RECLAMATION

Managing Water in the West

Final Environmental Assessment

Westlands Water District, San Luis Water District and Metropolitan Water District of Southern California 2010-2011 Water Exchange and Transfer Program

EA-10-71

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

Please note: A vertical line in the right margin indicates a change has been made to the text since the Draft Environmental Assessment was circulated for review and comment.

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List of Acronyms and Abbreviations

af	acre-feet
af/yr	acre-feet per year
APE	area of potential effects
Aqueduct	California Aqueduct
CAA	Clean Air Act
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
Delta	Sacramento-San Joaquin Delta
DMC	Delta-Mendota Canal
DWR	Department of Water Resources
EA	Environmental Assessment
ESA	Endangered Species Act
Exchangers	WWD and SLWD, collectively
FWCA	Fish and Wildlife Coordination Act
GHG	green house gases
IRP	Integrated Resources Plan
ITA	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
MWD	Metropolitan Water District of Southern California
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRHP	Nation Register of Historic Places
Reclamation	United States Bureau of Reclamation
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SJV	San Joaquin Valley
SJVAB	San Joaquin Valley Air Board
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLC	San Luis Canal
SLR	San Luis Reservoir
SLWD	San Luis Water District
SOD	south-of-Delta
SWP	State Water Project
SWRCB	State Water Resources Control Board
USFWS	U.S. Fish and Wildlife Service
WWD	Westlands Water District

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Section 1 Purpose and Need for Action

1.1 Background

Three years of drought and dry conditions which continued early into the 2010 rainfall season resulted in relatively low south-of-Delta Central Valley Project (CVP) water allocations. This situation was followed by above normal late season rainfall throughout much of California. Although water supply allocations increased they remained below 50 percent levels for both the State Water Project (SWP) and CVP contractors relying on south-of-Delta exports. The California Department of Water Resources (DWR) and Reclamation will continue to facilitate water transfers and to seek approval from the State Water Resources Control Board as appropriate.

Westlands Water District and San Luis Water District hereafter referred to jointly as the "Exchanging-Districts", each receives their principal water supplies under contract with Reclamation from the CVP. Due to ongoing constraints on their CVP water supplies, the Exchanging-Districts are consistently experiencing water shortages and have pursued various precautionary measures to acquire supplemental water to their CVP supplies. As a result, the Exchanging-Districts acquired supplemental water supplies in 2009 that were carried over for use in 2010. However, due to a late increase in 2010 water allocations the Exchanging-Districts have water stored in San Luis Reservoir that is surplus to their previously planned 2010 water needs. Due to limited storage space in the reservoir, the Exchanging-Districts could be in jeopardy of forfeiting their rescheduled supply.

As a result, the Exchanging-Districts have requested and Reclamation proposes to approve an exchange/transfer project in which the Exchanging-Districts will deliver up to 150,000 af of CVP water to MWD. MWD will return up to 100,000 af (two-thirds of total CVP water) of their SWP Table A water to the Exchanging-Districts next year when the water can be planned for and incorporated into their cropping needs. The remaining 50,000 af of CVP water will be considered and treated as transferred to MWD.

The Draft EA/FONSI was posted for a 15-day public comment period between September 15, 2010 and September 30, 2010. Reclamation received two comments which can be found in Appendix A of this document. One of these comments requested the inclusion of a letter that was sent to the President of the Board of Westlands Water District in the official record. That letter can also be found in Appendix A of this document. Reclamation's response to comments is included in the Consultation and Coordination Section of this document. Changes resulting from the comments are reflected in Section 2.2.1. These and editorial changes since the draft EA/FONSI are delineated by a vertical line in the right margin.

1.2 Purpose and Need

Should SLR fill, various types of water in SLR, based upon priorities established in Reclamation's Rescheduling Guidelines, could be forfeited if not evacuated from the reservoir.

The Exchanging-Districts are concerned that their ability to carry over and store their rescheduled 2009 CVP water and their 2010 allocated CVP water in SLR into the 2011-2012 contract year will be limited. Therefore, the purpose of the proposed project is for the Exchanging-Districts to reduce the risk of forfeiting their 2010 CVP water supplies currently stored in the SLR and preserve the water for future use.

In addition, the secondary purpose is for MWD to replenish their reserves with the portion of water transferred to the district as part of the agreed terms. As a result of drought and dry conditions and increased demand, MWD has over drawn from their storage reserves and reduced them to very low levels. MWD needs additional water supplies to replenish the reserves.

1.3 Scope

The Exchanging-Districts have agreed on the terms of the 2010 delivery of their CVP water to MWD, and the subsequent return of MWD's SWP water in contract year 2011, and have requested Reclamation approval. The Federal Action involves both an "exchange" of water because two-thirds of the water delivered to MWD would be returned to the Exchanging-Districts and a "transfer" of water because one-third of the water would remain with MWD to cover the costs of MWD's conveyance, storage and associated losses. This Environmental Assessment (EA) has been prepared to examine the potential direct, indirect and cumulative impacts to the affected environment associated with the Proposed Action and No Action Alternative.

No new or additional water would be diverted from the Delta as a result of the proposed exchange, nor would the timing of any Delta diversions be impacted in accordance with the commitments described in Section 2.2.2 of this document. Therefore, the only areas in which impacts may occur are the CVP service area boundaries of WWD and SLWD and the SWP service area boundary of MWD (see Figure 1-1). The water associated with the Proposed Action would be conveyed using existing facilities including the CVP and the SWP. The initial delivery would occur during the 2010 contract year, with the completion of return delivery occurring no later than September, 2011 or the expiration of the consolidated place-of-use petition, whichever is earlier; therefore, this will be the study period for evaluating the potential effects.

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

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the National Environmental Policy Act analysis and decision-making process of this EA and include the following as amended, updated, and/or superseded:

- Title XXXIV Central Valley Project Improvement Act (CVPIA), October 30, 1992, Section 3405(a);
- Reclamation Reform Act, October 12, 1982;
- Reclamation's Interim Guidelines for Implementation of Water Transfers under Title XXXIV of Public Law 102-575 (Water Transfer), February 25, 1993; and

- Reclamation and United States Fish and Wildlife Service (USFWS) Regional, Final Administrative Proposal on Water Transfers April 16, 1998.

1.5 Potential Issues

Potentially affected resources and cumulative impacts in the project vicinity include: water resources, land use, biological resources, cultural resources, Indian Trust Assets (ITA), socioeconomic resources, environmental justice, air quality, and global climate.

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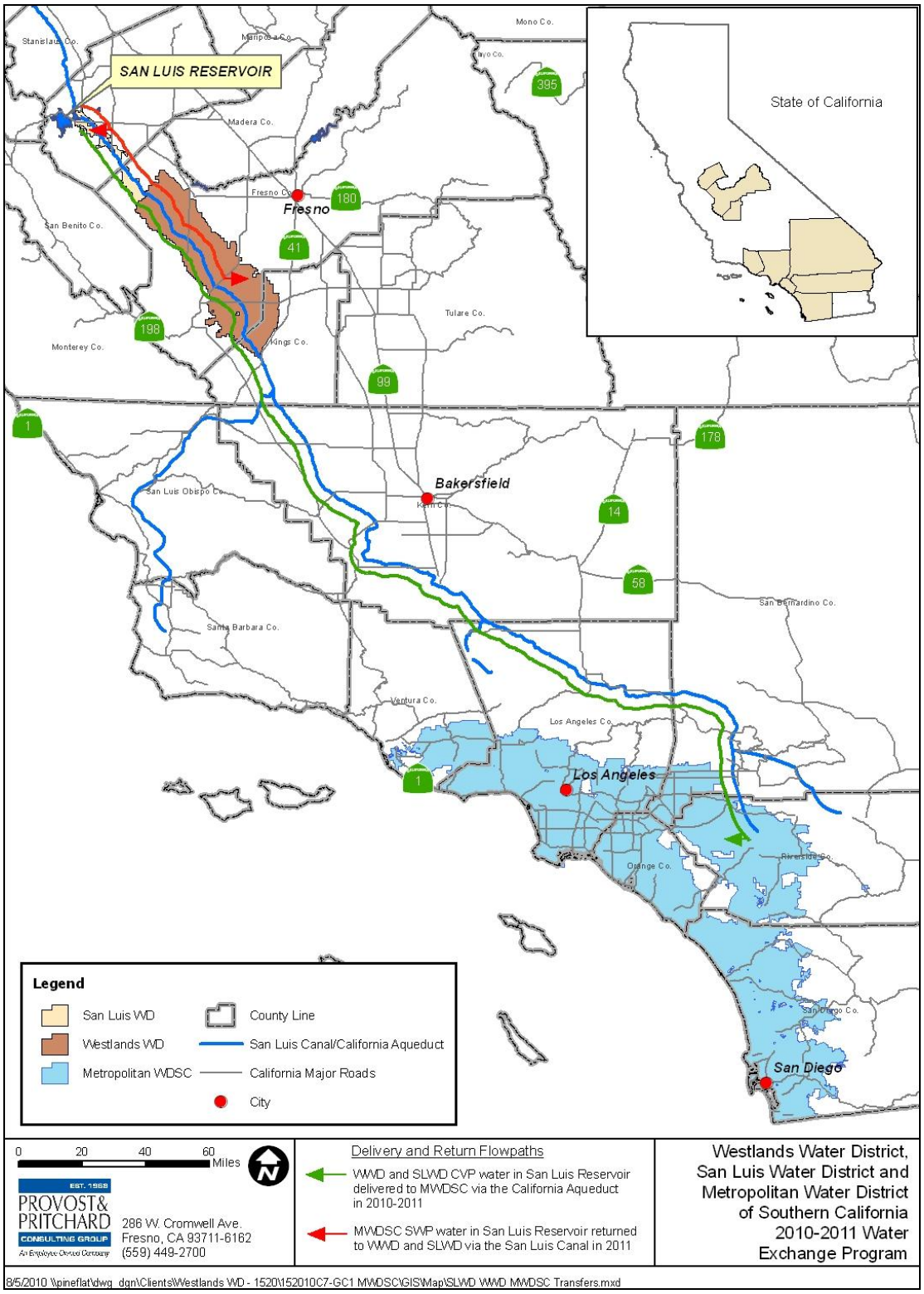
Figure 1-1 Project Location Map



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Section 2 Alternatives Including the Proposed Action

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve the delivery of CVP water from the Exchanging-Districts to MWD and the return of MWD's SWP water in 2011 to the Exchangers. The Exchangers' surplus supplies would remain in SLR storage, and depending on the fall hydrology, could be forfeited. MWD would continue to seek other sources of water to supplement its SWP supplies.

2.2 Proposed Action

Reclamation proposes to approve the exchange/transfer of up to 150,000 af of CVP water between the Exchanging-Districts and MWD. More specifically, Reclamation proposes to approve an exchange in which the Exchanging-Districts would deliver 150,000 af of CVP water to MWD. In exchange, MWD would deliver up to 100,000 af (two-thirds of total CVP water) of SWP Table A water to the Exchanging-Districts and retain up to 50,000 af.

