 miles away, but south of the San Joaquin River. The nearest records north of San Joaquin River both are from 1990 and are over 15 miles west of RCWD, across U.S. Highway 99, a divided

Table 2. Federally listed, candidate, and other listed species within or near the Proposed Action area				
Common Name	Scientific Name	Listing	Determination	Basis for Determination
				freeway. A pre-activity survey and avoidance measures would be implemented.
Sierra Nevada (= California) bighorn sheep	<i>Ovis canadensis californiana</i>	FE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
Southern sea otter	<i>Enhydra lutris nereis</i>	FT	NE	No suitable habitat would be disturbed. No conversion of habitat.
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	FE, ST	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
Tipton kangaroo rat	<i>Dipodomys nitratoides nitratoides</i>	FE, SE	NE	No suitable habitat would be converted or disturbed. No land use changes affecting this species would occur. No conversion of habitat.
Listing: CF: FEDERAL CANDIDATE SPECIES CH: CRITICAL HABITAT FD: FEDERAL DELISTED FE: FEDERAL ENDANGERED SPECIES FPE: FEDERALLY PROPOSED ENDANGERED FPT: FEDERALLY PROPOSED THREATEND FT: FEDERAL THREATENED SPECIES MBTA: MIGRATORY BIRD TREATY ACT R: FEDERAL RECOVERY SC: FEDERAL SPECIES OF CONCERN SCE: STATE CANDIDATE SPECIES (ENDANGERED) SE: STATE ENDANGERED SPECIES ST: STATE THREATENED SPECIES SR: STATE RARE SPECIES NE: NO EFFECT NLAA: NOT LIKELY TO ADVERSELY AFFECT				

3.3.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, conditions would remain the same as described above. There would be no impacts to biological resources since conditions would remain the same as existing conditions.

Proposed Action

The area for the Proposed Action includes lands within RCWD, MID, Westside, and SWID, and the Madera Canal and Madera Canal Lateral 6.2. RCWD would use the acquired water supplies for existing agricultural purposes, including recharge of groundwater supplies supporting agricultural activities.

The contract for 215 Water from Reclamation through February 2012 would potentially make water available to RCWD. RCWD has a lower priority than CVP Friant Contractors and 215 Water may not be made available to RCWD even when its availability is declared. However, when 215 Water is available to RCWD, supplies would be expectedly high and flows in the San

Joaquin River also would be expectedly high. The 215 Water that could be obtained by RCWD, in addition to that obtained by other contractors, would not measurably affect water resources in the San Joaquin below the mouth of the Merced River and would not affect fisheries resources or their habitat.

Water transferred between Westside and SWID could occur without approval by Reclamation. This action would involve either physical delivery of surface water from Westside's rights using existing facilities, or potentially moving Westside's water in NKWSD to the adjacent SWID using existing facilities. Additionally, no land use changes would occur on SWID lands or to Westside's lands in the San Joaquin Valley or elsewhere in relation to this element. As such this element would not contribute to any affect to listed species or designated critical habitat.

The exchange of SWID's water supplies in Millerton Lake for Westside's water would potentially reduce slightly the amount of water carried in the FKC and delivered to SWID. This small reduction (up to 7,000 AF per year) of water transported in the FKC would not affect listed species or critical habitat. Actions in SWID would remain the same and no increase or decrease in water supply would occur.

The proposed transfer of up to 10,000 AF of water from MID's CVP supply to RCWD would not affect MID's ability to meet its water needs and would therefore not affect MID's ongoing land use practices. Water supplied to RCWD from MID would remain in the same groundwater basin in which MID is located and there would be no change in MID's land use related to the Proposed Action. MID's transfer to RCWD would occur via existing facilities, including the Madera Canal and Madera Canal Lateral 6.2, except for the construction of the turnout at lateral 6.2. Potential impacts to wildlife, fisheries and listed species or their critical habitat would not occur from the proposed transfer and transport of water from MID to RCWD. Any potential effects would occur through effects from construction, as discussed below.

The Proposed Action includes construction of two turnouts on Lateral 6.2 of the Madera Canal adjacent to RCWD and lands within RCWD. As part of the two turnouts, two pipelines also would be constructed and together this would require ground disturbance. However, the land to be affected is already highly disturbed. Disturbance would occur to a bare, earthen canal bank along Madera Canal Lateral 6.2, where new turnouts would be established. Disturbance also would occur along the alignment of the two pipelines, which follows an existing field road and passes through a vineyard, and parallels an improved earthen Roadway (Madera County Road 40). The pipeline would cross two ephemeral wetted areas along the roadway alignments, but since a boring technique would be used, no disturbance above the ground surface would occur at these areas.

Construction activities are expected to occur in early fall and take approximately 4 to 6 weeks to complete. A small number of small shallow, inactive rodent burrows were found near areas that would be disturbed. Although potential breeding habitat for CTS is lacking within approximately 0.8 miles of areas to be disturbed, CTS may travel overland more than one mile. Consequently, avoidance measures including flagging and avoidance of burrows and efforts to prevent impeding movement would be implemented for CTS.

Although San Joaquin kit foxes (SJKF) have been reported within 10 miles of the area to be disturbed, agricultural practices and disturbance such as disking for weed control has greatly degraded any habitat for denning. Land disturbance associated with the project would be temporary and limited primarily to a vineyard, roadways and a small section of a canal levee. A pre-activity survey and avoidance measures would be implemented for SJKF to ensure there is no effect on the SJKF.

Limited habitat in areas that would be disturbed exists for other species because the land is either roadway, or is in agricultural production, primarily in vineyard, citrus, olive or pistachio production.

Swainson's hawks could forage in the limited open area along the 6.2 Lateral, and this area also may be suitable for burrowing owls, however, most land that would be disturbed is unsuited to raptors. The nearest recorded occurrence for burrowing owl is located approximately 12.5 miles away from the areas that would be disturbed. Measures to protect burrowing owls and other migratory birds would be taken including preconstruction surveys that would be conducted before any ground-disturbing activities are begun. If the surveys detect the presence of listed species or migratory birds, then the Proposed Action would be paused until Reclamation completes any consultation with the USFWS that might be necessary, and until any additional protective measures are identified and incorporated for any migratory birds.

Because the areas to be affected are already highly disturbed and provide marginal habitat for wildlife by implementing the avoidance measures specified (see Appendix C) the potential to affect to wildlife, including listed species is negligible and the Proposed Action is anticipated to have no adverse impacts on biological resources. The USFWS provided concurrence with Reclamation's determination on December 21, 2011 (see Appendix D).

3.4 Cultural Resources

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 in 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 State Historic Preservation Officer (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.

3.4.1 Affected Environment

The San Joaquin Valley is rich in historical and prehistoric cultural resources. Cultural resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18th Century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley. The San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. Cultural studies in the San Joaquin Valley have been limited. The conversion of land and intensive farming practices over the last century may have destroyed many Native American cultural sites.

3.4.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would be no impacts to cultural resources since no construction would occur and existing conditions related to cultural resource would remain the same.

Proposed Action

The Proposed Action is the type of activity that has the potential to affect historic properties. A records search, cultural resources survey, and Tribal consultation were performed for the APE in 2007 by consultants hired by RCWD. A subsequent report was provided to Reclamation and was submitted as part of Reclamation's SHPO consultation package. Reclamation determined that the Proposed Action would result in no adverse impacts to historic properties pursuant to 36 CFR Part 800.5(b) and consulted with the SHPO on August 7, 2007. The SHPO concurred with Reclamation's determination on August 22, 2007. Since no historic properties would be adversely affected, there would no adverse impacts to cultural resources by implementing the Proposed Action (see Appendix D for cultural resources determination).

3.5 Indian Trust Assets

ITA are legal interests in assets that are held in trust by the U.S. Government for federally recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of federally recognized Indian tribes. "Assets" are anything owned that holds monetary value. "Legal interests" means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. ITA can not be sold, leased or otherwise alienated without the United States' approval. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something; which may include lands, minerals and natural resources in addition to hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land.

Reclamation shares the Indian Trust responsibility with all other agencies of the Executive Branch to protect and maintain ITA reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or Executive Order.

3.5.1 Affected Environment

The nearest ITA is the Table Mountain Rancheria approximately 10 miles northeast of the Proposed Action location.

3.5.2 Environmental Consequences

No Action

Under the No Action Alternative, there would be no impacts to ITA as there would be no ground-disturbing activities and conditions would remain the same as existing conditions.

Proposed Action

There are no tribes possessing legal property interests held in trust by the U.S. within the area involved with the Proposed Action; therefore, this action does not have a potential to affect ITA (refer to Appendix D for ITA concurrence).

3.6 Indian Sacred Sites

Executive Order 13007 provides that in managing Federal lands, each Federal agency with statutory or administrative responsibility for management of Federal lands will, to the extent practicable and as permitted by law, accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and avoid adversely affecting the physical integrity of such sacred sites.

3.6.1 Affected Environment

In 2007, the Native American Heritage Commission was contacted in order to determine whether sacred sites have been identified either within or in close proximity to the Proposed Action area. There were no known Indian sacred sites or access roads/paths leading to Indian sacred sites identified.

3.6.2 Environmental Consequences

No Action

Under the No Action Alternative, there would be no impacts to Indian sacred sites since conditions would remain the same as existing conditions.

Proposed Action

Since no known Indian sacred sites have been identified either within or in close proximity, the Proposed Action would not impact Indian sacred sites and/or prohibit access to and ceremonial use of this resource.

3.7 Socioeconomic Resources

3.7.1 Affected Environment

The agricultural industry significantly contributes to the overall economic stability of the San Joaquin Valley. The CVP allocations each year allow farmers to plan for the types of crops to grow and to secure loans to purchase supplies. Depending upon the variable hydrological and economic conditions, water transfers and exchanges could be permitted. The economic variances may include fluctuating agricultural prices, insect infestation, changing hydrologic conditions, and increased fuel and power costs.

3.7.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would be minor impacts to socioeconomic resources. Continued reliance on and pumping groundwater could contribute to groundwater overdraft resulting in dropping water levels for agricultural wells, thus increasing pumping costs.

Proposed Action

The Proposed Action would provide RCWD with reliable surface water supplies and alleviate some of the district's reliance on groundwater pumping. There would be minor benefits to socioeconomics as compared to the No Action Alternative since continued heavy reliance on groundwater would lead to increased pumping costs.

3.8 Environmental Justice

Environmental justice refers to the fair treatment of peoples of all races, income levels, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative impacts resulting from the execution of Federal programs. Executive Order 12898, dated February 11, 1994, establishes the achievement of environmental justice as a Federal agency priority. The memorandum accompanying the order directs heads of departments and agencies to analyze the environmental effects of federal actions, including human health, economic, and social effects when required by NEPA, and to address adverse effects on minority and low-income communities.

3.8.1 Affected Environment

The market for seasonal workers on local farms draws thousands of migrant workers, commonly of Hispanic origin from Mexico and Central America, into the San Joaquin Valley. Agriculture and related businesses are the main industry within RCWD, which provides employment opportunities for these minority and/or disadvantaged populations.

3.8.2 Environmental Consequences

No Action Alternative

The No Action Alternative may result in minor impacts to minority or low-income populations within RCWD. Without the ability to improve the district's water supply reliability to sustain existing agriculture, there could be a minor decrease in farm-related jobs which these communities rely so heavily upon.

Proposed Action

The Proposed Action would result in increased conjunctive use in RCWD, which would help maintain the existing agriculture industry with a reliable surface supply of irrigation water. As a result, farm-related jobs for minority and disadvantaged populations within RCWD would slightly benefit from a sustained agricultural economy. The Proposed Action would not cause dislocation, adverse changes in employment, or increase flood, drought, or disease to minority or low-income populations.