2.2.1 WWD and SLWD Water Delivered to MWD

The 2010 CVP water would be conveyed under Article 55 of MWD's SWP contract with DWR through the California Aqueduct (Aqueduct). Article 55 of the SWP contracts allows for the SWP contractor to convey non-SWP water in the Aqueduct. Under this scenario, MWD would request DWR to convey the Exchangers' CVP water, if capacity exists, in the Aqueduct.

Under the Proposed Action, CVP water would be delivered outside of the CVP's permitted place-of-use if there is a risk of loss of the water from spill at the SLR. For 2009-2010, a petition was successfully filed and an order issued by the SWRCB consolidating the respective places-of-use of (CPOU) SWP and CVP. A similar order of consolidation has been filed for 2010-2011 with the SWRCB. Table 2-1 displays an example of Reclamation's approval of the potential breakdown of water sources which may not be all inclusive. The proposed action is contingent upon the SWRCB approving the proposed CPOU.

Table 2-1 Water Sources	Acre/Feet
Westlands WD 2010 Allocation Water	39,839 af
Westlands WD Transferred In Exchange Contractor Water	45,161 af
Westlands WD Transferred In Fresno ID Water	3,750 af
Westlands Transferred in City of Fresno Water	21,250 af
San Luis WD 2010 Allocation Water	38,125 af
San Luis WD Transferred In Exchange Contractor Water	1,875 af

MWDs final disposition or end use of the water is dependent on hydrological conditions. MWD has a variety of surface and groundwater storage programs available to them including but not limited to the following:

- MWD Service Area for Municipal and Industrial (M&I) direct delivery;
- Southern California surface storage including but not limited to Diamond Valley, Castaic, or Pyramid Reservoirs. Any surface storage would be part of MWDs existing programs in accordance with the associated environmental analysis and documentation;
- Central Valley groundwater storage including Arvin-Edison Water Storage District, Semitropic Water Storage District or Kern-Delta Water District. Any groundwater storage would be part of MWD's existing programs in accordance with the associated environmental analysis and documentation.

Water not directly delivered for M&I use would be stored as groundwater first in order to maintain surface water storage capacity which allows for a faster means of storage. How much water is delivered, where it is delivered to and when it is delivered would depend on fall hydrology, SWP operations and SLR end-of-year storage estimates.

MWD shall deliver the CVP water in accordance with applicable Federal Reclamation laws, policies, and guidelines. Water supplies would be used in compliance with the applicable state water rights permits including conforming to the applicable purpose and place-of-use of the associated water rights permit as may be temporarily amended.

For the two-thirds of CVP water exchanged with Metropolitan, Westlands and San Luis will pay their respective irrigation cost of service rate, CVPIA irrigation Restoration Fund charges, along with the applicable CVP assessments and conveyance pumping charges. For the one-third of CVP water that is transferred to Metropolitan, Westlands and San Luis will pay their respective full cost M&I rate, CVPIA M&I Restoration Fund charges, along with the applicable CVP assessments and conveyance pumping charges. In addition, in accordance with CVPIA Section 3407 (d)(2)(a), Westlands and San Luis will pay Reclamation the current FY11 Restoration M&I Surcharge for 95% of the one-third of CVP water transferred to Metropolitan (i.e. as of October 1, 2010, $38.72 per AF). The FY11 Restoration M&I Surcharge will not be applied to the remaining 5% since it will not be put to M&I use by Metropolitan.

2.2.2 MWD Water Returned to WWD and SLWD

In contract year 2011, MWD would subsequently deliver two-thirds of the amount of water received from the Exchanging-Districts from their SWP Table A supply to the O'Neill Forebay in 2011. One-third of the CVP water would remain with MWD as an approved transfer from the Exchangers.

The 2011 SWP water would be delivered to O'Neill Forebay and conveyed to WWD and SLWD through the San Luis Canal (SLC) or stored in SLR. Under this exchange mechanism, SWP water could be delivered outside of the SWP's permitted place-of-use. As previously noted, Reclamation approval is contingent upon the SWRCB order of consolidation.

The Proposed Action would include the following commitments:

- No native or untilled land (fallow for 3 consecutive years or more) would be cultivated with the water involved in these actions;
- No new construction or modification of existing facilities would be required;
- As noted in Section 2.2.1 and 2.2.2, a successful petition to consolidate the CVP and SWP places-of-use must be approved by the SWRCB in order to deliver the Exchanger's CVP water to MWD and to return MWD's SWP water to the Exchangers;
- All deliveries associated with the proposed exchanges involving CVP and SWP facilities would be required to be obtain the applicable approval/permission so as not to hinder the respective normal operations and maintenance of the facilities;
- All deliveries associated with the proposed exchanges involving CVP and SWP facilities would be required to be scheduled with Reclamation and DWR accordingly, so as not to hinder their respective obligations to deliver water to contractors, wildlife refuges, and due to regulatory requirements;
- All deliveries associated with the proposed exchanges involving CVP and SWP water cannot alter the flow regime of natural waterways or natural water bodies such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to not have a detrimental effect on fish or wildlife, or their habitats; and
- All deliveries associated with the proposed exchanges involving CVP and SWP water must comply with applicable federal, state and local laws, regulations, permits, guidelines and policies.

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Section 3 Affected Environment and Environmental Consequences

3.1 Water Resources

3.1.1 Affected Environment

Westlands Water District
WWD entered into a long-term contract with Reclamation in 1963 for 1,008,000 af per year (af/yr) of CVP water. In a stipulated agreement in 1981, the contractual entitlement to CVP water was increased to 1,150,000 af/yr. In 1999, WWD entered into an assignment contract with Reclamation for 6,260 af/yr of water from Mercy Springs Water District. Subsequently, WWD via its Distribution Districts 1 and 2, entered into an assignment contract with Reclamation for an additional 4,198 af/yr of water from Mercy Springs Water District. WWD has also entered into assignment contracts for 27,000 af/yr from Broadview Water District, 2,500 af/yr from Centinella Water District, and 2,990 af/yr from Widren Water District. Reclamation signed an interim renewal contract with WWD effective from March 1, 2010 thru February 28, 2012. It is anticipated that this interim renewal contract would be renewed prior to its termination in 2012.

The 10-year average allocation of south-of-Delta CVP water supplies available to the Exchanging-Districts between 2001 and 2010 are summarized in Table 3-1 below. The table lists maximum delivery percentages of CVP water on a yearly basis for agriculture purposes, and shows that the 10-year average is 59.4 percent of contract amounts, with the last four years averaging only some 36.5 percent of contract amounts.

Table 3-1 Historic south-of-Delta CVP Allocations (as Percentage Amount of Contract)

Contract Year	Allocation (percent)
2001-2002	49
2002-2003	70
2003-2004	75
2004-2005	70
2005-2006	85
2006-2007	100
2007-2008	50
2008-2009	40
2009-2010	10
2010-2011	45
Average	**59.4**

WWD often participates in water transfer arrangements with other water districts in order to supplement their CVP water supply. In past years, the WWD has actively received transferred water from many contractors within as well as outside the CVP; these transfers are summarized in Table 3-2. The table lists transfers into WWD by year, and shows that from 2006 to 2009, WWD has transferred an average of over 138,000 af into the district to supplement its other supplies.

Table 3-2 Summary of Net Transfers into WWD.						
Water Type	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2006-2009 Average**	**2010-2011**
Central Valley Project	63,654	104,838	120,782	88,445	94,430	128,808
State Water Project	9,000	26,359	15,974	12,523	15,964	3,100
Cross Valley Contractors	-	17,823	14,600	-	8,106	10,150
Other	6,762	-	36,400	37,251	20,103	97,924
Total	**79,416**	**149,020**	**187,756**	**138,219**	**138,603**	**239,982**

The table also shows the effects of the 2010-2011 initial CVP allocation of 5 percent of contract amounts. In anticipation of a fourth consecutive dry year, WWD reacted to this low allocation by transferring over 101,000 af more into the district than the previous four-year average. With the allocation ultimately increased to 45 percent, this additional water has resulted in 2010 contract supplies surplus to WWD's current needs.

San Luis Water District

SLWD entered into a long-term water service contract with Reclamation in 1959, and into a subsequent amendatory contract in 1974, for 125,080 af/yr of CVP water. Recently, due to the expiration of their original long-term contract, SLWD signed an interim renewal contract, effective January 1, 2009, with a term of up to 26 months. It is anticipated that this interim renewal contract would be renewed prior to its termination in 2011.

Like WWD, SLWD also participates in water transfer arrangements with other water districts in order to supplement their CVP water supply. In past years, the district has actively received transferred water from many contractors within as well as outside the CVP; these transfers are summarized in Table 3-3. The table lists transfers into SLWD by year, and shows that from 2006 to 2009, SLWD has transferred an average of over 28,000 af into the district to supplement its other supplies.

Table 3-3 Summary of Net Transfers into SLWD.						
Water Type	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2006-2009 Average**	**2010-2011**
Central Valley Project	9,363	25,748	33,458	20,140	22,177	18,335
State Water Project	-	-	-	-	-	-
Cross Valley Contractors	-	3,500	-	-	875	-
Other	-	-	7,809	13,904	5,428	12,792
Total	**9,363**	**29,248**	**41,267**	**34,044**	**28,481**	**31,127**

As is the case with WWD, when the allocation ultimately increased to 45 percent, this additional water resulted in 2010 contract supplies surplus to SLWD's current year needs.

Metropolitan Water District of Southern California

MWD was created in 1928 under an enabling act of the California State Legislature to provide supplemental water to cities and counties in the Southern California coastal plain. This supplemental water is delivered to MWD's twenty six member agencies through a regional network of canals, pipelines, reservoirs, treatment plants and related facilities.

In the late 1990's, MWD developed an Integrated Resources Plan (IRP) which predicted significant water supply deficits for its service area and also outlined the efforts needed on several fronts to avoid significant water shortages, especially in dry years. This plan called for a

mix of water resources derived from conservation, reclamation, groundwater conjunctive-use and water transfers to ensure adequate system flexibility to protect public safety, particularly during droughts. The IRP specifically cites a need for diversification of MWD's source of supply including accessing transfers, exchanges and groundwater banking programs involving Central Valley water districts.

MWD imports water from the Colorado River via the Colorado River Aqueduct and from Northern California across the Sacramento-San Joaquin Delta (Delta) via the SWP. MWD also has access to reservoirs and groundwater basins that can store as reserves more than twice the water that MWD delivers to its member agencies in a typical year. By keeping the storage reserves maximized, MWD can maintain a hedge against an outage from any of its major water sources. Prior to 2007, favorable weather and environmental conditions allowed MWD to store more than a full year's supply of deliveries in these facilities. The capacity of this storage network is several million acre-feet of water, and this storage allows MWD to be able to ensure a certain level of water supply reliability.

Beginning in 2007, dry weather in the West and restrictions in the Delta have resulted in MWD having to draw from their storage reserves. As a result, these reserves have been reduced to critical levels, and the district is actively seeking additional water supplies to replenish their reserve supply.

The 10-year average allocations of SWP water supplies available to MWD between 2001 and 2010 are summarized in Table 3-4 below. The table lists maximum delivery percentages of SWP water on a yearly basis, and shows that the 10-year average is 63.9 percent of contract amounts, with the last four years averaging 46.3 percent of contract amounts.

Table 3-4 Historic SWP Allocations (as Percentage Amount of Contract)

Contract Year	Allocation (percent)
2001	39
2002	70
2003	90
2004	65
2005	90
2006	100
2007	60
2008	35
2009	40
2010	50
Average	**63.9**

The annual Table A contract amount for MWD is 1,911,500 af, thus the average SWP supply to MWD has been 1,221,449 af. With a 2010 allocation of 50 percent (955,750 af), MWD is 265,699 af below the average supply levels (cumulatively, a shortfall of 1,349,521 af below the typical supply levels over the previous four years).

MWD also participates in water transfer arrangements with other contractors in order to supplement their water supply. In response to the last four below-normal water years, the district has actively received transferred water from many contractors within as well as outside the

SWP—these transfers are summarized in Table 3-5. The table lists transfers into MWD by year, and shows that from 2008 to 2009, MWD has transferred an average of over 70,000 af into the district to supplement its other supplies.

Table 3-5 Summary of Net Transfers into MWD.

	2006	2007	2008	2009	2008-2009 Average	2010
Dought Water Bank	-	-	-	37,912	18,956	-
Yuba River Accord	-	-	26,430	42,915	34,673	60,000
State Water Project	-	-	31,952	-	15,976	91,242
Other	-	-	-	-	-	18,145
Total	**-**	**-**	**58,382**	**80,827**	**69,605**	**169,387**

The table also illustrates the cumulative effects of four consecutive below-normal water years. In an effort to replenish its reserve storage above critical levels, MWD reacted to the reduced water allocations by transferring over 100,000 af more into the District than the previous two-year average. With up to 150,000 af of additional water from the Proposed Action, MWD will further bolster their storage reserves for the coming year.

3.1.2 Environmental Consequences

3.1.2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve the proposed exchange and transfer program. The Exchanging-Districts would retain their CVP supplies and use them as allowed under their respective contracts. Any water remaining undelivered at the end of the water year would be at risk of spill and loss.

Likewise, MWD would continue to seek other sources of water to replenish their deleted reserves stored, increasing pressure on water markets and potentially increasing Delta exports.

3.1.2.2 Proposed Action

The Exchanging-Districts have water available that is surplus to their current year operational water supply needs, and will benefit by managing this surplus into water that can be utilized next year. MWD currently has storage capacity available, and it will benefit by being able to move and store up to an additional 150,000 af of water in their facilities.

Under the Action Alternative, the Exchanging-Districts will convert via the exchange a portion of their 2010-11 water supplies into supplies that can be assured for delivery in 2011-2012. Likewise, MWD will utilize the exchanged CVP supplies in 2010 to replenish depleted reserves.

The CVP and SWP facilities will not be impacted as the Action Alternative must be scheduled and approved by Reclamation and DWR. Additionally, the transfer must be conducted in a manner that will not harm other CVP contractors or other CVP contractual or environmental obligations, or SWP contractors. Therefore, there will be no impact to normal operations of the facilities.

MWD will convey the Exchanging-Districts' CVP water using Article 55 of MWD's SWP contract which provides for the conveyance of non-SWP water in SWP facilities including the California Aqueduct. The conveyance of water under Article 55 is subject to capacity in the

California Aqueduct and meeting all SWP requirements. Water will be delivered for storage in existing facilities and ultimately used for existing Municipal and Industrial (M&I) uses. Article 55 is available in its entirety in Appendix D.

MWD may incorporate Central Valley groundwater storage involving Arvin-Edison Water Storage District, Semitropic Water Storage District or Kern-Delta Water District. The operation of these banking programs was analyzed as a condition of their construction, and any banking operations associated with the Action Alternative will adhere to the same operational regulations.

The exchange will enhance the water resources available to both Exchanging-Districts and MWD without increasing Delta exports resulting in no adverse impact to water resources.

3.2 Land Use

3.2.1 Affected Environment

WWD covers almost 950 square miles of farmland between the California Coast Range and the trough of the San Joaquin Valley (SJV) in western Fresno and Kings Counties. Currently, WWD's boundaries encompass roughly 604,000 acres with an irrigable acreage of 570,000 with over 60 different crops are grown commercially.

SLWD is located on the western side of the SJV near the City of Los Banos, in both Merced and Fresno Counties. Construction of the DMC in the 1950s sparked major development of farmland in the SJV that led to the formation of SLWD in January 1951. SLWD's current size is approximately 66,000 acres. The majority of irrigated acreage is planted in permanent crops.

MWD's service area encompasses about 5,200 square miles in Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. Only 10 percent of the region is urbanized, the remainder is largely uninhabited mountain and desert area. The area is home to approximately 19 million people with the expectation to reach a population of 22 million people by the year 2015.

3.2.2 Environmental Consequences

3.2.2.1 No Action

Under the No Action Alternative, Reclamation would not approve the proposed exchange and transfer program. Because this water is surplus to the current year needs, landowners in the Exchangers' service areas would continue to finish out their 2010 crops, and no land use changes would be anticipated this year. Should the Exchanging-Districts attempt to reschedule the water for use in contract year 2011, there is the possibility that this water would be "spilled" and increased land fallowing could occur in 2011.

No land use changes are anticipated in MWD under the No Action Alternative, as this water was to be used to replenish storage reserves, and not as a new water supply that could facilitate growth.

3.2.2.2 Proposed Action

Under the Proposed Action, there would be no land use changes within the Exchangers' service areas in 2010 as their water supplies would not be reduced below anticipated demands. There could be a positive impact on agricultural land use within the Exchangers' service areas compared to the No Action Alternative due to the ability of the landowners to make planting decisions for 2011 with the knowledge that up to 100,000 af would or could be returned to them in addition to their allocated 2011-2012 CVP supply.

The conveyance of water under Article 55 is subject to capacity in the California Aqueduct and meeting all SWP requirements. Due to the unique and temporary availability of this water, the Action Alternative will not lead to long-term land use changes. The water supplies are surplus to the Exchanging-Districts 2010 needs and do not provide a reliable or consistent water supply that could be considered growth inducing in MWD. Water will be delivered to storage in existing facilities and ultimately used for existing M&I uses. However, because no new long term supply is involved, neither the exchange or transfer portions of the proposal will facilitate growth. These findings indicate that there will be no adverse impacts to land use.

3.3 Biological Resources

3.3.1 Affected Environment

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 2001). The Exchangers' service areas are dominated by agricultural habitat that includes field crops, orchards, and pasture. The vegetation is primarily crops and frequently includes weedy non-native annual and biennial plants.

Urban development resulted in large losses of habitat in the south coast area. Major habitat types in this region include coastal sage scrub, chaparral, oak woodland, riparian habitat and freshwater wetlands, coastal sand dunes, and coastal salt marsh. Other habitat types include grasslands (once dominated by needlegrass) and vernal pools. By 1990, less than 50% of historical cover by chaparral remained, less than 40% cover by oak woodland, and less than five percent by coastal sage scrub, riparian habitat and freshwater wetlands, coastal sand dunes, and coastal salt marsh.

The documents incorporated by reference contain a more detailed description of biological resources in the Exchanging-Districts service areas and boundaries. The Exchanging-Districts have already undergone consultation with the USFWS and National Marine Fisheries Service (NMFS) in regard to their renewal contracts and are implementing measures in the applicable Biological Opinions supporting those contracts.

Threatened, Endangered and Sensitive Species

Reclamation requested an official species list from USFWS via the Sacramento Field Office's website: http://www.fws.gov/sacramento/es/spp_list.htm, on August 2, 2010 for the following United States Geological Survey 7.5 minute quadrangles covering WWD (Document Number 100802041949): Avenal, Broadview Farms, Burrel, Calflax, Cantua Creek, Chaney Ranch,

Chounet Ranch, Coalinga, Coit Ranch, Domengine Ranch, Firebaugh, Five Points, Guijarral Hills, Hammonds Ranch, Harris Ranch, Helm, Huron, Kettleman City, La Cima, Lemoore, Levis, Lillis Ranch, Monocline Ridge, San Joaquin, Stratford, Tranquillity, Tres Pecos Farms, Tumey Hills, Vanguard, Westhaven and Westside (Table 3-6).

In addition, the database was accessed and summarized in Table 3-6 for the following quadrangles covering SLWD (Document Number 100802040356): Charleston School, Chounet Ranch, Dos Palos, Hammonds Ranch, Laguna Seca Ranch, Los Banos, Los Banos Valley, Ortigalita Peak NW, San Luis Dam and Volta.

Table 3-6 Potential Federal Status Species WWD and SLWD

Common Name	Species Name	Fed Status[1]	ESA[2]	Summary
Invertebrates				
longhorn fairy shrimp	*Branchinecta longiantenna*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
vernal pool fairy shrimp	*Branchinecta lynchi*	T	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
vernal pool tadpole shrimp	*Lepidurus packardi*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Fish				
delta smelt	*Hypomesus transpacificus*	T	NE	No changes in Delta pumping.
Central Valley steelhead	*Oncorhynchus mykiss*	T	NE	No effect on natural stream systems.
Amphibians				
California tiger salamander, central population	*Ambystoma californiense*	T	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Critical habitat, CA tiger salamander, central population	*Ambystoma californiense*	X	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
California red-legged frog	*Rana draytonii*	T	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Critical habitat, CA red-legged frog	*Rana draytonii*	X	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Reptiles				
blunt-nosed leopard lizard	*Gambelia (=Crotaphytus) sila*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
giant garter snake	*Thamnophis gigas*	T	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Birds				
California condor	*Gymnogyps californianus*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.

Table 3-6 (Continued) Potential Federal Status Species WWD and SLWD				
Mammals				
giant kangaroo rat	*Dipodomys ingens*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Fresno kangaroo rat	*Dipodomys nitratoides exilis*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Critical habitat, Fresno kangaroo rat	*Dipodomys nitratoides exilis*	X	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Tipton kangaroo rat	*Dipodomys nitratoides nitratoides*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
San Joaquin kit fox	*Vulpes macrotis mutica*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Plants				
California jewelflower	*Caulanthus californicus*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Palmate-bracted bird's-beak	*Cordylanthus palmatus*	E	NE	No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
San Joaquin woolly-threads	*Monolopia congdonii (=Lembertia congdonii)*	E	NE	No land use changes would occur as a result of this action. No conversion of habitat, and no new facilities.

[1]Listed as Federally Endangered (E), Threatened (T) or Critical Habitat designated (X)
[2]No Effect Determination

While quadrangle level detail was not readily available for the MWD service area, the websites for the Carlsbad http://www.fws.gov/carlsbad/TEspecies/CFWO_Species_List.htm and the Ventura http://www.fws.gov/ventura/endangered/consultations/ Fish & Wildlife offices were accessed on August 6, 2010 for the following counties and summarized in Table 3-7: Los Angeles, Orange, San Bernardino, Riverside, San Diego and Ventura. The database information is also included in Appendix A.