3.9 Air Quality

3.9.1 Affected Environment

The Proposed Action area lies within the San Joaquin Valley Air Basin (SJVAB), the second largest air basin in California. Air basins share a common “air shed”, the boundaries of which are defined by surrounding topography. Although mixing between adjacent air basins inevitably occurs, air quality conditions are relatively uniform within a given air basin. The San Joaquin Valley experiences episodes of poor atmospheric mixing caused by inversion layers formed when temperature increases with elevation above ground, or when a mass of warm, dry air settles over a mass of cooler air near the ground.

Despite years of improvements, the SJVAB does not all meet State and Federal health-based air quality standards. To protect health, the SJVAPCD is required by Federal law to adopt stringent control measures to reduce emissions. On November 30, 1993, the Environmental Protection Agency (EPA) promulgated final general conformity regulations at 40 CFR 93 Subpart B for all Federal activities except those covered under transportation conformity. The general conformity regulations apply to a proposed Federal action in a non-attainment or maintenance area if the total of direct and indirect emissions of the relevant criteria pollutants and precursor pollutant caused by a proposed action equal or exceed certain emissions thresholds, thus requiring the federal agency to make a conformity determination. Table 3 presents the emissions thresholds covering the project location’s overlying air basin.

Table 3. San Joaquin Valley Attainment Status and Emissions Thresholds for Federal Conformity Determinations			
Pollutant	Federal Attainment Status^a	(tons/year)^b	(pounds/day)
Volatile organic compounds (VOC) (as an ozone precursor)	Nonattainment/Serious (8-hour ozone)	50	274
Nitrogen oxides (NO _x) (as an ozone precursor)	Attainment/Unclassified	50	274
Inhalable particulate matter (PM ₁₀)	Attainment	100	548
Carbon monoxide (CO)	Attainment/Unclassified	100	548

^aSJVAPCD 2009

^b40 CFR 93.153

3.9.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would be no impacts to air quality since no construction would take place.

Proposed Action

Short-term air quality impacts would be associated with construction, and would generally arise from dust generation (fugitive dust) and operation of construction equipment. Fugitive dust results from land clearing, grading, excavation, concrete work, and vehicle traffic on paved and unpaved roads. Fugitive dust is a source of airborne particulates, including PM₁₀ and PM_{2.5}.

Large earth-moving equipment, trucks, and other mobile sources powered by diesel or gasoline are also sources of combustion emissions, including NO₂, CO, volatile organic compounds (VOCs, a precursor of ozone), sulfur dioxide, and small amounts of air toxics. Table 4 provides a summary of the estimated emissions during construction.

Table 4. Estimated Project Emissions During Construction	
Pollutant	^a (tons/year)
VOC	0.1
NO _x	0.8
PM ₁₀	0.2
CO	0.5
CO ₂	84.3

^aRoad Construction Emissions Model, Version 6.3.2

Comparison of the estimated Proposed Action emissions (Table 4) with the thresholds for Federal conformity determinations and the local significance thresholds (Table 3) indicates that estimated emissions are well below these thresholds. In addition, RCWD would comply with the SJVAPCD's Regulation VIII – Rule 8021 control measures (see Appendix C for Rule 8021 control measures) for construction emissions of PM₁₀ as stated in their 2010 IS/ND. One of these control measures includes the use of water with all “land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities” in order to suppress fugitive dust emission. After construction is completed, the Proposed Action also involves the importation of surface water supplies by gravity conveyance; therefore, no adverse impacts to air quality would occur and no general conformity analysis is required.

3.10 Global Climate

Climate change refers to significant change in measures of climate that last for decades or longer. Burning of fossil fuels is considered a major contributor to perceived global climate change. Carbon dioxide (CO₂), which is produced when fossil fuels are burned, is a greenhouse gas (GHG) that effectively traps heat in the lower atmosphere. Some carbon dioxide is liberated naturally, but this may be augmented greatly through human activities. Increases in air temperature may lead to changes in precipitation patterns, runoff timing and volume, sea level rise, and changes in the amount of irrigation water needed due to modified evapotranspiration rates. These changes may lead to impacts to California's water resources and project operations.

While there is general consensus in their trend, the magnitudes and onset-timing of impacts are uncertain and are scenario-dependent (Anderson et al. 2008).

3.10.1 Affected Environment

California adopted Assembly Bill 32, which identified GHG reduction goals and noted the effect of increased GHG emissions as they relate to global climate change. While the emissions of one single project will not cause global climate change, GHG emissions from multiple projects throughout the world could result in an adverse impact with respect to global climate change.

Locally, impacts would be limited to GHG emissions (primarily CO₂) during construction. In lieu of a specific threshold of significance, it is noteworthy that the EPA has issued the Final Mandatory Reporting of Greenhouse Gases Rule which requires that sources of GHG emissions greater than 25,000 metric-tons per year are required to submit annual reports to the EPA (EPA 2009).

3.10.2 Environmental Consequences

No Action Alternative

The No Action Alternative would involve no change to the composition of GHG in the atmosphere and therefore would not contribute to global climate change.

Proposed Action

The Proposed Action would involve short-term impacts consisting of emissions during construction, which have been estimated at about 84.3 metric tons for CO₂. In addition, the importation of surface water supplies from the transfers and exchanges would be conveyed by gravity and help alleviate the need to pump groundwater, which utilizes electric pumps and involves CO₂ emissions. Accordingly, construction and operations under the Proposed Action would result in no adverse impacts to the global climate or contribute to adverse climate change.

3.11 Cumulative Impacts

3.11.1 Affected Environment

The Gateway Village development is a residential housing project located within the RCWD's service boundaries and occupying approximately 15% of the total service area (approximately 2,072 acres). The project has undergone review under the California Environmental Quality Act and an Environmental Impact Report was finalized in May 2007 (Gateway Village EIR 2007). The project has an estimated average annual demand of 6,374 acre-feet of water for municipal (including potable) uses based on a phased build-out of approximately 6,578 units. To meet municipal water demands the project would rely on a combination of existing and new local groundwater wells.

3.11.2 Cumulative Effects

The Proposed Action could move forward without the development of the Gateway Village project. However, the Proposed Action may indirectly contribute to the effects on resources that the residential development causes, most notably those to water and biological resources. Cumulatively, there would be no adverse effects contributed to the effects caused by the development project as there would be no net impacts to groundwater resources as a result of the

Proposed Action. Similarly, there would be no adverse effects to biological resources as the Proposed Action includes measures to reduce any potential impacts to CTS to negligible effects.

Transfers and exchanges proposed under the Proposed Action would not alter the baseline conditions of biological resources; similar amounts of water are being applied for similar existing lands uses, namely agricultural production. Water would be supplied to agricultural lands to address groundwater overdraft; water is needed to meet crop growth needs and address overdraft. Land use changes would not occur under the Proposed Action. Water supplies in excess of needs by the source, Westside, would be available to meet varying demands for crop production on other lands for similar purpose when and where needed. This would occur through some facility of conveyance, or transfer/exchange. The Section 215 water that may be taken by RCWD through water year 2012 could incrementally increase the amount of water taken under this provision, although it would not cumulatively adversely impact biological resources. Other state or local actions in the area that may contribute cumulatively to changes in biological resources includes the Gateway Village development. Lands that would be affected are largely agricultural, providing limited habitat for wildlife. An Environmental Impact Report for this project has been finalized and determined that the project would have no adverse impact on biological resources. The Proposed Action would not contribute to cumulative adverse impacts to biological resources.

Impacts to land use would be temporary during excavation for the buried pipeline since the areas disturbed would be returned to pre-construction conditions. Cumulative effects resulting in long-term surface water supply reliability for irrigation would be slightly beneficial for the overall land use and sustaining agriculture within the affected environment.

In Reclamation's consultation with the SHPO, the APE defined was that of a much larger area than just the pipeline alignment. The APE also included lands that could potentially receive this water via future connections to the pipeline. The SHPO agreed with the APE as defined by Reclamation and concurred that the Proposed Action would not result in adverse impacts to cultural resources. Since the APE covered reasonably foreseeable related actions, the Proposed Action would not contribute to adverse cumulative impacts to cultural resources.

The Proposed Action would not contribute to cumulative impacts to ITA and Indian sacred sites, since the Proposed Action would have no effect on either resource.

Slight beneficial impacts to socioeconomics and environmental justice would be within historical variations, and therefore would not contribute to cumulative impacts.

According to Table 4, the Proposed Action would involve short-term emissions during construction, which are all well-below the annual threshold levels. Future construction-related projects for interconnecting turnouts on the pipeline are speculative in scope but would most likely be much smaller in scale to the Proposed Action, occur in subsequent years so to not contribute and exceed the annual thresholds for emissions, and may require separate approval and environmental review. In addition, the pipeline as described in the Proposed Action would connect to existing distribution systems and does not require future turnouts/modifications in

order to function. As a result, the Proposed Action would not contribute to cumulative adverse impacts to air quality.

GHG impacts are considered to be cumulative impacts. GHG generated by the Proposed Action is estimated to be 84.3 metric-tons of CO₂, which is well-below the EPA threshold (25,000 tons/year) magnitude required for reporting. In addition, long-term operation of the pipeline would utilize gravity to convey imported surface water supplies; thereby alleviating the need to pump groundwater, which utilizes electric motors and produces CO₂ emissions. While any increase in GHG emissions would add to the global inventory of gases that would contribute to global climate change, the Proposed Action would result in potentially minimal increases in GHG emission and the long-term operation of the pipeline would decrease electrically-driven groundwater pumps within RCWD.

The Proposed Action, when added to other related past, existing, and foreseeable projects do not contribute to adverse increases or decreases in environmental conditions. Overall, there would be no adverse cumulative impacts caused by the Proposed Action.

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Section 4 Consultation and Coordination

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the NEPA analysis and decision making process of this EA.

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft EA and Finding of No Significant Impact during a 30-day public comment period from July 6, 2011 through August 4, 2011. One set of comments were received from the Friant Water Authority (FWA) via email dated Thursday, August 4, 2011 4:46 PM PST (see Appendix E) and are addressed below:

Response to FWA Comment #1:

Comment noted, please see second paragraph in Section 1.1.

Response to FWA Comment #2:

There will be no diversion from the San Joaquin River as part of the Proposed Action.

4.2 Fish and Wildlife Coordination Act (16 USC § 651 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation coordinate with appropriate fish and wildlife agencies (Federal and State) on water development construction projects whenever the waters of any stream or body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified. The FWCA is applicable when the impoundment, diversion, or other control facility is proposed to be constructed by Reclamation or by any public or private agency acting under a Reclamation permit or license.

Reclamation has periodically engaged in dialogue with the USFWS regarding the Proposed Action since it was first proposed in 2006. Prior to, during, and after the public review period when which the Draft EA and Finding of No Significant Impact were made available, Reclamation provided the USFWS with opportunities to comment on the project and to provide recommendations to avoid and/or mitigate for potential impacts to wildlife and wildlife resources. In an email dated August 5, 2011 and phone conference on August 17, 2011, the USFWS recommended that the Draft EA is revised to include more information regarding a nearby subdivision development project commonly referred to as Gateway Village. Section 3.11 in this Final EA has been revised to include potential impacts to resources resulting from cumulative impacts with the Proposed Action and those potential impacts associated with Gateway Village, as appropriate.

In addition, the project description has been modified in order to reduce, avoid, and minimize potential impacts to wildlife and wildlife resources. More specifically, the amount of ground disturbance has been scaled down by:

- Constructing the two new turnouts and pipeline next to each other in order to reduce the size of excavation required;
- The alignment of the RCWD pipeline has been modified to run in the middle of an existing highly disturbed farm road;
- Recharge basins have been eliminated as part of the Proposed Action;
- Miles of turnouts from the RCWD pipeline have been eliminated; and
- The RCWD pipeline would be jack-and-bored under Root Creek or suspended above the creek attached to an existing dirt bridge to avoid impacts to Root Creek.

Reclamation and RCWD have taken into consideration recommendations from appropriate wildlife agencies and have made reasonable modifications to the Proposed Action in order to conserve wildlife and wildlife resources to the extent possible.