Table 3-7 Potential Federal Status Species MWD							
		LA	O	SB	Riv	SD	V
Amphibian							
arroyo toad	*Bufo californicus*	E	E	E	E	E	E
California red-legged frog	*Rana aurora draytonii*	T	T	T	T	T	T
desert slender salamander	*Batrachoseps aridus*				E		
mountain yellow-legged frog	*Rana muscosa* (So Cal DPS)	E		E	E		
Bird							
brown pelican	*Pelicanus occidentalis*	E	E	E	E	E	E
California condor	*Gymnogyps californianus*	E		E		E	E
California gnatcatcher	*Polioptila californica*	T	T	T	T	T	T
California least tern	*Sterna antillarum browni*	E	E		E	E	E
least Bell's vireo	*Vireo bellii pusillus*	E	E	E	E	E	E

Table 3-7 (Continued) Potential Federal Status Species MWD							
		LA	O	SB	Riv	SD	V
light-footed clapper rail	*Rallus longirostris levipes*	E	E			E	E
marbled murrelet	*Brachyramphus marmoratus*	T				T	
San Clemente loggerhead shrike	*Lanius ludovicianus mearnsi*	E					
San Clemente sage sparrow	*Amphispiza belli clementeae*	E					
short-tailed albatross	*Phoebastria albatrus*	E	E			E	
Southwestern willow flycatcher	*Empidonax trallii extimus*	E	E	E	E	E	E
Western snowy plover	*Charadrius alexandrinus nivosus*	T	T			T	T
yellow-billed cuckoo	*Coccyzus americanus*	C	C	C	C	C	C
Yuma clapper rail	*Rallus longirostris yumanensis*			E	E		
Fish							
bonytail chub	*Gila elegans*			E	E		
Colorado squawfish	*Ptychocheilus lucius*			E	E		E
desert pupfish	*Cyprinodon macularius*				E	E	E
Mohave tui chub	*Gila bicolor mohavensis*			E			
razorback sucker	*Xyrauchen texanus*			E	E		
Santa Ana sucker	*Catostomus santaanae*	T	T	T	T		
Southern California steelhead	*Oncorhynchus mykiss*	E	E			E	E
tidewater goby	*Eucyclogobius newberryi*	E	E			E	E
unarmored threespine stickleback	*Gasterosteus aculeatus williamsoni*	E		E		E	E
Invertebrate							
conservancy fairy shrimp	*Branchinecta conservatio*						E
Delhi Sands flower-loving fly	*Rhaphiomidas terminatus abdominalis*			E	E		
El Segundo blue butterfly	*Euphilotes battoides allyni*	E					
Laguna Mountains skipper	*Pyrgus ruralis lagunae*					E	
Palos Verdes blue butterfly	*Glaucopsyche lygdamus palosverdesensis*	E					
Quino checkerspot butterfly	*Euphydryas editha quino*		E	E	E	E	
Riverside fairy shrimp	*Streptocephalus woottoni*	E	E		E	E	E
San Diego fairy shrimp	*Branchinecta sandiegonensis*		E			E	
vernal pool fairy shrimp	*Branchinecta lynchi*				T		T
Mammal							
San Bernardino kangaroo rat	*Dipodomys merriami parvus*	E		E	E		
Stephens' kangaroo rat	*Dipodomys stephensi*			E	E	E	
Peninsular bighorn sheep	*Ovis canadensis nelsoni*				E	E	E
Pacific pocket mouse	*Perognathus longimembris pacificus*	E	E			E	
Palm Springs ground squirrel	*Spermophilus tereticaudus chlorus*				C		
Santa Catalina Island fox	*Urocyon littoralis catalinae*	E					
Southern sea otter	*Enhydra lutris nereis*	T	T			T	T

Table 3-7 (Continued) Potential Federal Status Species MWD							
		LA	O	SB	Riv	SD	V
Plant							
ash-gray Indian paintbrush	*Castilleja cinerea*			T			
Bear Valley sandwort	*Arenaria ursina*			T			
big-leaved crown beard	*Verbesina dissita*		T				
Brand's phacelia	*Phacelia stellaris*	C			C	C	
Braunton's milk-vetch	*Astragalus brauntonii*	E	E		E		E
California orcutt grass	*Orcuttia californica*	E			E	E	E
California taraxacum	*Taraxacum californicum*			E			
Catalina Island mountain-mahogany	*Cercocarpus traskiae*	E					
Coachella Valley milk-vetch	*Astragalus lentiginosus* var. *coachellae*				E		
coastal dunes milk-vetch	*Astragalus tener* var. *titi*	E				E	
Conejo dudleya	*Dudleya abramsii* ssp. *parva*	T					T
Cushenberry milk-vetch	*Astragalus albens*			E			
Cushenbury buckwheat	*Eriogonum ovalifolium* var. *vineum*			E			
Cushenbury oxytheca	*Oxytheca parishii var. goodmaniana*			E			
Del Mar manzanita	*Arctostaphylos glandulosa* subsp. *crassifolia*					E	
Encinitas baccharis	*Baccharis vanessae*					T	
Gambel's watercress	*Rorippa gambellii*	E	E	E		E	
Hidden Lake bluecurls	*Trichostema austromontanum subsp.compactum*				T		
Island rush-rose	*Helianthemum greenei*	T					
Laguna Beach live-forever	*Dudleya stolonifera*		T				
Lane Mountain milk-vetch	*Astragalus jaegerianus*			E			
Lyon's pentachaeta	*Pentachaeta lyonii*	E					E
Marcescent dudleya	*Dudleya cymosa ssp. marcescens*	T					T
marsh sandwort	*Arenaria paludicola*	E		E			
Mexican flannelbush	*Fremontodendron mexicanum*					E	
Munz's onion	*Allium munzii*				E		
Nevin's barberry	*Berberis nevinii*	E		E	E	E	
Orcutt's hazardia	*Hazardia orcuttii*					C	
Orcutt's spineflower	*Chorizanthe orcuttiana*					E	
Otay mesa mint	*Pogogyne nudiuscula*					E	
Otay tarplant	*Deinandra (Hemizonia) conjugens [1]*					T	
Parish's daisy	*Erigeron parishii*			T	T		
pedate checker-mallow	*Sidalcea pedata*			E			

Table 3-7 (Continued) Potential Federal Status Species MWD							
		LA	O	SB	Riv	SD	V
salt marsh bird's beak	*Chloropyron maritimum* (*Cordylanthus maritimus*) var. *maritimum* (subsp.*maritimus*) *[1]*	E	E			E	E
San Bernardino bluegrass	*Poa atropurpurea*			E		E	
San Bernardino Mountains bladderpod	*Physaria* (*Lesquerella*) *kingii* subsp. *bernardina [1]*			E			
San Clemente Island bush mallow	*Malacothamnus clementinus*	E					
San Clemente Island Indian paintbrush	*Castilleja grisea*	E					
San Clemente Island larkspur	*Delphinium variegatum* subsp. *kinkiense*	E					
San Clemente Island lotus	*Acmispon* (*Lotus*) *dendroideus* var. *traskiae*	E					
San Clemente Island woodland star	*Lithophragma maximum*	E					
San Diego ambrosia	*Ambrosia pumila*				E	E	
San Diego button celery	*Eryngium aristulatum* var. *parishii*				E	E	
San Diego mesa mint	*Pogogyne abramsii*					E	
San Diego thornmint	*Acanthomintha ilicifolia*					T	
San Fernando Valley spineflower	*Chorizanthe parryi* var. *fernandina*	C	C	C			C
San Jacinto Valley crownscale	*Atriplex coronata* var. *notatior*				E		
Santa Ana River woolly-star	*Eriastrum densifolium* subsp. *sanctorum*		E	E	E		
Santa Cruz Island rock-cress	*Sibara filifola*	E					
Santa Monica Mountains live-forever	*Dudleya cymosa* ssp. *ovatifolia*	T	T				T
Slender-Horned spineflower	*Dodecahema* (=*Centrostegia*) *leptoceras*	E		E	E		E
slender-petaled mustard	*Thelypodium stenopetalum*			E			
Southern mountain wild buckwheat	*Eriogonum kennedyi* var. *austromontanum*			T			
Spreading navarretia	*Navarretia fossalis*	T			T	T	
thread-leaved brodiaea	*Brodiaea filifolia*	T	T	T	T	T	
triple-ribbed milk-vetch	*Astragalus tricarinatus*			E	E		
Vail Lake ceanothus	*Ceanothus ophiochilus*				T		
Ventura Marsh milk-vetch	*Astragalus pycnostachyus var. lanosissimus*	E	E				E
Verity's dudleya	*Dudleya verityi*	T					T
willowy monardella	*Monardella linoides subsp. viminea*					E	
Reptile							
blunt-nosed leopard lizard	*Gambelia silus*						E
Coachella Valley fringe-toed lizard	*Uma inornata*				T		
desert tortoise	*Gopherus agassizzii*			T	T		
island night lizard	*Xantusia* (=*Klauberina*) *riversiana*	T					T

Status: E = Federally endangered; T = Federally threatened; C = Federal candidate for listing; P = proposed; PDM=subject to post delisting monitoring
XN: Experimental population; * southern sea otter first listed as threatened Jan. 14, 1977 42:2968
CH = Critical Habitat: p = Proposed; f = Designated; np=Not Prudent; pr = Proposed Revised; fr = Final Revised; W* = proposal withdrawn
RP = Recovery Plan: F= Final, D= Draft
County Reported: LA = Los Angeles; O = Orange; SB = San Bernardino; Riv = Riverside; SD = San Diego

3.3.2 Environmental Consequences

3.3.2.1 No Action

Under the No Action Alternative, it is anticipated that, in response to not having up to 100,000 af of supplemental water available in contract year 2011 and a potentially low initial allocation, there would be continued, and in some cases, additional land fallowing within the Exchangers' service areas in 2011. The effects of continued land fallowing on listed species is anticipated to be negligible, as most of the habitat types required by species protected by the Endangered Species Act (ESA) do not occur in the action area. As this water was only to be used to bolster storage reserves, no biological resources are anticipated to be affected.

3.3.2.2 Proposed Action

The Action Alternative will not involve the conversion of any land fallowed and untilled for three or more consecutive years or any new development. While the Action Alternative could reduce the potential for fallowed acreage, it will not substantially change the land use patterns of the cultivated or fallowed fields that may have some value to listed species or to birds protected by the Migratory Bird Treaty Act. Since no natural stream courses will be utilized as part of the Action Alternative, there will be no effects on listed fish species. No changes in Delta exports or operations will occur, so no impacts on species utilizing the Delta will occur.

The aspect of the Action Alternative that is of possible concern, environmentally, is the unbalanced portion of the exchange that results in a transfer. However, the net amount of water that will remain in MWD can only be utilized to replenish depleted storage reserves until its end-use for existing M&I uses because it is a one-time supply that cannot facilitate long-term use such as development. The 150,000 af of water that will be involved in the exchanges are supplies already allocated to the Exchanging-Districts and no additional water supplies will be diverted from rivers or lakes. No new construction or additional Federal points of diversion will be required. However, slight changes in timing and locations of when and where water is diverted and stored south of the Delta could occur, and there may be small changes[1] in ground or surface water levels within MWD. These reservoir level changes will be within normal operating levels, as the reservoirs are below capacity due to drought conditions. These changes will not impact any federally listed or proposed species or critical habitat.