4.3 Endangered Species Act (16 USC § 1531 et seq.)

Section 7 of the Endangered Species 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. Pre-construction biological surveys for SJKF are required before any ground-disturbing activities are to begin. Additionally, environmental protection measures for avoidance of effects to SJKF, CTS, San Joaquin Valley orcutt grass, hairy orcutt grass, and succulent owl's clover would be implemented (see Appendix C).

Reclamation initiated informal consultation with USFWS on the Proposed Action and determined that the Proposed Action is not likely to adversely affect SJKF and CTS. Reclamation has further determined that the Proposed Action would not affect critical habitat or other federally listed species, including anadromous fish. The USFWS provided concurrence with Reclamation's determination on December 21, 2011, which included recommendations for protection measures of three plant species as noted in the previous paragraph (see Appendix D).

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

The NHPA of 1966, as amended, is the primary Federal legislation that outlines the Federal Governments' responsibility to consider the affects of their actions on historic properties. The 36 CFR Part 800 regulations that implement Section 106 of the NHPA describe how Federal agencies address these effects. Additionally, Native American human remains, cultural objects, and objects of cultural patrimony are protected under the Native American Graves Protection and Repatriation Act of 1990 (25 USC 32) and its implementing regulation outlined at 43 CFR Part 10. The Archaeological Resources Protection Act of 1979 (16 USC 470aa), as amended, and its implementing regulations at 43 CFR 7, protects archaeological resources on Federal land.

As determined in Section 3.4.2, Reclamation determined that the Proposed Action would not adversely impact cultural resources. The SHPO concurred in a letter dated August 22, 2007 (see Appendix D).

4.5 Indian Trust Assets

ITA are legal interests in property held in trust by the U.S. for Federally-recognized Indian tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITA can include land, minerals, federally-reserved hunting and fishing rights, federally-reserved water rights, and in-stream flows associated with trust land.

Beneficiaries of the Indian trust relationship are federally-recognized Indian tribes with trust land; the U.S. is the trustee. By definition, ITA cannot be sold, leased, or otherwise encumbered without approval of the U.S. The characterization and application of the U.S. trust relationship have been defined by case law that interprets Congressional acts, executive orders, and historic treaty provisions.

The Proposed Action would not affect ITA (see Appendix D for ITA determination). The nearest ITA is the Table Mountain Rancheria approximately 10 miles northeast of the Proposed Action location.

4.6 Migratory Bird Treaty Act (16 USC § 703 et seq.)

The MBTA implements various treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the MBTA provides that it is unlawful to pursue, hunt, 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 MBTA, the Secretary of the Interior 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 will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

The Proposed Action would not change the land use patterns of the cultivated or fallowed fields that do have some value to birds protected by the MBTA. Protective measures to avoid take of migratory birds would be implemented and therefore it is anticipated that the Proposed Action would have no effect on birds protected by the MBTA.

4.7 Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting floodplains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands.

The Proposed Action would construct facilities that would ultimately deliver surface water to existing agriculture that would otherwise pump groundwater. The pipeline would not involve excavation through wetlands or affect floodplains.

4.8 Clean Air Act (42 USC § 176 et seq.)

Section 176 (c) of the Clean Air Act (CAA) (42 USC 7506 (c)) requires that any entity of the Federal government that engages in, supports, or in any way provided financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the CAA (42 USC 7401 (a)) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements will, in fact conform to the applicable SIP before the action is taken.

As described in Section 3.9.2, the Proposed Action would not result in air quality impacts that would exceed State, Federal, and local thresholds and no general conformity analysis is required.

4.9 Clean Water Act (16 USC § 703 et seq.)

Section 401

Section 401 of the Clean Water Act (CWA) (33 USC § 1311) prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under sections 402 and 404 of the CWA (33 USC § 1342 and 1344). If new structures (e.g., treatment plants) are proposed, that would discharge effluent into navigable waters, relevant permits under the CWA would be required for the project applicant(s). Section 401 requires any applicant for an individual Corps dredge and fill discharge permit to first obtain certification from the state that the activity associated with dredging or filling will comply with applicable state effluent and water quality standards. This certification must be approved or waived prior to the issuance of a permit for dredging and filling.

No pollutants would be discharged into any navigable waters under the Proposed Action so no permits under Section 401 of the CWA are required.

Section 404

Section 404 of the CWA authorizes the Army Corps of Engineers to issue permits to regulate the discharge of “dredged or fill materials into waters of the United States” (33 USC § 1344).

The pipeline alignment would involve jack and boring under Root Creek when the creek is most likely to be dry. No activities such as dredging or filling of wetlands or surface waters would be required for implementation of the Proposed Action, therefore permits obtained in compliance with CWA section 404 are not required.

Section 5 List of Preparers and Reviewers

Bureau of Reclamation

Michael Inthavong, Natural Resources Specialist, SCCAO
Rena Ballew, Repayment Specialist – Reviewer, SCCAO
Ned Gruenhagen, Ph.D., Wildlife Biologist, SCCAO
Patricia Rivera, Indian Trust Assets, MP-400
Adam Nickels, Cultural Resources, MP-153
Rain Healer, Natural Resources Specialist – Reviewer, SCCAO

Root Creek Water District

Phil Pierre, President, Root Creek Water District

Baker, Manock & Jensen, PC

Christopher L. Campbell, Esq.
Lauren D. Layne, Esq.

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Section 6 References

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Appendix A

Water Transfer/Exchange Agreements

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**AGREEMENT BETWEEN
MADERA IRRIGATION DISTRICT
and
ROOT CREEK WATER DISTRICT
FOR THE CONVEYANCE AND SALE OF WATER**

THIS AGREEMENT FOR THE CONVEYANCE AND SALE OF WATER ("Agreement") is made and entered into by MADERA IRRIGATION DISTRICT, a California irrigation district ("MID"), and ROOT CREEK WATER DISTRICT, a California water district ("RCWD") (collectively, the "Parties") as of March 13, 2002.

RECITALS:

- A. WHEREAS, MID is an irrigation district organized under the California Irrigation District Law, codified at § 20500 et seq. of the California Water Code, that delivers water from Hidden Dam and Friant Dam under 25-year Long Term Renewal Contracts with the United States Department of Interior, Bureau of Reclamation ("USBR") to locations in Madera County for irrigation purposes.
- B. WHEREAS, RCWD is a water district organized under the California Water District Law, codified at § 34000 et seq. of the California Water Code, and serves a portion of southeastern Madera County currently consisting of 9,221 acres.
- C. WHEREAS, the Parties executed an "Agreement Concerning Agricultural, Municipal and Industrial Water Use Within Root Creek Water District" ("Root Creek Agreement") on December 30, 1999, with the Friant Water Users Authority ("FWUA"), Chowchilla Water District ("CWD") and certain Holding Contract owners and Landowners/Developers within RCWD.
- D. WHEREAS, the Root Creek Agreement recognizes that surface water supplies may become available to RCWD from: (1) Friant Dam flood flow releases unused by Friant Contractors; (2) Water transfers from sources outside of Madera County; (3) Water transfers from Central Valley Project ("CVP") water service or exchange contractors; (4) Water transfers from sources within Madera County; and (5) Purchase of water to supplement San Joaquin River water, first from MID and CWD, then if additional water is needed, purchase from other supplemental sources.
- E. WHEREAS, the Root Creek Agreement, Article III, section 2, provides that before obtaining supplemental water from any sources other than San Joaquin River flood flows, and Section 215 water purchased directly from the Bureau, RCWD shall first satisfy its water purchase requirements from supplies available for sale by MID, to the extent and on the same terms and conditions that MID is willing to sell such water to parties other than Friant Contractors or other CVP Contractors. In exchange MID agrees that RCWD shall have the first right to purchase any MID surface water available for sale outside its district, subject only to water sold to other Friant Contractors or CVP Contractors.

- F. WHEREAS, the Root Creek Agreement, under Article V, section 4, provides that the Parties will negotiate and execute an implementing agreement to construct necessary facilities to convey water to RCWD from MID's Lateral 6.2.
- G. WHEREAS, the United States constructed the Madera Canal as a part of the CVP for the carriage and distribution of waters of the San Joaquin River, which Canal is now operated by the Madera Chowchilla Water and Power Authority ("MCWPA"), pursuant to the "Cooperative Agreement Among the United States of America, the Madera Irrigation District, and the Chowchilla Water District Providing for Operation and Maintenance of Madera Canal and Associated Project Works," dated September 20, 1985, and the Joint Exercise of Powers Agreement by and between MID and CWD.
- H. WHEREAS, on April 30, 1985, MID and CWD entered into an agreement on the method of sharing capacity of the Madera Canal ("1985 Capacity Agreement"), which allocates the capacity of the Madera Canal during normal operations as 60% of the capacity to MID and 40% to CWD, and allows the use of whatever share of the other District's capacity is not being used. The Agreement further provides that this allocated capacity "shall apply regardless of the type of water being delivered to any district."
- I. WHEREAS, the Root Creek Agreement, under Article V, section 5, provides that ~~the Parties will negotiate and execute an implementing agreement regarding water conveyance charges, capacity, terms and conditions.~~
- J. WHEREAS, the most convenient surface route to deliver water to RCWD is through the Madera Canal and MID Lateral 6.2.
- K. WHEREAS, the Parties desire to explore opportunities to cooperate and jointly participate in groundwater recharge projects in Madera County.
- L. WHEREAS, the Parties desire to cooperate and support one another, as appropriate, on Madera County and regional water issues.
- M. WHEREAS, upon the completion of the Environmental Impact Report ("EIR") for the Village of Gateway Development within RCWD, this Agreement will be reviewed and no physical implementation of the Agreement will occur prior to the completion of such EIR.

NOW THEREFORE, the Parties agree as follows:

ARTICLE I DEFINITIONS

As used in this Agreement, the terms set forth below have the following meanings.

1. "As-Available Capacity" shall mean any water conveyance capacity in the Madera Canal or Lateral 6.2 in excess of MID or CWD needs and the "Reserved

Capacity" made available to RCWD pursuant to this Agreement, which, if available, may be used by RCWD to convey its water.

2. "Building Permit" shall mean any building permit issued by the County of Madera, or any other public entity which may assume such authority, for construction in RCWD pursuant to any Tentative Map, Parcel Map or other entitlement.

3. "CVP Water" shall mean all water that is developed, diverted, stored, or delivered by the USBR in accordance with the statutes authorizing the CVP and in accordance with the terms and conditions of water rights acquired by the USBR pursuant to California law.

4. "CVP Class 1 Water" shall mean that supply of water stored in or flowing through Millerton Lake which, pursuant to MID's Long-Term CVP Water Service Contract, will be available for delivery from Millerton Lake and the Madera Canal as a dependable water supply during each year.

5. "CVP Class 2 Water" shall mean that supply of water which can be made available pursuant to MID's Long-Term CVP Water Service Contract for delivery from Millerton Lake and the Madera Canal, in addition to the supply of Class 1 Water. Because of its uncertainty as to availability and time of occurrence, such water will be undependable in character and will be furnished only if, as, and when it can be made available, as determined by the USBR.

6. "Village of Gateway" shall mean that certain property described in the Village of Gateway Area Plan dated November 2000.

7. "General Plan Amendment Approval by Madera County" shall mean certification of the Village of Gateway Environmental Impact Report based on the draft dated February 2001, approval of the Village of Gateway Area Plan, designation of the Village of Gateway as a new growth area and the running of any applicable period to appeal those decisions.

8. "Infrastructure Master Plan for Village of Gateway" shall mean that certain plan for infrastructure (including roadways, water, sewer and other urban infrastructure) within the Village of Gateway and the EIR for that plan as required by mitigation measures imposed by the County of Madera in its General Plan Amendment Approval for the Village of Gateway.