The relatively small amounts of water associated with the Action Alternative and the requirement that no native lands be converted without consultation with U.S. Fish and Wildlife Service will preclude impacts to wildlife, including federally listed species. Habitat for listed species is mostly absent in the vast agricultural areas where small declines in fallowed ground may occur, and listed species and habitat suitability will not be affected by these small short term changes in the vast agricultural area. Other Federally protected species utilize agricultural lands, which would not be subject to a land use change as a result of the Action Alternative. These findings indicate that there will be no adverse impacts to biological resources.

[1] The combined storage of Pyramid, Castaic, Silverwood, Perris and Diamond Valley reservoirs is nearly 1.5 million acre-feet as compared to the 50,000 acre-feet involved in the transfer. MWD reports a total storage capacity (groundwater and surface water) of 4.7 million acre-feet.

3.4 Cultural Resources

Cultural resources 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 will 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 will have on historic properties, and consult with the State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

3.4.1 Affected Environment

Resources within the scope of this project include historic features of the built environment primarily those of the CVP and SWP. Components of the CVP have been determined eligible for inclusion in the NRHP and have been prepared for inclusion in the NRHP through a multiple property nomination. The CVP multiple property nomination is currently being reviewed for submission to the Keeper of the NRHP for inclusion in the NRHP.

The DMC is a component of the CVP that is currently being evaluated for the NRHP. The DMC, completed in 1951, carries water southeasterly from the Tracy Pumping Plant along the west side of the San Joaquin Valley for irrigation supply, for use in the San Luis Unit, and to replace San Joaquin River water stored at Friant Dam and used in the Friant-Kern and Madera systems.

The San Luis Unit is a joint Federal and State project. The Federal components of the San Luis Unit include SLR, O'Neill Pumping Plant and Intake Canal, Coalinga Canal, Pleasant Valley Pumping Plant, and the San Luis Drain. The features of the San Luis Unit are not considered contributing features of the CVP's NRHP status. Additionally, the features of the San Luis Unit were all completed in the late 1960's and are not yet eligible for inclusion in the NRHP.

3.4.2 Environmental Consequences

3.4.2.1 No Action

Under the No Action Alternative, Reclamation would not approve the water exchange and transfer program and there would be no Federal undertaking. Conditions related to cultural

resources would remain the same as existing conditions. There would be no impacts to cultural resources under the No Action alternative.

3.4.2.2 Proposed Action

The exchange and transfer of CVP water as described in the Proposed Action is an undertaking as described in Section 301(7) of the NHPA, initiating Section 106 of the NHPA and its implementing regulations at 36 CFR Part 800. All exchanges and transfers would occur through existing facilities and water would be provided within existing service area boundaries to areas that currently use CVP and SWP water. The Proposed Action would not result in modification of any existing facilities, construction of new facilities, change in land use, or growth. Since Reclamation determined that the Proposed Action is the type of activity that has no potential to affect to historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1), no cultural resources would be impacted as a result of implementing the Proposed Action (see Appendix C for cultural resources determination).

3.5 Indian Trust Assets

3.5.1 Affected Environment

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 cannot 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.

3.5.2 Environmental Consequences

3.5.2.1 No Action

The No Action Alternative is similar to the Proposed Action. Historical diversions and water deliveries would continue as in the past. Therefore no impacts to ITA would occur.

3.5.2.2 Proposed Action

Approval of the exchange and transfer program between the Exchanging-Districts and MWD would not involve any construction on lands or impact water, hunting, and fishing rights associated with the nearest Public Domain Allotment. Therefore, the Proposed Action does not have a potential to affect ITA (determination can be found in Appendix C).

3.6 Socioeconomic Resources

3.6.1 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 economical conditions, water transfers and exchanges could be prompted. The economic variances may include fluctuating agricultural prices, insect infestation, changing hydrologic conditions, increased fuel and power costs.

3.6.2 Environmental Consequences

3.6.2.1 No Action

Under the No Action Alternative, economic conditions in the vicinity of the Exchanging-Districts could worsen. As agricultural land continues to be taken out of production as a result of the uncertainty associated with low initial allocations and unknown supplemental supplies, there would be a decreasing need for farm labor, and farm equipment and supplies. The economic impacts of reduced agricultural production could adversely impact the affected environment.

3.6.2.2 Proposed Action

The Proposed Action will allow the Exchanging-Districts to beneficially use water that is surplus to their current year operational needs into a supply that could be utilized next year to supplement CVP allocations. This will help maintain the stability of the agricultural market and economic vitality for the San Joaquin Valley to a certain degree. The exchange and transfer is a temporary action and will provide short-term beneficial impacts to socioeconomic conditions in the affected region.

Likewise, MWD currently has available storage capacity, and it will benefit by being able to move and store up to an additional 150,000 af of water in these facilities which will replenish their reserves with the portion of water left in-district as part of the agreed terms. MWD has had to draw from their storage reserves because of the drought and dry conditions, which has reduced these reserves to at or near critical levels.

3.7 Environmental Justice

3.7.1 Affected Environment

The February 11, 1994, Executive Order 12898 requires federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations. 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 in the Recipient Districts, which provides employment opportunities for these minority and/or disadvantaged populations.

3.7.2 Environmental Consequences

3.7.2.1 No Action

The No Action Alternative could result in harm to minority or disadvantaged populations within the vicinity of the Exchanging-Districts service areas because lands could be temporarily or perennially taken out of agricultural production, resulting in reduced need for farm labor.

3.7.2.2 Proposed Action

The Proposed Action could reduce dislocation and promote continued employment within the affected environment. The Proposed Action would not disproportionately impact economically disadvantaged or minority populations. Employment opportunities for low-income wage earners and minority population groups would be within historical conditions.

3.8 Air Quality

3.8.1 Affected Environment

The Proposed Action area is located within both the San Joaquin Valley Air Basin (SJVAB) and the South Coast Air Basin (SCAB). Both air basins are federal and state designated air basins and the SJVAB is under the jurisdiction of the San Joaquin Valley Air Pollution Control District while the SCAB is under the jurisdiction of the South Coast Air Quality Management District. Both jurisdictions adopt and enforce rules and regulations to achieve State and federal ambient air quality standards and enforce applicable State and federal laws.

3.8.2 Environmental Consequences

3.8.2.1 No Action

Under the No Action Alternative, there would be no impacts to air quality since conditions would remain the same as the existing conditions.

3.8.2.2 Proposed Action

Under the Proposed Action, movement of water between Exchanging-Districts and MWD would be done via gravity flow and/or pumped using electric motors which have no emissions. The air quality emissions from electrical power have been considered in environmental documentation for the generating power plant. There are no emissions from electrical motors and therefore a conformity analysis is not required under the CAA and there would be no impact on air quality.

3.9 Global Climate

3.9.1 Affected Environment

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, 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.

Human activity has substantially added to the amount of carbon dioxide in the atmosphere, primarily through burning of fossil fuels. This action enhances the natural greenhouse effect, and is likely contributing to an increase in global average temperature and related climate changes.

The magnitude and significance of anthropogenic effects is being examined and debated and there is uncertainty associated with the science of climate change (EPA 2009).

More than 20 million Californians rely on the SWP and CVP. 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).

California Assembly Bill 32, the Global Warming Solutions Act of 2006, mandates the reduction of GHG emissions in California to 1990 levels by the year 2020. Currently there are no established significance thresholds for GHG in the SJVAB or in California.

3.9.2 Environmental Consequences

3.9.2.1 No Action Alternative

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

3.9.2.2 Proposed Action

The emissions from the generating power plant to provide the electricity needed to convey up to 50,000 af of water are small when compared to the overall water supplies and power used each year to move water where it is needed. GHG generated by the project is expected to be small compared to other sources contributing to potential climate change, and 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 emissions and a net increase in GHG emissions among the pool of GHG would not be detectable.

3.10 Cumulative Impacts

The Proposed Action was found to have no adverse impacts on water, biological, and cultural resources, ITA and environmental justice. The Proposed Action is a one-time, temporary action, and when added to other actions do not contribute to cumulative adverse impacts to existing environmental conditions. Slight beneficial impacts to land use and socioeconomics would be short-term and within historical variations, and would not contribute to cumulative impacts.

Coordination to schedule the deliveries for all these actions would be required with the appropriate overseeing agency to ensure that the normal operations of the facilities involved would not be hindered. Overall, there would be no cumulative impacts from the Proposed Action.

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Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft EA from September 15, 2010 through September 30, 2010. Two comments were received addressing the Proposed Action:

1. A comment addressing the EA/FONSI came from the Natural Resources Defense Council (NRDC). The entire NRDC comment can be found in Appendix A but their comment can be summarized here by the following quote from their comment: " The EA and FONSI should be revised to make clear that the transfer portion of this Project (all water that is not returned to Westlands Water District, including all losses, which would amount to 50,000 acre feet if the full 150,000 acre feet of the Project is implemented), will be subject to the fee required by section 3407(d)(2)(A) of the CVPIA, and all other applicable fees under the CVPIA and other laws".

   The following is Reclamation's response to the NRDC comment: For the two-thirds of CVP water exchanged with Metropolitan, Westlands and San Luis will pay their respective irrigation cost of service rate, CVPIA irrigation Restoration Fund charges, along with the applicable CVP assessments and conveyance pumping charges. For the one-third of CVP water that is transferred to Metropolitan, Westlands and San Luis will pay their respective full cost M&I rate, CVPIA M&I Restoration Fund charges, along with the applicable CVP assessments and conveyance pumping charges. In addition, in accordance with CVPIA Section 3407 (d)(2)(a), Westlands and San Luis will pay Reclamation the current FY11 Restoration M&I Surcharge for 95% of the one-third of CVP water transferred to Metropolitan (i.e. as of October 1, 2010, $38.72 per AF). The FY11 Restoration M&I Surcharge will not be applied to the remaining 5% since it will not be put to M&I use by Metropolitan.

   Section 2.2.1 has been updated to reflect the NRDC comment.

2. Reclamation received a comment from George Miller, Member of Congress that included a letter to Jean Sagouspe, President of the Westlands Water District Board from the following members of Congress: George Miller, John Garamendi, Grace Napolitano and Mike Thompson. The entire letter from Congress can be found in Appendix A. Reclamation will not be commenting on the letter to Jean Sagouspe and the only other item in the comment from Representative Miller involved the application of funds required by section 3407(d)(2)(A) of the CVPIA addressed in comment 1 above.

4.2 Applicable Laws

4.2.1 Fish and Wildlife Coordination Act (16 USC § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The Proposed Action does not involve federal water development projects; therefore, the FWCA does not apply.

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

Section 7 of the ESA requires Federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

The Proposed Action would not change the land use patterns of the cultivated or fallowed fields that do have some value to listed species. In addition, the requirement that no native lands be converted without consultation with the USFWS, and the stringent requirements for transfers and exchanges under applicable laws would prevent any adverse impact to any federally listed species or any critical habitat. Therefore, consultation with the USFWS or NMFS is not required. The Sacramento, Ventura, and Carlsbad Field Offices will be sent a copy of this EA and associated FONSI when they are released for public review. National Historic Preservation Act (16 USC § 470 et seq.)