9. "Lateral 6.2" shall mean the canal constructed by the U. S. Bureau of Reclamation beginning at mile post 6.2 of the Madera Canal for the purpose of delivering irrigation water to lands within MID

10. "Madera Canal" shall mean the canal constructed by the USBR extending from Friant Dam to the Chowchilla River, for the purposes of flood control and delivering irrigation water to MID and CWD.
11. "Non-CVP Water" shall mean any water not deemed to be CVP Water.
12. "Non-Residential Equivalent Dwelling Unit ("e.d.u.")" shall be defined as follows: The number of e.d.u.'s in any permitted non-residential structure shall equal the total square feet of floor space divided by 500.
13. "Reserved Capacity" shall mean that water conveyance capacity in the Madera Canal or Lateral 6.2 that has been reserved by MID for use by RCWD pursuant to the terms of this Agreement, and held available during the term of this Agreement for RCWD use in conveying its water.
14. "Residential Equivalent Dwelling Unit ("e.d.u.")" shall mean any single family dwelling unit or any unit of a multi-family residential structure designed to house a single family or individual.
15. "Restoration Fund Costs" shall mean any rates, costs or charges payable to the Restoration Fund pursuant to the Central Valley Project Improvement Act, PL 102-575.
16. "Surplus Class 2 Water" shall mean Class 2 water made available to RCWD following a determination by MID that a Surplus Water Condition exists.
17. "Surplus Water Condition" shall mean a condition, as determined solely by MID, wherein the MID supply of Class 2 water, in combination with other water supplies available to MID, has resulted in the ability of MID to transfer water to RCWD without impacting current or future deliveries of water to MID agricultural customers.
18. "Uncontrolled Season" shall mean that period of time, typically occurring during the spring months of March through May, when the USBR has determined that there is a need to evacuate water from Millerton Lake in order to prevent or minimize a spill or meet flood control criteria, and has notified Friant long-term water service contractors that such condition exists. During an Uncontrolled Season, water taken by a Friant long-term water service contractor is in addition to the water supply declaration for the balance of the contract year.
19. "Uncontrolled Season Class 2 Water" shall mean water delivered as Class 2 Water during the period(s) when the USBR has declared an Uncontrolled Season.
20. "MID Long-Term CVP Water Service Contract" shall mean the "Long-Term Renewal Contract Between the United States and Madera Irrigation District

Providing for Project Water Service From Friant Division," Contract No. 175r-2891-LTRI and as it may be renewed from time to time.

21. "The Root Creek Agreement" shall mean that certain "Agreement Concerning Agricultural, Municipal and Industrial Water Use Within Root Creek Water District" entered into December 30th 1999 by and among the Friant Water Users Authority, Madera Irrigation District, Chowchilla Water District and Root Creek Water District.

ARTICLE II TERM AND RENEWAL OF AGREEMENT

1. Term

This Agreement shall become effective upon execution by the Parties and shall terminate on February 28, 2026.

2. Initiation of Physical Performance

No physical performance, other than the payment of fixed or guaranteed payments due during 2002 through 2005 under this Agreement shall occur prior to environmental review of this Agreement under the EIR prepared by the County of Madera to review the environmental effects of Infrastructure Master Plan for the Village of Gateway, including the implementation of this Agreement.

3. Renewal

Upon date of termination, this Agreement shall be automatically renewed on the same terms and conditions, except as changes to the Agreement are necessary to reflect change in MID's CVP Long-Term Water Supply Contract. Either Party may provide notice of intent to negotiate revised terms for renewal, provided that such notice is made at least one year prior to the expiration of this Agreement.

ARTICLE III. CONVEYANCE FACILITIES AND CHARGES

1. Lateral 6.2

a. Capacity

i) Under this Agreement, RCWD is entitled to the use of Reserved Capacity in Lateral 6.2 of 25 cfs from May 1 to August 31 of each year, and 50 cfs from September 1 of each year until April 30 of the following year.

(1) RCWD shall have the first right of refusal for any increase in Reserved Capacity that MID may determine is available on Lateral 6.2 as a result of changed conditions or actions taken by MID. Should RCWD request an increase in available Reserved

Capacity, MID agrees to negotiate in good faith to make such capacity available.

- (2) MID shall not reduce Reserved Capacity of RCWD unless required to do so by the USBR or by exercise of state or federal law. Should MID be required to reduce Reserved Capacity, the parties shall negotiate in good faith to adjust capacity charges commensurate with the changed circumstances.
 - (3) The Reserved Capacity is for the sole and exclusive use of RCWD and it shall not be assigned for any other purpose or to any other user.
- ii) As-Available Capacity in excess of Reserved Capacity may be utilized by RCWD during each water year as it becomes available (for that year only) from MID's capacity provided:
- (1) MID landowners and agricultural customers' water conveyance capacity needs are first satisfied, then RCWD shall have first priority on any available capacity.
 - (2) MID shall provide RCWD one day's notice of available capacity changes affecting the requested additional capacity by RCWD.
- iii) Terms and Conditions Applicable to RCWD's Reserved Capacity and As-Available Capacity
- (1) RCWD must provide MID at least 30 days' notice to initiate deliveries if Lateral 6.2 is out of service at the time delivery is requested by RCWD.
 - (2) If Lateral 6.2 is in service at the time delivery to RCWD is requested, RCWD shall give MID at least three days' notice of RCWD capacity requirements.

b. Delivery Locations

- i) RCWD will use the existing diversion structure from Lateral 6.2 located at Station 129+35 ("Turnout 1-A"), or such structure at that location as modified to increase its diversion capacity.
- ii) The existing diversion structure at Turnout 1-A is owned by MID to benefit MID Improvement District #3 landowners. Any modifications to such diversion structure to increase capacity shall be at the sole expense of RCWD, with the approval of MID and MID

Improvement District #3 landowners. RCWD will have the sole responsibility to obtain approval from MID Improvement District #3 landowners but MID will provide reasonable assistance in a mutually acceptable resolution.

- iii) Any additional diversion locations from Lateral 6.2 by RCWD shall require the prior approval of MID, which shall not be unreasonably withheld.

c. Carriage Losses

- i) Carriage losses for conveyance of RCWD water supplies in Lateral 6.2 shall be computed at 3% from Madera Canal outflow structure to delivery location at Turnout 1-A. Carriage losses to any additional future diversion locations shall be determined when additional diversion locations are approved by MID.
- ii) If the only water conveyed in Lateral 6.2 is that being delivered to RCWD, the delivery amount shall be measured at the Madera Canal outflow structure into Lateral 6.2 and no carriage loss calculation will be necessary for Lateral 6.2.

d. Capacity and Conveyance Charges

- i) **Charges for Reserved Capacity And Other Cooperation**
The charges assessed by MID to RCWD for the long-term assurance of availability of Reserved Capacity to convey RCWD water supplies through the Madera Canal and Lateral 6.2 and for the other assistance and cooperation provided to RCWD pursuant to this Agreement include three components. Fixed Reimbursement Payments prior to the construction of residential and commercial development within the Village of Gateway are intended to reimburse MID for prior and anticipated administrative and legal costs incurred in the development, environmental review and administration of this and other agreements.

Commencing in the year 2004, when construction of such units is expected to be underway, two other fees shall then be paid to MID by RCWD: an Impact Fee and an Annual Assessment Fee. The Impact Fee shall be a one-time fee paid by RCWD at the time a building permit is issued for each Equivalent Dwelling Unit for the purpose of defraying all or a portion of the cost of MID facilities related to the development project. The Annual Fee shall be applied annually to all Equivalent Dwelling Units existing at that time.

(1) Fixed Reimbursement Payments to MID by RCWD:

- A. The initial payment shall be \$100,000, which shall be made within 120 days of County of Madera Board of Supervisors final action to approve the Village of Gateway General Plan Amendment,
- B. The second payment of \$125,000 shall be made at the one-year anniversary of the initial payment.
- C. The third payment, expected to occur in 2004, shall be \$150,000, which shall be made upon certification of the applicable EIR and approval of the Infrastructure Master Plan for the Village of Gateway by Madera County.

(2) One-time Impact Fees payable to MID by RCWD at issuance of Building Permits by Madera County shall be paid by the fifteenth (15th) day of each month for Building Permits issued in the prior month based on the following rates:

- A. From 2004 to 2008, \$1,000 per Building Permit issued for each Residential e.d.u., and \$250 per Non-Residential e.d.u. For the year 2005 only, the minimum Impact Fee payable by RCWD shall be \$150,000 as additional reimbursement, provided that any Impact Fees paid in 2004 shall be credited toward meeting the \$150,000 required to be paid by the end of 2005.
- B. From 2009 to 2013, \$1,100 per Building Permit issued for each Residential e.d.u., and \$260 per Non-Residential e.d.u.
- C. From 2014 to 2018, \$1,200 per Building Permit issued for each Residential e.d.u., and \$270 per Non-Residential e.d.u.
- D. From 2019 to 2023, \$1,300 per Building Permit issued for each Residential e.d.u., and \$280 per Non-Residential e.d.u.
- E. From 2024 to 2026, \$1,400 per Building Permit issued for each Residential e.d.u., and \$290 per Non-Residential e.d.u.

F. Upon renewal of this Agreement, the Impact Fee shall continue to escalate in the manner described above (i.e., by \$100 per Residential e.d.u. and \$10 per Non-Residential e.d.u. every five years), unless otherwise agreed to by the Parties.

(3) Annual Assessment Fee payments to MID by RCWD shall be based upon the number of e.d.u.'s on the regular property tax roll of Madera County during each calendar year. The Annual Assessment Fee payments shall be made in two installments due on or before January 31 and May 31 of each year using the following annual unit rates:

- A. Annual Payment Rate for 2004: \$80.00 per Residential e.d.u. and \$40.00 per Non-Residential e.d.u.
- B. Each year thereafter the Annual Payment Rate for both Residential e.d.u. and Non-Residential e.d.u. shall increase by 2% per year (e.g., the payment rate for 2005 will be \$81.60 per Residential e.d.u. and \$40.80 per Non-Residential e.d.u.).

ii) **Conveyance Charges**

- (1) Reserved Capacity Water conveyed by RCWD through the Madera Canal and Lateral 6.2 pursuant to this Agreement shall be subject to charges based on the cost per acre-foot of water conveyed, which will be determined each year based on MID's budget for that upcoming year. (Such annual rate will be established to cover MID operations, maintenance and administrative costs of conveying water, including MID's share of costs to convey water through the Madera Canal.)
- (2) The conveyance charge shall reflect the full operations cost of Lateral 6.2 if the canal would not otherwise be operating at the time RCWD is using such capacity.
- (3) The conveyance charge shall be calculated based upon the amount delivered as measured at Turnout 1-A, plus Carriage Losses as defined in Section III 1.c. above, or if the only water conveyed in Lateral 6.2 is that being delivered to RCWD, the delivery shall be measured at the Madera Canal turnout structure.

- (4) The payment of conveyance charges shall be due within 30 days of the last day of the month in which water is delivered.

2. Madera Canal

a. Use of MID Share of Reserved Capacity in Madera Canal

Under this Agreement, RCWD may also utilize a portion of MID's allocation of Madera Canal capacity equal to RCWD's Reserved Capacity in Lateral 6.2 set out in Section III 1.a.i) above, under the following terms and conditions:

- i) Utilization of MID's share of Reserved Capacity in the Madera Canal shall be for a 25-year period (to match term of the current MID CVP Contract) and shall be renewable on the same terms and conditions with the exception of any changes required by USBR in any renewal of the MID CVP Contract.
- ii) RCWD's utilization of MID's Reserved Capacity in the Madera Canal may be subject to necessary conveyance agreements with MCWPA and USBR.
- iii) As provided in Section III 1.a.i)(3), the Reserved Capacity is for the sole and exclusive use of RCWD and it shall not be assigned for any other purpose or to any other user.