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

The NHPA of 1966, as amended (16 USC 470 *et seq*), requires that federal agencies give the Advisory Council on Historic Preservation an opportunity to comment on the effects of an undertaking on historic properties, properties that are eligible for inclusion in the NRHP. The 36 CFR Part 800 regulations implement Section 106 of the NHPA.

Section 106 of the NHPA requires federal agencies to consider the effects of federal undertakings on historic properties, properties determined eligible for inclusion in the NRHP. Compliance with Section 106 follows a series of steps that are designed to identify interested parties, determine the APE, conduct cultural resource inventories, determine if historic properties are present within the APE, and assess effects on any identified historic properties. The activities associated with the Proposed Action would include no new ground disturbance, no change in land use, and the use of existing conveyance features to move and store water. Reclamation has determined that there would be no potential to affect historic properties by the Proposed Action pursuant to 36 CFR 800.3(a)(1), and consultation with the SHPO is not required (see Appendix B for determination).

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

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the MBTA provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the 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 birds protected by the MBTA; therefore, the Proposed Action would have no effect on birds protected by the MBTA.

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Section 5 List of Preparers and Reviewers

Rena Ballew, Repayment Specialist, South-Central California Area Office

Rick Besecker, Provost & Pritchard Consulting Group

BranDee Bruce, Archaeologist, MP-Region

Valerie Curley, Supervisory Repayment Specialist, South-Central California Area Office

Michael Inthavong, Natural Resources Specialist, South-Central California Area Office

Jennifer Lewis, Ph.D., Wildlife Biologist, South-Central California Area Office

Shauna McDonald, Wildlife Biologist, South Central California Area Office

Charles Siek, Supervisory Natural Resources Specialist, South-Central California Area Office

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Section 6 References

Anderson, J., F. Chung, M. Anderson, L. Brekke, D. Easton, M. Ejetal, R. Peterson, and R. Snyder. 2008. Progress on Incorporating Climate Change into Management of California's Water Resources. Climatic Change (2008) 87 (Suppl 1):S91–S108 DOI 10.1007/s10584-007-9353-1.

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Appendix A Comments

NATURAL RESOURCES DEFENSE COUNCIL

September 30, 2010

Chuck Siek
Supervisory Natural Resource Specialist
US Bureau of Reclamation
1243 "N" Street
Fresno, CA. 93721

Sent Via Email to: csiek@usbr.gov

RE: Comments on draft EA and FONSI regarding proposed water transfer and exchange between Westlands Water District and Metropolitan Water District

Dear Mr. Siek:

On behalf of the Natural Resources Defense Council, which has 250,000 members and activists in California, I am writing to comment on the draft EA and FONSI for the proposed transfer and exchange of CVP water between the Westlands Water District and Metropolitan Water District ("Project"). The draft EA and FONSI for this project should be modified to explain how the project will comply with section 3407(d)(2)(A) of the Central Valley Project Improvement Act ("CVPIA").

In the notice announcing this proposed transfer and exchange, Westlands Water District suggested that the proposed project would not be subject to CVPIA fees. *See* Westlands Water District, Notice 309, July 8, 2010.[1] However, Section 3407(d)(2)(A) of the CVPIA requires that,

> … the Secretary shall impose an additional annual charge of $25.00 per acre-foot (October 1992 price levels) for Central Valley Project water sold or transferred to any State or local agency or other entity which has not previously been a Central Valley Project customer and which contracts with the Secretary or any other individual or district receiving Central Valley Project water to purchase or otherwise transfer any such water for its own use for municipal and industrial purposes, to be deposited in the Restoration Fund;

Id. We now understand that the Bureau of Reclamation intends to apply the requisite fee, *see* Attachment 1, which, indexed for inflation, should be approximately $39 per acre foot in 2010 dollars.

The EA and FONSI should be revised to make clear that the transfer portion of this Project (all water that is not returned to Westlands Water District, including all losses, which would amount

[1] This notice is available online at: http://www.westlandswater.org/short/201007/notice309.pdf?title=07/08/2010.

www.nrdc.org
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San Francisco, CA 94104
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NEW YORK · WASHINGTON, DC · LOS ANGELES · CHICAGO · BEIJING

to 50,000 acre feet if the full 150,000 acre feet of the Project is implemented), will be subject to the fee required by section 3407(d)(2)(A) of the CVPIA, and all other applicable fees under the CVPIA and other laws.

Thank you for consideration of our view. We greatly appreciate the Bureau of Reclamation's compliance with the CVPIA regarding this proposed project.

Sincerely,

Doug Obegi
Staff Attorney

Encl. Email from Charles Siek to Doug Obegi dated September 17, 2010 (Attachment 1).

cc: The Honorable George Miller

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7TH DISTRICT, CALIFORNIA
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DANIEL WEISS
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COMMITTEE ON EDUCATION AND LABOR
CHAIRMAN
COMMITTEE ON NATURAL RESOURCES
DEMOCRATIC POLICY COMMITTEE
CHAIRMAN

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September 30, 2010

Chuck Siek
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Dear Mr. Siek:

As the chief sponsor of both the 1982 Reclamation Reform Act and the Central Valley Project Improvement Act of 1992 (CVPIA), and the chairman of the House Natural Resources Committee at the time of the latter's enactment, I am submitting the following comments on the Draft Finding of No Significant Impact and Draft EA for Westlands Water District, San Luis Water District and the Metropolitan Water District of Southern California 2010-2011 Water Exchange and Transfer Program, pursuant to the Bureau's September 15 notice.

Attached for inclusion in the official record is a letter to the president of the board of the Westlands Water District, outlining a series of questions raised by this proposed transfer and exchange. I was joined in sending the letter by Rep. Grace Napolitano, chair of the Subcommittee on Water and Power, and Reps. John Garamendi and Mike Thompson, both of whom represent congressional districts affected by excessive diversions from the Bay-Delta.

As noted in the letter, although water transfers and exchanges are often of significant benefit to water managers, this proposal raises numerous questions that must be answered before it is approved by the relevant federal agencies, including your own.

In addition, as you know, the CVPIA requires the Department of the Interior to impose a Restoration Fund charge of $25.00 per acre-foot, indexed to inflation, for any Central Valley Project water that is transferred to a non-Central Valley Project agency. The Westlands Water District has proposed that this transfer be structured to avoid the required Restoration Fund charge, but it would be a serious mistake for Reclamation to accept this proposal or to ignore the explicit congressional mandate to index the charge to inflation. These funds are owed to the taxpayers, and Reclamation must fully enforce the law on their behalf.

Thank you for your attention to this matter.

Sincerely,

George Miller

GEORGE MILLER
Member of Congress

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Congress of the United States
Washington, DC 20515

September 15, 2010

Jean Sagouspe
President of the Board
Westlands Water District
3130 N. Fresno Street
Fresno, California 93703

Dear Mr. Sagouspe:

We read with great interest the notice that the Westlands Water District has more water at San Luis Reservoir than it can use this year, and is contemplating an exchange with the Metropolitan Water District of Southern California. While water transfers can be an important tool for both agricultural and urban users, this announcement of "extra" federal water delivered to Westlands will come as a surprise to anyone who has seen Westlands' political advocacy, press releases, and court filings over the course of this year.

Following Westlands' claims of significant hardship, many stakeholders and policymakers in California and in Washington spent considerable time and energy this spring identifying additional water supplies for Westlands. Obviously, the snow and rain that California experienced led to increased Central Valley Project (CVP) and State Water Project allocation announcements over the course of the year, but if the federal government ultimately delivered more water to Westlands than its water users needed, it would seem that much of that earlier effort was misplaced.

Accordingly, we would like to present you with the opportunity to clarify Westlands' current water situation, and would appreciate your answers to the following questions.

- How much CVP water was delivered to Westlands this year? Of that, how much was water carried over from a prior year's allocation? How much CVP water was made available to Westlands this year but not delivered because Westlands decided instead to carry over, bank, sell, exchange, or transfer that water?

- Including CVP supplies, what was the total amount of water available to Westlands, its landowners, and its farm operations this year? Please identify the amounts by source (e.g. transferred water, groundwater, carryover water, etc).

- At what price did Westlands originally purchase the CVP water being offered in the exchange with the Metropolitan Water District? Did Westlands purchase any CVP water at prices other than those laid out in your current interim water service contract? Please identify the different prices paid for each source.

- What other water sales, transfers, or exchanges did Westlands, or parties within Westlands, enter into this year? Please provide an accounting of parties, quantities, price, and any other terms and conditions.

- Press accounts this summer indicated that some Westlands farmers sold their water allocations in 2010, yet simultaneously told the federal court that they were suffering from a reduced water supply caused by operations of the CVP. Please

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explain this discrepancy. In addition, so that Westlands' water and production situation can be more accurately assessed, please provide a year-to-date crop report, and a comparison of this year's fall planting plans to last year's.

- The notice describes an effort to "ensure the proposed water exchange... is not subject to Central Valley Project Improvement Act fees or Reclamation Law limitations." Please identify the fees and provisions of law that you intend to avoid, and explain why a transfer of water between a federal and state water contractor, for water stored at the state-federal San Luis Reservoir, should be considered exempt from any relevant provisions of the law.

- Westlands has indicated that its farmers have pumped unsustainable levels of groundwater in recent years, creating an overdraft situation. Why is the water that Westlands and its water users seek to sell, transfer, or exchange this year not being used to replenish the groundwater basin overdrafted as a result of overuse?

- As you know, there are many competing demands on California's water, and while southern California's urban water supply needs are significant, 100,000 acre feet could doubtless be used for any number of beneficial purposes, including obligations under the Central Valley Project Improvement Act. Did Westlands offer to sell or transfer this water to any other party, including the Bureau, before this recent announcement?

- Westlands' recent press statements indicate that the water delivery was announced too late in the year to be incorporated into water users' plans. Did Westlands notify the Bureau that this water would not needed before the water was made available to Westlands and exported from the Bay-Delta? Would you support a policy change such that allocation announcements are not increased after planting decisions have been made?

Thank you for your attention to this request. We know that you will recognize the value of setting the record straight in this matter, and would appreciate your reply by September 30, 2010.

Sincerely,

GEORGE MILLER
Member of Congress

JOHN GARAMENDI
Member of Congress

GRACE F. NAPOLITANO
Member of Congress

MIKE THOMPSON
Member of Congress

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Appendix B – Biological Review Documents

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 100802041949

Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)

Rana draytonii
California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Thamnophis gigas
giant garter snake (T)

Birds

Gymnogyps californianus
California condor (E)

Mammals

Dipodomys ingens
giant kangaroo rat (E)

Dipodomys nitratoides exilis
Critical habitat, Fresno kangaroo rat (X)
Fresno kangaroo rat (E)

Dipodomys nitratoides nitratoides
Tipton kangaroo rat (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Caulanthus californicus
California jewelflower (E)

Cordylanthus palmatus
palmate-bracted bird's-beak (E)

Monolopia congdonii (=Lembertia congdonii)
San Joaquin woolly-threads (E)

Quads Containing Listed, Proposed or Candidate Species:

STRATFORD (313A)
WESTHAVEN (313B)
KETTLEMAN CITY (313C)
HURON (314A)
GUIJARRAL HILLS (314B)
AVENAL (314C)
LA CIMA (314D)
COALINGA (315A)
BURREL (336B)
VANGUARD (336C)
LEMOORE (336D)
FIVE POINTS (337A)
WESTSIDE (337B)
HARRIS RANCH (337C)
CALFLAX (337D)
TRES PECOS FARMS (338A)
LILLIS RANCH (338B)
DOMENGINE RANCH (338D)
SAN JOAQUIN (359C)
HELM (359D)
TRANQUILLITY (360A)
COIT RANCH (360B)
LEVIS (360C)
CANTUA CREEK (360D)
CHANEY RANCH (361A)
CHOUNET RANCH (361B)
TUMEY HILLS (361C)
MONOCLINE RIDGE (361D)
FIREBAUGH (381C)
HAMMONDS RANCH (382C)
BROADVIEW FARMS (382D)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be October 31, 2010.