RCWD payment to MID for its share of Reserved Capacity in the Madera Canal is included in RCWD's payment to MID for Lateral 6.2 Reserved Capacity as set forth in Section III 1.d.i) of this Article.

b. RCWD Use of Additional As-Available Capacity in Madera Canal

Under this Agreement, RCWD may also utilize As-Available Capacity in excess of its Reserved Capacity in MID's allocation in the Madera Canal on the following terms and conditions:

- i) As-Available Capacity in the Madera Canal may be available on an annual basis, subject to satisfying needs of MID and CWD conveyance requirements.
- ii) If the Madera Canal is not currently operating, RCWD must give MID at least 30 days' notice of request for As-Available Capacity. If Canal is out of service due to scheduled Canal maintenance, the 30-day notice period may be modified by mutual agreement of the Parties and MCWPA with the intent of operating the canal as soon as reasonably possible. (Such minimum maintenance period will

be determined annually by the MCWPA in consultation with the Parties.)

iii) If Madera Canal is operating, RCWD must give MID at least three days' notice of request for As-Available Capacity.

iv) MID must give RCWD one day's notice of any change in As-Available Capacity.

c. Terms and Conditions Applicable to RCWD Use of Both Reserved Capacity and As-Available Capacity in the Madera Canal

i) RCWD's use of capacity in the Madera Canal shall not include the annual 45-day period of "down" time for Canal maintenance. MID shall give RCWD 30 days' prior written notice of such scheduled Canal maintenance down time.

ii) The use of capacity provided in this Agreement in the Madera Canal shall in no manner be construed as a warranty or covenant by MID that any water is available to be conveyed under such RCWD capacity and such conveyance shall be subject to the USBR minimum release requirements in place at Friant Dam. (The availability of any water to be conveyed under the capacity provided in this section depends upon a variety of factors beyond MID's control, such as annual precipitation, increased use by MID and CWD landowners, and other factors.)

iii) The delivery location of waters conveyed through the Madera Canal pursuant to this section shall be at the Lateral 6.2 diversion on the Madera Canal.

iv) RCWD is responsible for scheduling the water deliveries with MID.

v) Carriage Losses

(1) There shall be no carriage losses within the Madera Canal associated with CVP water whose delivery point is at Lateral 6.2.

(2) Carriage losses for all water that is not CVP water shall be calculated pursuant to Warren Act provisions in any applicable USBR Contracts.

vi) Conveyance Charges for the Madera Canal

(1) There shall be no additional charge to RCWD for the conveyance of water that is purchased directly from MID pursuant to other terms of this Agreement.

(2) RCWD will pay all operations costs of the Madera Canal to MID if the Canal is operated solely for the conveyance of water to RCWD.

ARTICLE IV. SALE OF MID WATER AND OPTIONS TO PURCHASE

1. Options to Purchase MID Water

RCWD shall pay an annual option fee to MID to secure the first right to purchase surplus water from MID (if any) on the following terms and conditions for each source of water specified:

a. Surplus Class 2 Water will be made available by MID for purchase by RCWD pursuant to an annual option by RCWD upon the occurrence of:

i) A determination by MID based on June 1 or later water supply conditions, that Class 2 Water available to MID, in combination with other supplies available to MID, has resulted in the ability of MID to transfer water to RCWD without impacting current or future deliveries to MID agricultural customers.

ii) If USBR issues a notice of reduced allocation of Class 2 Water after delivery of Surplus Class 2 Water by MID to RCWD is complete, RCWD shall render replacement of water to MID from other water supply sources within one year of date of pre-reduction delivery.

b. Uncontrolled Season Class 2 water will be available for purchase by RCWD pursuant to an annual option by RCWD only upon MID determination that there is water in excess of MID's ability to divert and deliver water to MID landowners, recharge facilities or storage facilities, including those facilities that may be developed in conjunction with RCWD, during the uncontrolled season.

2. Option Payments

a. RCWD shall purchase annually from MID an option to receive 10,000 acre-feet of MID water.

b. The total annual option price shall be \$10 per acre-foot per year, equaling a \$100,000 annual payment, payable no later than February 1 of each calendar year.

- c. Option payments are non-refundable and MID makes no guarantee that surplus water will be available in any year for purchase under these options.
- d. RCWD shall receive full credit for option payments for water purchased in future years up to a maximum \$50.00 per acre-foot purchased in any year.
- e. Annual Option payments by RCWD shall not be required whenever RCWD has accumulated an unused \$500,000 credit because MID has been unable to make water available.
- f. Option payments by RCWD shall be forfeited at a rate of \$10.00 per acre-foot for water made available by MID but not taken by RCWD.

3. Purchase of Water By Exercise of Option

- a. **Price of MID CVP Water Purchased Under Exercise of Option**
If RCWD exercises its option to purchase water from MID, the purchase price shall be set at \$50 per acre-foot above MID cost of water. The MID cost of water determination will include the following: CVP contract rate (currently \$10.05/acre-foot); Restoration Fund Charges; any incremental costs charged by USBR; any USBR surcharge for water transferred to non-CVP Contractors; and San Luis/Delta Mendota Authority charges, and other charges that may be imposed upon MID water deliveries.
- b. **Delivery of MID Non-CVP Water Supplies Under Exercise of Option**
 - i) MID may deliver Non-CVP Water, if available, in lieu of CVP Class 2 Water.
 - ii) If Non-CVP water is delivered to RCWD in lieu of Class 2 Water, cost adjustment will be made to reflect increases or decreases in MID or RCWD costs, including but not limited to:
 - (1) Restoration Fund Costs, if any;
 - (2) Non-CVP water conveyance charges and carriage losses.
- c. **Cooperation in Acquisition of Supplemental Supplies**
MID will cooperate and assist RCWD in securing supplemental water supplies from other sources. If MID secures such supplies on behalf of RCWD, the following charges shall be assessed by MID to RCWD:

- i) The purchase price by RCWD shall be \$50 per acre-foot above MID cost in securing such supplies;
- ii) MID shall apply option payments previously made to MID by RCWD to the price payable by RCWD for such supplemental supplies up to \$50 per acre-foot.

4. Billings and Payments

a. Compensation Factor for Carriage Losses

The billing for water shall be based on charges per acre-foot of metered water taken by RCWD at the point of delivery. In order to compensate for the carriage loss set forth in Section III.1.c (Carriage Losses), the billing for all water charges under this Agreement shall be based on the amount of metered water taken by RCWD multiplied by a factor of 1.03, except as otherwise provided in Section III.1.c.

b. Billing Due Dates

RCWD will be billed separately by MID for water purchase amounts and water conveyance costs. All payments shall be due within 30 days of the last day of the month in which water is delivered. Interest shall be charged for all delinquent payments at a rate of 1 percent per month from the due date to the date of payment.

ARTICLE V

CONDITIONS AND OBLIGATIONS OF PARTIES

1. Madera Irrigation District

a. Assistance with Environmental Approvals

MID agrees to provide reasonable assistance to RCWD, as appropriate on water issues, on the County, State and Federal environmental approvals for the Village of Gateway General Plan Amendment, the Infrastructure Master Plan for the Village of Gateway, subsequent tentative and subdivision maps, the Root Creek Agreement and this Agreement.

b. Provide Reasonable Support at Gateway Village Entitlement Hearings

MID agrees to provide RCWD reasonable support on water issues at all entitlement hearings for the Village of Gateway General Plan Amendment, the Infrastructure Master Plan for the Village of Gateway, subsequent tentative and subdivision maps before the Madera County Planning Commission and Board of Supervisors.

c. Provide Support for Future Annexations to RCWD

MID agrees to provide RCWD reasonable support for additional future annexations to RCWD, providing such annexations are subject to the provisions of the Root Creek Agreement and this Agreement.

d. Provide Support for Special RCWD Legislation

MID agrees to provide RCWD reasonable support for State legislation to expand the powers of RCWD to allow RCWD to provide roadways, public buildings and school facilities, parks, street lighting and landscaping, electricity, natural gas, telecommunications, and other utilities and urban services and contract for police and fire services within the boundaries of RCWD. MID acknowledges, however, that nothing in this Agreement entitles MID to participate in any additional revenue generated by RCWD from any activities authorized by the special legislation.

e. Provide Assistance in Obtaining Pipeline from RCWD to Lateral 6.2

MID shall provide reasonable assistance to RCWD to obtain an easement to deliver water from Turnout 1-A on Lateral 6.2 to the boundary of RCWD.

2. Root Creek Water District

a. Indemnification of MID by RCWD

It is the understanding of the Parties hereto, and the intention of this Agreement, that the execution of this Agreement by MID and all actions taken by MID under this Agreement are to be performed at the expense and risk of RCWD, and that RCWD shall defend, indemnify and hold MID harmless against any loss, expense, damage or liability of any kind whatsoever, including attorneys' fees, arising out of or in connection with the sale or conveyance of water or any other action taken under this Agreement.

b. Future Lands Annexed or Served by RCWD

All additional lands annexed or served by RCWD after the date of execution of this Agreement shall be annexed or served by RCWD subject to the terms and provisions of the Root Creek Agreement and this Agreement.

c. RCWD Commitment to Purchase Water First from MID and CWD

In purchasing its necessary water supplies, RCWD shall purchase such water first from MID and then CWD, if available, prior to purchasing water from any other sources.

d. **RCWD Commitment Not to Sell or Provide Water Service to Lands Outside of RCWD Boundaries**

RCWD shall not sell or provide water service utilizing water purchased from MID to lands outside of RCWD boundaries without the prior approval of MID.

e. **Provision of Services Only to Properties Subject to a Groundwater Management Plan**

RCWD will provide its services, including but not limited to, provision of water, wastewater treatment, flood control, electrical power, natural gas, telecommunications, public facilities, or any other urban or M & I services, only to properties that have adopted or are subject to a groundwater management plan that stipulates to water balance, and, if applicable, are subject to an agreement to limited consumption of San Joaquin River waters pursuant to USBR Holding Contracts, similar to the limitations imposed in the Root Creek Agreement.

ARTICLE VI

GENERAL PROVISIONS

1. **Compliance with Environmental Laws**

The Parties shall comply with all applicable federal, state and local environmental laws and regulations, and take all steps necessary to assess whether the activities described in this Agreement may adversely impact threatened or endangered species, critical habitat or other environmental resources regulated pursuant to the federal Endangered Species Act, the California Endangered Species Act and other applicable state and federal laws relating to the protection of environmental resources.

2. **Enforcement of Agreement**

If default shall be made by any Party in any provision contained in this Agreement, such default shall not excuse the other Party from fulfilling its obligations under the Agreement and such other Party shall continue to be liable for the performance of all obligations herein contained. The Parties hereby declare that this Agreement is entered into for the benefit of all Parties to the Agreement and each Party shall have the right to enforce this Agreement, and all the obligations of each Party hereunder, by whatever lawful means that Party deems appropriate.

3. **Recording**

This Agreement shall be recorded in the Official Records of Madera County to bind the land within RCWD to the extent legally permissible and to make an official record of the agreement of the Parties.

4. Best Efforts/No Guaranty

When this Agreement requires any Party to assist, cooperate, negotiate, facilitate or otherwise participate in a process to obtain a mutually desired result described in this Agreement, all that is required of that Party is that they exert their reasonable and appropriate best efforts in relation to the matter described in this Agreement. In agreeing to cooperate, assist or negotiate in good faith, no Party is endeavoring to guaranty any result describe or sought by this Agreement.

5. Uncontrolled Forces

If any of the Parties to this Agreement are prevented in whole or in part from delivering wheeling or receiving water as a result of forces beyond their control, all Parties are relieved from the obligations to the extent they are reasonably unable to complete the obligation due to the uncontrollable force. Uncontrollable forces shall include, but are not limited to, earthquakes, fires, tornadoes, floods and other natural disasters. However, each Party shall be responsible for payment of any costs incurred on its behalf by the other Party before the occurrence of the uncontrollable force.

6. Waste and Unreasonable Use

Nothing in this Agreement is intended or shall be construed as condoning any waste or unreasonable use of water. All Parties specifically retain their rights and responsibilities as water purveyors to ensure that water within their jurisdiction is put to reasonable and beneficial use.

7. Remedies - Specific Performance

The Parties acknowledge that both groundwater and surface water are unique and irreplaceable resources. Therefore, monetary compensation or other remedies at law will not be sufficient to cure a breach of this Agreement. Thus, the Parties agree that in addition to all remedies at law, specific performance shall be available to all Parties to enforce the terms of this Agreement.

8. Costs

The costs and expenses incurred for the preparation of this Agreement shall be paid by each Party subject only to the reimbursement of MID set forth above.

9. Time

Time is of the essence of this Agreement and each and all of its provisions.

10. Effect of Headings

The subject headings of the articles and paragraphs of this Agreement are included for purposes of convenience only and shall not affect the construction or interpretation of any of its provisions.

11. Entire Agreement

This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter contained in it and supersedes all prior and contemporaneous agreements, representations, and understandings of the Parties. No supplement, modification, or amendment to this Agreement shall be binding unless executed in writing by all of the Parties hereto. It is understood by the Parties that this Agreement may be subject to additional mitigation measures if required by the EIR to be prepared for the Village of Gateway Amendment to the Madera County General Plan, the Infrastructure Master Plan for the Village of Gateway, subsequent tentative or subdivision maps for the Village of Gateway.

12. Waiver

Waiver of any breach of this Agreement by any Party hereto shall not constitute a continuing waiver or a waiver of any breach of the same or another provision of this Agreement.

13. Counterparts

This Agreement may be executed in any number of counterparts and each such counterpart shall be deemed to be an original instrument, all of which together shall constitute one and the same instrument.

14. Binding Effect

This Agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, assigns and successors of the Parties hereto, and shall bind and apply to all property subsequently annexed to RCWD or any other party and shall be recorded against subsequent annexed land.

15. Survival of Agreement

The provisions of this Agreement and the covenants and conditions contained herein shall be continuous and shall survive any annexation or other change in the boundaries of RCWD and any transfer of ownership of any Holding Contract property or other property within RCWD.

16. Attorneys' Fees

Should any litigation be commenced between the Parties hereto concerning this Agreement or the rights and duties of any Party in relation thereto, the Party prevailing in such litigation shall be entitled, in addition to such other relief as may be granted, to recover from the losing Party a

reasonable sum for its attorneys' and paraprofessionals' fees and costs in such litigation, or any other separate action brought for that purpose.

17. Governing Law

This Agreement shall be governed by the laws of the State of California.

18. Rules of Construction and Word Usage

All words used in the Agreement shall be construed to include the plural as well as the singular number and vice versa. Words used herein in the present tense shall include the future as well as the present, and words used in the masculine gender shall include the feminine and neuter genders.

19. Parties in Interest

Nothing in this Agreement, whether expressed or implied, is intended to confer any rights or remedies on any persons other than the Parties hereto and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligation or liability of any third person to any Party to this Agreement, nor shall any provision give any third person any right of subrogation or action over and against any Party to this Agreement.

20. Notices

All notices and other communications required under this Agreement shall be in writing and shall be deemed to have been duly given on the date of service, if served personally on the person to whom notice is to be given, or on the third (3rd) day after mailing, if mailed to the Party to whom notice is to be given by first class mail, registered or certified, postage prepaid, and properly addressed as follows:

To Stephen H. Ottemoeller, General Manager, at:
Madera Irrigation District
12152 Road 28 1/4
Madera, CA. 93637-9199

To Christopher L. Campbell, Counsel; at:
Root Creek Water District
5260 N. Palm Ave., Suite 421
Fresno, CA 93704

or at such other address as any party may, by like notice, designate to the other Party in writing.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of
the day and year first above written.

MADERA IRRIGATION DISTRICT

Ron Pistori
By President - Board of Directors

Attest:

By SA Ottum
GENERAL MANAGER

ROOT CREEK WATER DISTRICT

[Signature]
By President - Board of Directors

Attest:

By Abraham C. Messer
SECRETARY ROOT CREEK
WATER DISTRICT

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Madera

SS.

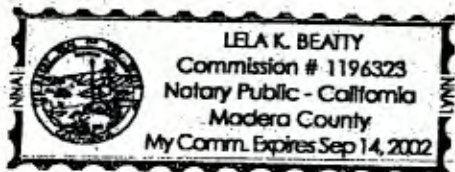
On March 13, 2002, before me, Lela K. Beatty, Notary Public

personally appeared Phillip R. Pierre

Name(s) of Signer(s)

- ☐ personally known to me
☒ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.



Place Notary Seal Above.

WITNESS my hand and official seal.

Lela K. Beatty
 Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Agreement Between MID & Root Creek WD for the Co-management & Sale of Water

Document Date: 3/13/02

Number of Pages: 20

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

Signer's Name: _____

- ☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: Root Creek Water District

RIGHT THUMBPRINT
 OF SIGNER

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CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

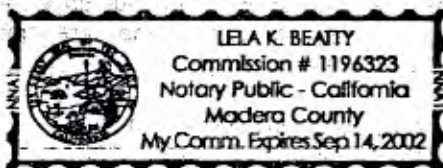
State of California

County of Madera } SS.

On March 13, 2002, before me Lela K. Beatty, Notary Public
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")
 personally appeared Ron Pistaresi
Name(s) of Signer(s)

☒ personally known to me
☐ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



Place Notary Seal Above

WITNESS my hand and official seal.

Lela K. Beatty
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document Agreement Between MID & Root Creek WD
for the Conveyance & Sale of Water
 Document Date 3/13/02 Number of Pages: 20

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

Signer's Name: _____

- ☐ Individual
- ☐ Corporate Officer — Title(s): _____
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other: _____

Signer Is Representing: Madera Irrigation District

RIGHT THUMBPRINT
 OF SIGNER
 Top of thumb here

WATER SUPPLY AGREEMENT

THIS WATER SUPPLY AGREEMENT is made effective as of November 1, 2006, by and between the ROOT CREEK WATER DISTRICT, a California water district ("RCWD") and WESTSIDE MUTUAL WATER COMPANY, LLC, a California limited liability company ("Westside").

RECITALS:

A. RCWD is a California water district, located in Southeastern Madera County. The lands of the district have been extensively developed to agriculture, and in particular, permanent plantings. Also, a portion of the district has been designated for municipal and industrial development.

B. The lands within RCWD rely primarily on groundwater, and the groundwater basin underlying the district is in a state of overdraft. In order to efficiently manage its groundwater supplies, RCWD is seeking to acquire surface water supplies for conjunctive use purposes.

C. RCWD has acquired or will acquire certain wet-year supplies that it intends to deliver to its agricultural water users. RCWD is also seeking "firm" supplies, available in dry years, that will be available if necessary for the agricultural, municipal and industrial development within the district. Westside desires to provide RCWD with dry-year firm supplies, as described below.

D. Westside and its members have certain rights to banked groundwater in the North Kern Water Storage District ("North Kern") and may bank additional water in North Kern in the future. Westside proposes to pump and deliver banked groundwater to North Kern, for North Kern in turn to deliver to the Shafter Wasco Irrigation District ("SWID"). SWID shall use the banked groundwater delivered from North Kern in lieu of a comparable amount of surface water that SWID would otherwise have taken from the Friant Unit of the Central Valley Project ("Friant"), under its long-term water supply contract with the US Bureau of Reclamation ("Reclamation"). Westside and its members also have access to certain non-project supplies (i.e., waters that are not captured or delivered by Reclamation's Central Valley Project) that Westside may provide to RCWD under this Agreement.

E. The Friant water that could have been delivered to SWID shall remain in Lake Millerton, available for delivery to RCWD through the Madera Canal and related facilities. The parties intend that the SWID water delivered from Lake Millerton to RCWD shall be deemed an exchange for North Kern banked groundwater, and shall not be deemed to be Federal project water when delivered to RCWD.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained in this Agreement, the parties agree as follows:

1. Definitions. Definitions for the following terms are found at the following paragraphs of this Agreement:

- (a) "Approvals" is defined at Paragraph 10.
- (b) "CEQA" is defined at Paragraph 10(b).
- (c) "Commencement Date" is defined at Paragraph 8.
- (d) "Delivered Price" is defined at Paragraph 3(c).
- (e) "Delivery Point" is defined at Paragraph 6.
- (f) "Event of Default" is defined at Paragraph 16.
- (g) "Friant" is defined at Recital D.
- (h) "Force Majeure Event" is defined at Paragraph 14(b).
- (i) "Maximum Delivery Quantity" is defined at Paragraph 2.
- (j) "North Kern" is defined at Recital D.
- (k) "Order" is defined at Paragraph 5.
- (l) "Pre-Delivered Water" is defined at Paragraph 7.
- (m) "Reclamation" is defined at Recital D.
- (n) "Replacement Water Supply" is defined at Paragraph 16.
- (o) "Pre-Delivery Notice" is defined at Paragraph 7.
- (p) "RCWD" is defined in the Preamble.
- (q) "Reservation Fee" is defined at Paragraph 3(a).
- (r) "Standby Charge" is defined at Paragraph 3(b).
- (s) "SWID" is defined at Recital D.
- (t) "Term" is defined at Paragraph 8 .
- (u) "Uncredited Standby Charges" is defined at Paragraph 7(b)(i).
- (v) "Westside" is defined in the Preamble.

2. Agreement to Sell/Right to Purchase. Westside hereby agrees to sell to RCWD banked groundwater or other non-project waters available to Westside each year as requested by RCWD pursuant to the notice procedure set forth below. The amount Westside is obligated to sell each year shall not exceed the "Maximum Delivery Quantity" for that year described in Exhibit "A" to this Agreement and incorporated herein by this reference. RCWD shall not be obligated to purchase water from Westside, except as provided in this Agreement.

3. Pricing.

(a) *Reservation Fee.* Notwithstanding any other provision herein, commencing January 1, 2006 and continuing until the Commencement Date, RCWD shall pay to Westside the sum of \$50,000 each calendar quarter to reserve the availability of water supplies under this Agreement (the "Reservation Fee"). The Reservation Fee shall be paid not later than the 30th day of each calendar quarter.

(b) *Standby Charge.* Beginning on the Commencement Date, RCWD shall pay to Westside an annual "Standby Charge" of \$180 per acre-foot of the Maximum Delivery Quantity available each calendar year, as specified in Exhibit "A" hereto, as adjusted pursuant to this paragraph 3(b) and paragraph 9(b)(ii) hereof. Commencing on the Commencement Date and annually thereafter, the Standby Charge shall be adjusted annually for inflation by the same percentage as the percentage change in the Consumer Price Index for All Urban Consumers, West Region from the value of the Index on January 1, 2006. The annual Standby Charge shall be paid not later than January 31 of each year. Subject to paragraph 7(b)(ii) hereof, all Standby Charges paid shall be credited against the price of water purchased under this Agreement. Any Standby Charges paid that are not credited to water purchased in any year shall roll over into subsequent years until utilized for water purchased. While there shall be no limit to the amount of credit RCWD can accrue for Standby Charges paid, RCWD shall not be entitled to exceed the Maximum Delivery Quantity of water available in any year. If at the end of the Term there is a credit remaining, then RCWD shall be entitled to order and delivery, and be subject to pre-delivery, of the amount of water that can be purchased with such credit pursuant to the provisions of this Agreement.

(c) *Water Charge.* The price of water delivered under this Agreement shall be \$600 per acre-foot (the "Delivered Price") as adjusted pursuant to this paragraph 3(c) and paragraph 9(b)(ii) hereof. Commencing on the Commencement Date and annually thereafter, the Delivered Price shall be adjusted annually for inflation by the same percentage as the percentage change in the Consumer Price Index for All Urban Consumers, West Region from the value of the Index on January 1, 2006.