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U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 100802040356

Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

Branchinecta longiantenna
longhorn fairy shrimp (E)

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Thamnophis gigas
giant garter snake (T)

Mammals

Dipodomys ingens
giant kangaroo rat (E)

Dipodomys nitratoides exilis
Fresno kangaroo rat (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Monolopia congdonii (=Lembertia congdonii)
San Joaquin woolly-threads (E)

Proposed Species

Amphibians

Rana draytonii
Critical habitat, California red-legged frog (PX)

Quads Containing Listed, Proposed or Candidate Species:

CHOUNET RANCH (361B)
DOS PALOS (382B)
HAMMONDS RANCH (382C)
CHARLESTON SCHOOL (383A)
ORTIGALITA PEAK NW (383B)
LAGUNA SECA RANCH (383D)
LOS BANOS VALLEY (384A)
VOLTA (403C)
LOS BANOS (403D)
SAN LUIS DAM (404D)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and

indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be October 31, 2010.

Federally Listed Threatened & Endangered Species Which May Occur In Los Angeles County, CA (Ventura Fish & Wildlife Office)

Amphibian		
Arroyo Toad	Bufo californicus	E
California Red-Legged Frog	Rana aurora draytonii	T
Bird		
Brown Pelican	Pelicanus occidentalis	E
California Condor	Gymnogyps californianus	E
California Gnatcatcher	Polioptila californica	T
California Least Tern	Sterna antillarum browni	E
Least Bell's Vireo	Vireo bellii pusillus	E
Southwestern Willow Flycatcher	Empidonax trallii extimus	E
Western Snowy Plover	Charadrius alexandrinus nivosus	T
Yellow-Billed Cuckoo	Coccyzus americanus	C
Fish		
Southern California Steelhead	Oncorhynchus mykiss	E
Tidewater Goby	Eucyclogobius newberryi	E
Unarmored Threespine Stickleback	Gasterosteus aculeatus williamsoni	E
Invertebrate		
Riverside Fairy Shrimp	Streptocephalus woottoni	E
Plant		
Braunton's Milk-Vetch	Astragalus brauntonii	E
California Orcutt Grass	Orcuttia californica	E
Conejo Dudleya	Dudleya abramsii ssp. parva	T
Lyon's Pentachaeta	Pentachaeta lyonii	E
Marcescent Dudleya	Dudleya cymosa ssp. marcescens	T
Nevin's Barberry	Berberis nevinii	E
Santa Monica Mountains live-forever	Dudleya cymosa ssp. ovatifolia	T
Slender-Horned Spineflower	Dodecahema (=Centrostegia) leptoceras	E
Spreading Navarretia	Navarretia fossalis	T
Verity's Dudleya	Dudleya verityi	T

E - Endangered	T - Threatened	CH - Critical habitat
PE - Taxa proposed for listing as endangered	PT - Taxa proposed for listing as threatened	PCH - Critical habitat which has been proposed

Federally Listed Threatened & Endangered Species Which May Occur In San Bernardino County, CA (Ventura Fish & Wildlife Office)

Amphibian		
Arroyo Toad	Bufo californicus	E
Bird		
Least Bell's Vireo	Vireo bellii pusillus	E
Southwestern Willow Flycatcher	Empidonax trallii extimus	E
Yellow-Billed Cuckoo	Coccyzus americanus	C
Yuma Clapper Rail	Rallus longirostris yumanensis	E
Fish		
Bonytail Chub	Gila elegans	E
Mohave Tui Chub	Gila bicolor mohavensis	E
Razorback Sucker	Xyrauchen texanus	E
Plant		
Cushenbury Buckwheat	Eriogonum ovalifolium var. vineum	E
Cushenberry Milk-vetch	Astragalus albens	E
Cushenbury Oxytheca	Oxytheca parishii var. goodmaniana	E
Lane Mountain Milk-Vetch	Astragalus jaegerianus	E
Parish's Daisy	Erigeron parishii	T
Reptile		
Desert Tortoise	Gopherus agassizzii	T

E - Endangered	T - Threatened	CH - Critical habitat
PE - Taxa proposed for listing as endangered	PT - Taxa proposed for listing as threatened	PCH - Critical habitat which has been proposed

Federally Listed Threatened & Endangered Species Which May Occur In Ventura County, CA (Ventura Fish & Wildlife Office)

Amphibian		
Arroyo Toad	Bufo californicus	E
California Red-Legged Frog	Rana aurora draytonii	T
Bird		
Brown Pelican	Pelicanus occidentalis	E
California Condor	Gymnogyps californianus	E
California Gnatcatcher	Polioptila californica	T
California Least Tern	Sterna antillarum browni	E
Least Bell's Vireo	Vireo bellii pusillus	E
Light-Footed Clapper Rail	Rallus longirostris levipes	E
Southwestern Willow Flycatcher	Empidonax trallii extimus	E
Western Snowy Plover	Charadrius alexandrinus nivosus	T
Yellow-Billed Cuckoo	Coccyzus americanus	C
Fish		
Southern California Steelhead	Oncorhynchus mykiss	E
Tidewater Goby	Eucyclogobius newberryi	E
Unarmored Threespine Stickleback	Gasterosteus aculeatus williamsoni	E
Invertebrate		
Conservancy Fairy Shrimp	Branchinecta conservatio	E
Riverside Fairy Shrimp	Streptocephalus woottoni	E
Vernal Pool Fairy Shrimp	Branchinecta lynchi	T
Mammal		
Southern Sea Otter	Enhydra lutris nereis	T
Plant		
Braunton's Milk-Vetch	Astragalus brauntonii	E
California Orcutt Grass	Orcuttia californica	E
Conejo Dudleya	Dudleya abramsii ssp. parva	T
Lyon's Pentachaeta	Pentachaeta lyonii	E
Marcescent Dudleya	Dudleya cymosa ssp. marcescens	T
Salt Marsh Bird's-Beak	Cordylanthus maritimus ssp. maritimus	E
San Fernando Valley Spineflower	Chorizanthe parryi var. fernandina	C
Santa Monica Mountains live-forever	Dudleya cymosa ssp. ovatifolia	T
Slender-Horned Spineflower	Dodecahema (=Centrostegia) leptoceras	E
Ventura Marsh Milk-Vetch	Astragalus pycnostachyus var. lanosissimus	E
Verity's Dudleya	Dudleya verityi	T
Reptile		
Blunt-Nosed Leopard Lizard	Gambelia silus	E
Island Night Lizard	Xantusia (=Klauberina) riversiana	T

E - Endangered	T - Threatened	CH - Critical habitat
PE - Taxa proposed for listing as endangered	PT - Taxa proposed for listing as threatened	PCH - Critical habitat which has been proposed

Federally Listed Threatened & Endangered Species Which May Occur In Los Angeles, Orange, San Bernardino, Riverside, San Diego, and Imperial Counties, CA (Carlsbad Fish & Wildlife Office)

Scientific Name	Common Name	Fed. Status	LA	O	SB	Riv	SD	Imp	Date Listed
PLANTS									
Acanthoscyphus (Oxytheca) parishii var.*goodmaniana* [1]	Cushenbury oxytheca	E			X				24-Aug-94
Acanthomintha ilicifolia	San Diego thornmint	T					X		13-Oct-98
Acmispon (Lotus) dendroideus var. *traskiae*	San Clemente Island lotus	E	X						11-Aug-77
Allium munzii	Munz's onion	E				X			13-Oct-98
Ambrosia pumila	San Diego ambrosia	E				X	X		2-Jul-02
Arctostaphylos glandulosa subsp. *crassifolia*	Del Mar manzanita	E					X		7-Oct-96
Arenaria paludicola	marsh sandwort	E	X		X				3-Aug-93
Arenaria ursina	Bear Valley sandwort	T			X				14-Sep-98
Astragalus albens	Cushenbury milk-vetch	E			X				24-Aug-94
Astragalus brauntonii	Braunton's milk-vetch	E	X	X		X			29-Jan-97
Astragalus lentiginosus var. *coachellae*	Coachella Valley milk-vetch	E				X			6-Oct-98
Astragalus magdalenae var. *peirsonii*	Peirson's milk-vetch	T						X	6-Oct-98
Astragalus pycnostachyus var. *lanosissimus*	Ventura marsh milk-vetch	E	X	X					21-May-01
Astragalus tener var. *titi*	coastal dunes milk-vetch	E	X				X		12-Aug-98
Astragalus tricarinatus	triple-ribbed milk-vetch	E			X	X			6-Oct-98
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	E				X			13-Oct-98
Baccharis vanessae	Encinitas baccharis	T					X		7-Oct-96
Berberis nevinii	Nevin's barberry	E	X		X	X	X		13-Oct-98
Brodiaea filifolia	thread-leaved brodiaea	T	X	X	X	X	X		13-Oct-98
Castilleja cinerea	ash-gray Indian paintbrush	T			X				14-Sep-98
Castilleja grisea	San Clemente Island Indian paintbrush	E	X						11-Aug-77
Ceanothus ophiochilus	Vail Lake ceanothus	T				X			13-Oct-98
Cercocarpus traskiae	Catalina Island mountain-mahogany	E	X						8-Aug-97
Chloropyron maritimum (Cordylanthus maritimus) var. maritimum (subsp.*maritimus)* [1]	salt marsh bird's beak	E	X	X			X		28-Sep-78
Chorizanthe orcuttiana	Orcutt's spineflower	E					X		7-Oct-96
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	C	X	X	X				25-Oct-99
Deinandra (Hemizonia) conjugens [1]	Otay tarplant	T					X		13-Oct-98
Delphinium variegatum subsp. *kinkiense*	San Clemente Island larkspur	E	X						11-Aug-77
Dodecahema (Centrostegia) leptoceras [1]	slender-horned spineflower	E	X		X	X			28-Sep-87
Dudleya cymosa subsp. *ovatifolia*	Santa Monica Mountains dudleya	T	X	X					29-Jan-97
Dudleya stolonifera	Laguna Beach live-forever	T		X					13-Oct-98
Eriastrum densifolium subsp. *sanctorum*	Santa Ana River woolly-star	E		X	X	X			28-Sep-87
Erigeron parishii	Parish's daisy	T			X	X			24-Aug-94
Eriogonum kennedyi var. *austromontanum*	southern mountain wild buckwheat	T			X				14-Sep-98
Eriogonum ovalifolium var. *vineum*	Cushenbury buckwheat	E			X				24-Aug-94
Eryngium aristulatum var. *parishii*	San Diego button celery	E				X	X		3-Aug-93
Fremontodendron mexicanum	Mexican flannelbush	E					X		13-Oct-98
Hazardia orcuttii	Orcutt's hazardia	C					X		4-May-04
Helianthemum greenei	Island rush-rose	T	X						31-Jul-97
Lithophragma maximum	San Clemente Island woodland star	E	X						8-Aug-97
Malacothamnus clementinus	San Clemente Island bush mallow	E	X						11-Aug-77
Monardella linoides subsp. *viminea*	willowy monardella	E					X		13-Oct-98
Navarretia fossalis	spreading navarretia	T	X			X	X		13-Oct-98
Orcuttia californica	California Orcutt grass	E	X			X	X		3-Aug-93
Pentachaeta lyonii	Lyon's pentachaeta	E	X						29-Jan-97
Phacelia stellaris	Brand's phacelia	C	X			X	X		4-May-04
Physaria (Lesquerella) kingii subsp. bernardina [1]	San Bernardino Mountains bladderpod	E			X				24-Aug-94
Poa atropurpurea	San Bernardino bluegrass	E			X		X		14-Sep-98
Pogogyne abramsii	San Diego mesa mint	E					X		28-Sep-78
Pogogyne nudiuscula	Otay mesa mint	E					X		3-Aug-93
Rorippa gambellii	Gambel's watercress	E	X	X	X		X		3-Aug-93
Sibara filifola	Santa Cruz Island rock-cress	E	X						8-Aug-97
Sidalcea pedata	pedate checker-mallow	E			X				31-Aug-84
Taraxacum californicum	California taraxacum	E			X				14-Sep-98