4. Payment of Delivered Price. RCWD shall pay the Delivered Price for all water ordered within 60 days of the Order for such water. Standby Charges paid shall be credited against the Delivered Price pursuant to paragraph 3(b) hereof.

5. Ordering. Not later than April 1 of each calendar year, RCWD shall give written notice to Westside of the amounts of water to be purchased that year (the "Order"), up to the Maximum Delivery Quantity for that year. At RCWD's option, RCWD may also include in the Order a monthly schedule of requested deliveries as well as the total for the year and Westside shall use its reasonable good faith efforts to comply with the requested delivery schedule. In no case shall Westside be obligated to deliver more than 13.5 percent of the Maximum Delivery Quantity for that year in any single month; provided, however, that Westside shall remain obligated to deliver the full Maximum Delivery Quantity.

6. Delivery. The delivery point for all water ordered under this Agreement shall be RCWD's turnout on Madera Irrigation District Lateral 6.2 from the Madera Canal (the "Delivery Point"). The delivery period for all water ordered shall be April through September. Westside shall not be obligated to deliver any water during the period October through March; provided, however that Westside may pre-deliver water at any time during the year pursuant to paragraph 7 hereof regarding Pre-Delivery.

(a) *Conveyance to Delivery Point.* Except as provided in this Agreement, Westside shall be solely responsible for conveyance arrangements necessary to deliver the water to the Delivery Point, including, but not limited to, contracting with other parties for water exchanges.

(b) *Losses.* Westside shall be responsible to deliver the full amount of water specified in the Order to the Delivery Point and shall have no responsibility for any losses of any kind after its delivery of water to the Delivery Point. RCWD shall be solely responsible for any losses, including carriage or conveyance losses, after the Delivery Point.

7. Pre-Delivery. Westside may, at its option, deliver water at any time during the year to RCWD prior to receipt of an Order for such water ("Pre-Delivered Water"), provided that RCWD has available conveyance capacity and beneficial use (including capacity for direct recharge) for such water. Westside shall notify RCWD in writing when and if Westside has water available for pre-delivery ("Pre-Delivery Notice"). The Pre-Delivery Notice shall specify the amount of water available to be pre-delivered and the proposed timing of delivery. Not later than ten (10) days following receipt of the Pre-Delivery Notice, RCWD shall notify Westside how much, if any, Pre-Delivered Water that RCWD has the conveyance capacity and beneficial use to receive over and above that dedicated to receiving Section 215 water available to RCWD as a Section 215 contractor with the Bureau of Reclamation and/or water available under its agreement with Madera Irrigation District dated March 13, 2002 as it exists on the date hereof. RCWD shall maintain during the Term sufficient beneficial use and conveyance capacity in its water delivery facilities to allow (a) total deliveries of at least 10,000 AF of water each calendar year and (b) deliveries by Westside of at least 4,000

AF of water each calendar year. If this obligation is not satisfied at any time during the Term, then Westside shall have first priority to use RCWD delivery facilities for Pre-Delivered Water until the quantity of water prevented from being delivered by such limitation is delivered by Westside.

(a) *Application to Orders (Delivery).* Water Orders made by RCWD shall be considered satisfied first from the amount of Pre-Delivered Water delivered to the Delivery Point. RCWD shall not be considered to have ordered Pre-Delivered Water until Westside receives an Order.

(b) *Application of Uncredited Standby Charges.* If, as of December 31 of any year:

(i) RCWD has Pre-Delivered Water remaining, and after crediting the Standby Charges paid by RCWD against all water ordered by and delivered to RCWD prior to December 31 of that year RCWD still has a credit for additional Standby Charges ("Uncredited Standby Charges"), then

(ii) RCWD shall be deemed to have ordered an amount of the remaining Pre-Delivered Water up to the lesser of the amount of remaining Pre-Delivered Water or the amount that could be purchased for the amount of the Uncredited Standby Charges. The appropriate amount of Pre-Delivered Water shall be deemed delivered and paid for by crediting the appropriate amount of Standby Charges as of December 31 of that year. At the end of the Term, RCWD shall pay for any Pre-Delivered Water remaining after the foregoing credit at the then existing Delivered Price.

(c) *Reporting.* To monitor RCWD's use of Pre-Delivered Water, RCWD shall deliver to Westside a copy of RCWD's annual report submitted to Madera County, the Madera Irrigation District and/or the Friant Water Users' Authority (or its successor under the December 31, 1999 contract with RCWD) at the time of such submission demonstrating RCWD's water deliveries utilized for elimination of the contribution of its lands to regional overdraft. Should RCWD report the use of any Pre-Delivered Water, or other water from Westside that RCWD has not paid for, in achieving RCWD's groundwater balance, then RCWD shall promptly pay Westside for the reported water.

8. Term. The initial term of this Agreement shall be for a period of twenty-five (25) years, commencing on the "Commencement Date," which shall be January 1, 2008, or, if the General Plan Amendment, Area Plan Amendment and Specific Plan Amendment for Gateway Village are not approved by June 30, 2007, January 1, 2009, unless otherwise mutually agreed by RCWD, Westside, North Kern and SWID.

9. Renewal.

(a) *Renewal.* Subject to the renewal provisions described below, RCWD may, at its option, renew this Agreement on the same terms and conditions for up to one (1) additional twenty-five (25) year period. Each twenty-five (25) year period is referred to herein as a "Term". RCWD shall provide written notice to Westside of its intent to renew not later than one (1) year prior to the expiration of the initial Term.

(b) *Renewal Provisions.*

(i) Notwithstanding paragraph 6(a) hereof, RCWD and Westside shall, upon delivery to Westside of RCWD's notice of intent to renew this Agreement pursuant to paragraph 9(a) hereof, be mutually obligated to secure the conveyance arrangements necessary to deliver water under this Agreement to the Delivery Point for any renewal Term. In the event that such arrangements cannot reasonably be secured prior to the expiration of the initial term despite the good faith efforts of both parties, then this Agreement shall not be renewed.

(ii) At the beginning of the renewal Term, the Delivered Price and the Standby Charge shall be adjusted to an amount that reflects the then-current market price for water supplies of similar origin and reliability delivered to the Delivery Point. In the event that the parties are unable to agree as to a then-current market price, such price shall be decided through the dispute resolution procedure described in Paragraph 18 below.

10. Governmental Approvals and Environmental Review.

(a) *Governmental Approvals.* The parties shall work together to obtain any approvals or consents necessary from any governmental agency for the transactions contemplated herein ("Approvals"). Notwithstanding the foregoing,

(i) RCWD shall be solely responsible for any costs or fees incurred for any Approvals, except as provided in this Agreement.

(ii) Westside shall be solely responsible to negotiate with and obtain any necessary Approvals from North Kern and SWID.

(b) *CEQA.* The parties acknowledge that RCWD, North Kern and SWID are responsible to comply with the provisions of the California Environmental Quality Act ("CEQA") in connection with the performance of the actions contemplated by this Agreement. For CEQA purposes, RCWD shall be the lead agency, and North Kern and SWID shall be responsible agencies. RCWD shall bear all costs for CEQA compliance.

11. Conditions Precedent. The following are conditions precedent to the parties' performance under this Agreement except for RCWD's unconditional obligation to pay the Reservation Fee which shall be absolute:

(a) Westside and North Kern shall have executed the agreements necessary for Westside's performance under this Agreement; provided, however, that execution of such agreements shall be within the sole and absolute discretion of Westside. If this condition precedent is not satisfied, then Westside shall refund to RCWD one-half of the Reservation Fee paid to that date and this Agreement shall terminate.

(b) Westside and SWID (or at Westside's discretion Westside and another Friant Contractor) shall have executed the agreements necessary for Westside's performance under this Agreement; provided, however, that execution of such agreements shall be within the sole and absolute discretion of Westside. If this condition precedent is not satisfied, then Westside shall refund to RCWD one-half of the Reservation Fee paid to that date and this Agreement shall terminate.

(c) RCWD, North Kern and SWID shall have completed their environmental review as required by CEQA for the actions contemplated by this Agreement, and the time period to appeal the approval by any of those agencies of any CEQA document shall have run.

(d) The parties shall receive written confirmation from Reclamation that:

(i) RCWD is within the municipal and industrial "place of use" designated in Reclamation's permits from the State Water Resources Control Board for waters delivered from Friant; and that

(ii) SWID Friant water exchanged for North Kern banked groundwater shall be considered "non-project" water when delivered to RCWD.

(e) The parties have received all necessary Approvals.

12. Westside Representations and Warranties. Westside represents and warrants to RCWD that, to the best of Westside's knowledge:

(a) Westside is a limited liability company duly organized, validly existing and in good standing under the laws of the State of California;

(b) As of the date of this Agreement, Westside and its members have banked groundwater within North Kern on their own account(s) and have the current right to withdraw and transfer about 30,000 acre feet of that stored water. Westside and its members also have the right to bank additional water and have other water banked within Kern County that,

based on circumstances, laws, rules and regulations that exist as of the date of this Agreement, will allow Westside to fulfill its obligations under this Agreement throughout the total 50 year term if the option to renew is exercised.

(c) Westside has all necessary power and authority to enter into this Agreement and to perform its obligations hereunder; and all actions required to be taken on its part to approve the execution and delivery of this Agreement have been duly taken. This Agreement constitutes a legal, valid and binding obligation of Westside, enforceable against Westside in accordance with its terms.

(d) The execution and delivery of this Agreement by Westside, and the performance of its obligations hereunder do not and will not (i) violate, or conflict with its obligations under any contract to which it is a party or by which it is bound, or (ii) violate (and none of such obligations is void or voidable under) any law, regulation, order, arbitration award, judgment or decree to which it is a party or to which it is subject.

(e) Subject to paragraphs 10 and 11 hereof, no authorization, consent or approval of, or notice to, any person or entity (including but not limited to any federal, state, county, local or foreign government, regulatory body or official or any third party) not already obtained or given by Westside is required to be obtained or given in connection with the execution and delivery of this Agreement by Westside or the performance of any of its obligations hereunder.

(f) Subject to paragraphs 9, 10, 11 and 14 hereof, Westside currently has and will maintain throughout the Term, as extended, the legal right and ability to perform all of its obligations under this Agreement, including, but not limited to, the conveyance arrangements necessary to deliver the water to the Delivery Point.

(g) As of the date of this Agreement, there is no suit, action, arbitration, or legal, administrative, or other proceeding, or governmental investigation pending or threatened affecting any of the transactions contemplated by this Agreement.

13. RCWD Representations and Warranties. RCWD represents and warrants to Westside that, to the best of RCWD's knowledge:

(a) RCWD is a California water district duly formed and organized under the California Water District Law; RCWD has all necessary power and authority to enter into this Agreement and to perform its obligations hereunder; and all action required to be taken on its part to approve the execution and delivery of this Agreement has been duly taken.

(b) The execution and delivery of this Agreement by RCWD, and the performance of its obligations hereunder, do not and will not (i) violate, or conflict with its obligations under, any contract to which it is a party or by which it is bound, or (ii) violate (and none of such obligations is void or voidable under) any law, regulation, order, arbitration award, judgment or decree to which it is a party or to which it is subject.

(c) As of the date of this Agreement, there is no suit, action, arbitration, or legal, administrative, or other proceeding, or governmental investigation pending or threatened affecting any the transactions contemplated by this Water Service Agreement.

(d) This Agreement constitutes the legal, valid and binding obligation of RCWD, enforceable against RCWD in accordance with its terms.

14. Force Majeure/Permitted Suspension of Performance.

(a) *Suspension of Water Delivery.* Westside may suspend its delivery obligations under this Agreement only if it is unable to substantially perform such delivery obligations as the result of a Force Majeure Event (defined below); provided, however, that no suspension shall extend the Term of this Agreement. If at all possible, prior to suspension of performance, and in no event less than two business days following suspension of performance of water delivery based on a Force Majeure Event, Westside shall provide RCWD with written notice of the estimated duration for the suspension and the basis for the suspension. Westside shall additionally provide RCWD with any information that Westside subsequently obtains regarding the Force Majeure Event and any information RCWD may reasonably request. Except as expressly provided in this Paragraph or as a remedy for a default of the other party, neither party shall be entitled to suspend, or otherwise be excused from, performance of any of its obligations under this Agreement.

(b) *Force Majeure Event.* A "Force Majeure Event" is strictly limited to the following:

Any flood, earthquake, failure of any facility not owned by Westside, acts of God (other than drought), governmental or court actions, Reclamation allocations and other events which are beyond the reasonable control of, and have not been caused or contributed to by Westside and whose consequences cannot be avoided by utilizing other water supplies or conveyance facilities reasonably available to Westside at an equivalent cost. Neither drought nor unavailability of water resulting from drought shall result in cancellation or permanent reduction of water available under this contract.

(c) *Make-up Water.* Should Westside be unable to deliver the full amount of water ordered by RCWD in any year due to a Force Majeure Event, RCWD shall have the option of obtaining water in the following five (5) years pursuant to the provisions of this Agreement, including paragraph 2 hereof, to make up that shortfall if necessary to meet RCWD's obligations to balance the water usage in RCWD.

15. Events of Default. An "Event of Default" of a party shall be deemed to occur if, unless excused by a Force Majeure Event, the party at any time fails to perform any of its obligations as and when required to be performed under this Agreement, or any representation or warranty of the party made or restated in this Agreement becomes false or inaccurate in any material respect at any time; provided, however, that the other party shall have first demanded in writing that the party cure such non-performance, or false or inaccurate representation or warranty (or cause it to be cured) and the party shall have then failed to (i) cure the default within 30 days after the receipt of such demand in the case of payment obligations, (ii) commence a cure within 30 days after the receipt of such demand in the case of non-payment performance obligations, or (iii) develop within 30 days after the receipt of such demand and thereafter perform a plan to maintain RCWD's five year rolling average groundwater balance in the case of Westside's obligation to deliver water.

16. Rights Upon an Event Default. Upon the occurrence of an Event of Default, the non-defaulting party (a) may suspend performance of its obligations under this Agreement until the Event of Default has been cured or waived, and (b) shall have the following rights and remedies:

(i) *Westside Event of Default.*

Replacement Water Supply

Upon a Westside Event of Default, RCWD shall immediately have the right to (A) specific performance of Westside's obligations under this Agreement and (B) reimbursement of the actually incurred reasonable cost of obtaining water to replace the water requested in an Order that Westside does not deliver ("Replacement Water Supply") less all amounts saved as a result of the Event of Default including all amounts that otherwise would have been due under this Agreement.

Termination of Contract and Replacement Contract

RCWD shall have the right to terminate this Agreement upon its reasonable determination that a material Westside Event of Default has occurred that cannot or will not be cured within a reasonable time. Westside's obligation to reimburse RCWD for a Replacement Water Supply shall thereupon cease and RCWD shall have the right to recover from Westside, immediately upon demand, an amount equal to the excess of (A) the net present value as of the termination date of the reasonable cost of securing equivalent substitute performance from a financially responsible contractor for the balance of the existing Term remaining as of the date of termination, over (B) the net

present value as of the date of termination of all amounts RCWD saved as a result of such termination plus the cost of any water under a Replacement Water Supply to be delivered after the date of termination for which Westside has paid reimbursement.

Sole Remedy

The rights and remedies of RCWD described in this paragraph 16 are RCWD's sole and exclusive remedy for any Event of Default by Westside under, or any inaccuracy in any of Westside's representations and warranties in, this Agreement.

(ii) *RCWD Event of Default.* Upon a RCWD Event of Default, Westside shall immediately have the right to (A) deem any Pre-Delivered Water as ordered to accelerate delivery of any Pre-Delivered Water and payment therefor; (B) specific performance of this Agreement or money damages at the discretion of Westside, (C) payment of any amount that is due and payable by RCWD under this Agreement plus interest at the rate of 10 percent per annum, and/or (D) terminate this Agreement; provided, however, that no delay in termination of this Agreement by Westside shall constitute a waiver of this right. RCWD's obligation to pay any amounts that are due and payable under this Agreement or this paragraph 16 shall survive any termination of this Agreement. The rights and remedies of Westside described in this paragraph 16 shall be cumulative, and are Westside's sole and exclusive remedies for any Event of Default by RCWD under, or any inaccuracy in any of RCWD's representations or warranties in, this Agreement.

17. Dispute Resolution. Upon the request of either party, any dispute claim, or controversy of any kind arising in connection with this Agreement shall be resolved through a two-step dispute resolution process, as follows:

(a) *Step I Mediation:* At the request of either party, the dispute, claim or controversy of the matter shall be referred for mediation to a retired Superior Court Judge, reasonably acceptable to both parties.

(b) *Step II Trial by Court Reference:* If the dispute, claim or controversy has not been resolved by Step I mediation, then any remaining dispute, claim or controversy shall be submitted for determination by a trial on Order of Reference conducted by a single retired Judge appointed pursuant to the provisions of California Code of Civil Procedure Section 638 (or any amendment, addition or successor section thereto). **BOTH PARTIES HEREBY WAIVE A JURY TRIAL OR PROCEEDING IN CONNECTION WITH ANY DISPUTE, CLAIM OR CONTROVERSY ARISING IN CONNECTION WITH THIS AGREEMENT.** The parties intend this general reference agreement to be specifically enforceable in accordance with CCP Section 638, and no other agreement shall be necessary to submit a dispute to general judicial reference.

(i) The general reference proceeding shall be commenced by a request or motion filed with the Presiding Judge of the

Superior Court of Kings County. If the parties are unable to agree upon a person to act as referee, then a referee shall be appointed by the Presiding Judge as provided under CCP Section 640.

(ii) The parties shall pay in advance, to the referee, the estimated reasonable fees and costs of the reference. Each party shall be responsible for one-half of such estimated fees. The referee shall be authorized to award costs of the general reference, including, without limitation, attorneys' fees, expert witness fees and fees assessed by the referee to the prevailing party.

(iii) The general reference hearing must commence within three (3) months after appointment of the referee. The referee shall report his or her findings to the Court in the form of a statement of decision within twenty (20) days after the close of testimony, pursuant to CCP Section 643. The Court shall enter judgment based upon the statement of decision which shall be appealable.

(c) *Venue.* The parties agree that venue for any mediation or reference held pursuant to this Paragraph shall be the County of Kings, to avoid any undue advantage that might otherwise accrue to RCWD or Westside from a venue located in their respective home counties.

18. Indemnification. Neither party shall be liable for injury or damage to persons or property caused by the other party, or the other party's employees, agents, or representatives. Each party hereby agrees to defend, indemnify, and hold harmless the other party from any claim, demand, or liability on account of such injury or damage.

19. Severability. If any term or provision of this Agreement shall be held to be invalid or unenforceable in any jurisdiction, for any reason, then it is the intention of the parties that this Agreement shall be construed and enforced as if such invalid or unenforceable term or provision had never been a part hereof without invalidating the remaining terms and provisions hereof, and that all of the terms and provisions of this Agreement shall remain in full force and effect without regard to such invalidity or unenforceability.

20. Waiver. The failure by either party to enforce any of the covenants, terms, or conditions of this Agreement shall not be deemed a waiver of such breach, or any future breach, of such covenants, terms, or conditions, unless such waiver shall have been made in writing.

21. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the, successors, and permitted assignees of the parties.

22. Assignment. Except as provided in this Paragraph, neither party shall assign or transfer its rights under this Agreement. RCWD hereby consents to an assignment of the rights and delegation of the obligations of Westside pursuant to this Agreement to a trust or foundation for estate planning purposes, an affiliate entity, North

Kern or SWID. Upon the prior written consent of Westside, which shall not be unreasonably withheld, RCWD may assign its rights to receive water under this Agreement provided that RCWD shall pay all of the costs of environmental review or third party permitting necessary to accomplish the assignment and pay any additional conveyance costs (including, but not limited to conveyance losses) to any alternate point of delivery.

23. Governing Law. This Agreement shall be governed by, and construed and enforced in accordance with the laws of the State of California.

24. Further Assurances. From time to time and at any time after the execution and delivery hereof, each of the parties, at their own expense, shall execute, acknowledge and deliver any further instruments, documents and other assurances reasonably requested by the other party, and shall take any other action consistent with the terms of this Agreement that may reasonably be requested by another party, to evidence or carry out the intent of this Agreement.

25. Notices. All notices and other communications required under this Agreement shall be in writing and shall be deemed to have been duly given (i) on the date of service, if served personally on the person to whom notice is to be given, (ii) on the date of service if sent by e-mail or telecopier, provided the originally is concurrently sent by first class mail, and provided that notices received by email or telecopier after 5:00 p.m. shall be deemed given on the next business day, (iii) on the next business day after deposit with a recognized overnight delivery service, or (iv) on the third (3rd) day after mailing, if mailed to the party to whom notice is to be given by first class mail, registered or certified, postage-prepaid, and properly addressed as follows:

To Westside: William D. Phillimore, Executive Vice President
Westside Mutual Water Company
33141 E. Lerdo Highway
Bakersfield, California 93308-9767

With a copy to:
Roll International Corporation
Attn: General Counsel
11444 W. Olympic Blvd., 10th Floor
Los Angeles, CA 90064

To RCWD: Philip R. Pierre, President
c/o Christopher L. Campbell, Esq.
Baker, Manock & Jensen
5260 N. Palm Avenue, Suite 421
Fresno, California 93701

or at such other address as any party may, by like notice, designate to the other party in writing.

26. Liquidated Damages. It is not intended that this Agreement contain any provisions providing for liquidated damages. However, in the event that any provision of this Agreement should nevertheless be construed as providing for liquidated damages, then the parties agree that provision is reasonable under the circumstances existing at the time this Agreement is made.

27. References. The Paragraph headings in this Agreement are provided for convenience only, and shall not be considered in the interpretation hereof or thereof. References in this Agreement to Paragraphs refer, unless otherwise specified, to the designated Paragraph of this Agreement. Terms such as "herein," "hereto" and "hereof" refer to this Agreement as a whole.

28. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original instrument, but all of which together shall constitute one and the same instrument.

29. Entire Agreement. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof, and supersedes all prior agreements or understandings with respect thereto. This Agreement may be modified or amended only by written instrument signed by both parties.

30. Time and Computation of Time. Time is of the essence of this Agreement and each and all of its provisions. The parties agree that the time for performance of any action permitted or required under this Agreement shall be computed as if such action were "an act provided by law" within the meaning of California Civil Code §10, which provides: "The time in which any act provided by law to be done is computed by excluding the first day and including the last, unless the last day is a holiday, and then it is also excluded."

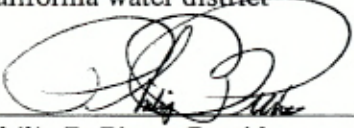
31. Parties in Interest. Nothing in this Agreement, whether expressed or implied, is intended to confer any rights or remedies on any persons other than the parties hereto and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligation or liability of any third person to any party to this Agreement, nor shall any provision give any third person any right of subrogation or action over and against any party to this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective as of the date first above written.

"RCWD"

ROOT CREEK WATER DISTRICT,
a California water district

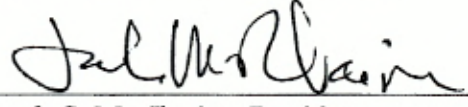
By


Philip R. Pierre, President

"Westside"

WESTSIDE MUTUAL WATER COMPANY LLC,
a California limited liability company

By


Joseph C. MacIlvaine, President

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Exhibit "A"
Maximum Delivery Quantities and Standby Charges

Period after Commencement Date	Maximum Delivery Quantity
Years 1-4	3,500 af/year
Years 5-9	5,000 af/year
Years 10+	7,000 af/year