Thelypodium stenopetalum	slender-petaled mustard	E			X				31-Aug-84
Trichostema austromontanum subsp.*compactum*	Hidden Lake bluecurls	T				X			14-Sep-98
Verbesina dissita	big-leaved crown beard	T		X					7-Oct-96
INVERTEBRATES									
Branchinecta lynchi	vernal pool fairy shrimp	T				X			19-Sep-94
Branchinecta sandiegonensis	San Diego fairy shrimp	E		X			X		3-Feb-97
Dinacoma caseyi	Casey's June beetle	pE				X			9-Jul-09
Euphilotes battoides allyni	El Segundo blue butterfly	E	X						1-Jun-76
Euphydryas editha quino	Quino checkerspot butterfly	E		X	X	X	X		16-Jan-97
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	E	X						2-Jul-80
Pyrgus ruralis lagunae	Laguna Mountains skipper	E					X		16-Jan-97
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	E			X	X			23-Sep-93
Streptocephalus woottoni	Riverside fairy shrimp	E	X	X		X	X		3-Aug-93
FISH									
Catostomus santaanae	Santa Ana sucker	T	X	X	X	X			12-Apr-00
Cyprinodon macularius	desert pupfish	E				X	X	X	31-Mar-86
Eucyclogobius newberryi	tidewater goby	E		X			X		4-Feb-94
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	E	X		X		X		13-Oct-70
Gila bicolor mohavensis	Mohave tui chub	E			X				13-Oct-70
Gila elegans	bonytail chub	E			X	X		X	23-Apr-80
Oncorhynchus mykiss	southern steelhead (So Cal DPS)	E	X	X			X		5-Jan-06
Ptychocheilus lucius	Colorado squawfish	E			X	X		X	24-Jul-85
Xyrauchen texanus	razorback sucker	E			X	X		X	23-Oct-91
AMPHIBIANS									
Anaxyrus californicus (B. microscaphus c.) [1]	arroyo toad (a. southwestern t.)	E	X	X	X	X	X		16-Dec-94
Batrachoseps aridus	desert slender salamander	E				X			4-Jun-73
Rana draytoni	California red-legged frog	T	X	X	X	X	X		23-May-96
Rana muscosa (So Cal DPS)	mountain yellow-legged frog	E	X		X	X			2-Jul-02
REPTILES									
Gopherus agassizii	desert tortoise	T			X	X		X	2-Apr-90
Phrynosoma mcallii	flat-tailed horned lizard	pT				X	X	X	29-Nov-93
Uma inornata	Coachella Valley fringe-toed lizard	T				X			25-Sep-80
Xantusia riversiana	island night lizard	T	X						11-Aug-77
BIRDS									
Amphispiza belli clementeae	San Clemente sage sparrow	T	X						11-Aug-77
Brachyramphus marmoratus	marbled murrelet	T	X				X		1-Oct-92
Charadrius alexandrinus nivosus	western snowy plover	T	X	X			X		5-Mar-93
Coccyzus americanus	yellow-billed cuckoo	C	X	X	X	X	X	X	25-Jul-01
Empidonax traillii extimus	southwestern willow flycatcher	E	X	X	X	X	X	X	27-Feb-95
Gymnogyps californianus	California condor	E	X		X		X		16-Oct-96
Haliaeetus leucocephalus	bald eagle	PDM	X	X	X	X	X	X	12-Jul-95
Lanius ludovicianus mearnsi	San Clemente loggerhead shrike	E	X						11-Aug-77
Pelecanus occidentalis	brown pelican	PDM	X	X	X	X	X	X	4-Feb-85
Phoebastria albatrus	short-tailed albatross	E	X	X			X		31-Jul-00
Polioptila californica californica	coastal California gnatcatcher	T	X	X	X	X	X		30-Mar-93
Rallus longirostris levipes	light-footed clapper rail	E	X	X			X		13-Oct-70
Rallus longirostris yumanensis	Yuma clapper rail	E			X	X		X	11-Mar-67
Sternula (Sterna) antillarum browni [1]	California least tern	E	X	X		X	X	X	2-Jun-70
Vireo bellii pusillus	least Bell's vireo	E	X	X	X	X	X	X	2-May-86
MAMMALS									
Dipodomys merriami parvus	San Bernardino kangaroo rat	E	X		X	X			24-Sep-98
Dipodomys stephensi	Stephens' kangaroo rat	E			X	X	X		30-Sep-88
Enhydra lutris nereis	southern sea otter	T/X*	X	X			X		11-Aug-87
Ovis canadensis nelsoni	Peninsular bighorn sheep	E				X	X	X	18-Mar-98
Perognathus longimembris pacificus	Pacific pocket mouse	E	X	X			X		29-Sep-94
Spermophilus tereticaudus chlorus	Palm Springs ground squirrel	C				X			25-Oct-99
Urocyon littoralis catalinae	Santa Catalina Island fox	E	X						5-Mar-04

Status: E = Federally endangered; T = Federally threatened; C = Federal candidate for listing; P = proposed; PDM=subject to post delisting monitoring
XN: Experimental population; * southern sea otter first listed as threatened Jan. 14, 1977 42:2968
CH = Critical Habitat: p = Proposed; f = Designated; np=Not Prudent; pr = Proposed Revised; fr = Final Revised; W+ = proposal withdrawn
RP = Recovery Plan: F= Final, D= Draft
County Reported: LA = Los Angeles; O = Orange; SB = San Bernardino; Riv = Riverside; SD = San Diego; Imp = Imperial
Note: Santa Catalina Isl. and San Clemente Isl. Are in L.A. County
[1] Name under which the species was listed is in parentheses. This form should be cited at least in the beginning of a document, otherwise use the current name throughout.

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Appendix C – ITA and Cultural Resources Determinations

From: Barnes, Amy J
Sent: Tuesday, August 17, 2010 2:05 PM
To: Siek, Charles R
Cc: MPR Cultural Resources Section
Subject: RE: SCCAO request to review and comment on EA

Tracking #10-NCAO-290

Project: Westlands WD-San Luis WD-Metropolitan WD Water Exchange

The proposed activities associated with Reclamation approving delivery of CVP water from Westlands Water District (WWD) and San Luis Water District (SLWD) to the Metropolitan Water District of Southern California (MWD) will have no potential to affect historic properties. The WWD and SLWD have requested delivery of up to 150 thousand acre-feet (TAF) (up to 110 TAF from WWD and up to 40 TAF from SLWD) of their 2010 CVP water supplies currently stored in An Luis Reservoir (SLR) to the MWD. The MWD will subsequently return in 2011 two-thirds of the total amount delivered of their 2011 water supplies via delivery in SLR. No new construction or modification of conveyance facilities will occur as a result of this project.

As the proposed action has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1), no additional consideration under Section 106 of the National Historic Preservation Act is required.

Thank you for the opportunity to review the proposed action. Please place a copy of this concurrence with the EA administrative record.

Amy J. Barnes
Archaeologist
U.S. Bureau of Reclamation
Mid-Pacific Region, MP-153
2800 Cottage Way
Sacramento, CA 95825
916-978-5047
abarnes@usbr.gov

From: Rivera, Patricia L
Sent: Tuesday, August 17, 2010 4:35 PM
To: Siek, Charles R
Subject: RE: WWD/SLDM/MWD

Chuck,

I reviewed the proposed action to approve the delivery of up to 150 TAF of CVP water from the Exchangers (up to 110 TAF from WWD and up to 40 TAF from SLWD) to MWD. MWD would subsequently return in 2011 two-thirds of the total amount delivered from their 2011 SWP Table A supplies. The return water will be allocated among the Exchangers in the same proportion that each Exchanger made exchange water available to MWD.

The proposed action does not have a potential to affect Indian Trust Assets.

Appendix D – Article 55

The Metropolitan Water District of Southern California

CONTRACT BETWEEN
THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA
AND
THE STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
FOR A WATER SUPPLY
AND
SELECTED RELATED AGREEMENTS

[76] 55. Transportation of Nonproject Water.

(a) Subject to the delivery priorities in Article 12(f), contractors shall have the right to receive services from any of the project transportation facilities to transport water procured by them from nonproject sources for delivery to their service areas and to interim storage outside their service areas for later transport and delivery to their service areas: Provided, that except to the extent such limitation in Section 12931 of the Water Code be changed, a contractor shall not use the project transportation facilities under this option to transport water the right to which was secured by the contractor through eminent domain unless such use be approved by the Legislature by concurrent resolution with the majority of the members elected to each house voting in favor thereof.

(b) For any nonproject water delivered pursuant to this article, contractors shall pay the State the same (including adjustments) for power resources (including on-aqueduct, off-aqueduct, and any other power) incurred in the conservation and transportation of such water as if such nonproject water were entitlement water, as well as all incremental operation, maintenance, and replacement costs, and any other incremental costs, which may include an administrative or contract preparation charge, all as determined by the State. Incremental costs shall mean those nonpower costs which would not be incurred if nonproject water were not scheduled for or delivered to contractors. Only those contractors not participating in the repayment of a reach shall be required to pay a use of facilities charge for the delivery of nonproject water from or through that reach. Costs for transporting water placed into interim storage shall be paid in the same manner provided for in subdivision (c)(6) of Article 56.

(c) The amounts, times and rates of delivery of nonproject water shall be provided for pursuant to a water delivery schedule to be issued in the same manner as provided for in Article 12. The costs specified in this article shall be paid for at the same time the corresponding project water costs are paid.