

# CVPIA Fiscal Year 2008 Annual Work Plan

**November 2, 2007**

## **Program Title**

Refuge Water Supply Program – Refuge Water Conveyance (Wheeling)  
CVPIA Section 3406(d)(1), (2) and (5)

## **Responsible Entities**

<b>Staff Name</b>	<b>Agency</b>	<b>Role</b>
(Vacant)	Reclamation	Lead, Refuge Water Conveyance Program Mgr
Sonya Nechanicky	Reclamation	Refuge Water Supply Program Specialist
(Vacant)	Reclamation	Refuge Water Supply Program Assistant
Dale Garrison	U.S. Fish and Wildlife Service	Co-Lead, Refuge Water Supply Coordinator

## **Program Goals and Objectives for FY 2008**

The Refuge Water Conveyance Program (Program) endeavors to meet the mandate of Section 3406(d)(1), (2), and (5) of the Central Valley Project Improvement Act (CVPIA), to provide long-term, firm and reliable water deliveries to certain Federal, State, and private wildlife refuges located in the Central Valley of California. The Refuge Water Conveyance Program is one of the four components of the Refuge Water Supply Program.

### **1.1 Program Management**

**1.1.1 – RECLAMATION.** Provide oversight, administration, and planning of Refuge Water Conveyance Program. Identify and initiate projects needed to achieve Program goals and meet long-term and short-term refuge water supply needs, exploring options and incorporating prioritization processes. Develop strategies to achieve set goals. Collaborate with Program agency partners. Maintain and continue to build on good cooperative working relationships and cohesive partnerships with refuge managers, conveyance contractors, other agencies, and stakeholders. Maintain strong coordination with Area Offices (A.O.) staff, Regional Office (R.O.) technical staff, delivering entities, local and regional refuge managers, and agency refuge coordinators. Maintain strong Program accountability, assuring compliance with Federal and State laws, including National Environmental Policy Act (NEPA) compliance, monitoring program progress, maintaining adequate records, utilizing audit tools, and providing information to interested parties. Develop annual Program budget, initiate, and track through final execution. Monitor fund obligations and expenditures, and contract payments. Develop annual work plans and activity reports. Expand Program information resources. Build on existing GIS maps to develop detailed maps of the refuges and their associated existing and potential conveyance

systems and related data. Maintain existing Refuge Water Supply Program website.

**Interagency Coordination:** Organize and chair the Interagency Refuge Water Management Team (IRWMT) meetings, Reclamation being the Program Lead. Coordinate with Program partner, U.S. Fish and Wildlife Service (FWS), and with cooperating entities, being Grassland Water District (GWD) and the California Department of Fish and Game (CDFG). The IRWMT coordinates and develops the annual refuge water delivery schedules and facilitates ongoing water management issues.

Manage existing long-term and interim conveyance agreements and long-term water supply contracts, providing oversight and monitoring. Contract administration includes coordinating with Central Valley Operations (CVO) office, Water Acquisition Program (WAP) and the refuge managers on water needs and delivery schedules to ensure the contract obligations are met. Administer R.O. Program-related agreements and associated financial processes, including invoice reconciliation and payments. Negotiate new long-term and interim conveyance agreements. Coordinate and assist on facilities improvement (construction) agreements with cooperating entities.

Negotiate a fourth amendment to the Gray Lodge Wildlife Area Deep Well Pumping Reimbursement Agreement (Reimbursement Agreement) between Reclamation and CDFG to extend the termination date for one more year. The purpose of this agreement is to supplement Level 2 surface water deliveries up to full Level 2 allocation for the Gray Lodge Wildlife Area (GLWA). This agreement is expected to be extended until the Reclamation-contracted facilities construction at Biggs-West Gridley Water District (BWGWD) is completed, after which BWGWD will have the capacity to provide conveyance of full Level 4 water supplies (Level 2 and Incremental Level 4) to the GLWA.

Program funding is organized in two categories - program management, and conveyance cooperative agreements and water supply contract administration. The \$8,800,000 total Program budget will be split as follows:

Of the funds allocated to the Program, approximately 92 percent will be used for conveyance cooperative agreements. For FY2008 the Program expects to convey approximately 100 percent of Level 2 in both the Sacramento and the San Joaquin Valleys to those refuges having full delivery capacity. However, the FY2008 Program budget is insufficient, and will only provide for conveyance of limited quantities of anticipated Incremental Level 4 water acquisition under the currently proposed budget.

## **1.2 Program Support**

**1.2.1 – FWS.** As CVPIA Refuge Program partner, provide Federal refuge coordination. Develop annual FWS Refuge Conveyance Program budget needs and submit to Reclamation for incorporation into overall Refuge Conveyance budget. Initiate FWS portion of budget and track through final execution. Monitor fund obligations and expenditures, and contract payments.

Participate in IRWMT meetings as Program partner with Reclamation and with cooperating entities, GWD and CDFG. Working with the IRWMT, develop the annual refuge water delivery schedules and coordinate with IRWMT partners on ongoing water management issues.

Manage the conveyance cooperative agreement with the San Luis Canal Company (SLCC), aka Henry Miller Reclamation District, (one of two conveyance agreements with SLCC under this Program; the second is administered by Reclamation). Monitor conveyance cooperative agreement obligations in coordination with FWS R.O. contracting staff, delivering entity, refuge managers and IRWMT. Review and reconcile invoices from conveying entity, calculate refuge water deliveries and losses, and process and track invoice payments.

### **1.3 Technical Support (Reclamation)**

**1.3.1** – Prepare environmental documentation to support continuation of the Reimbursement Agreement (refer to 1.1.1). CDFG pumps groundwater on the GLWA to supplement surface water deliveries up to full Level 2 amounts, enabling Reclamation to meet its CVPIA Level 2 responsibilities, until facilities construction is completed on BWGWD, increasing their capacity to provide delivery of Full Level 4 water to the GLWA. Construction is anticipated to be completed in 2012. Current NEPA documentation coverage does not extend to 2012.

**1.3.2** – Develop a prototype habitat health index, expressed in an algorithm of biotic and abiotic factors, to assess wetland salinity drainage management practices on migratory birds and their habitat in seasonal wetlands. This algorithm will be derived from data collected from the Load Reduction Monitoring Study at Grassland Wetlands (refer to 1.5.1).

**1.3.3** – Perform final beta testing on the CVPIA Refuge Water Supply Program Database (Phase I). Develop design for database enhancements required for Phase II, including conveyance agreement invoices and refuge water deliveries reconciliation processes. This is an integrated database to provide for refuge water supply accounting, delivery scheduling, tracking and invoicing.

**1.3.4** – Perform groundwater supply investigations in support of refuge water supply conjunctive use.

**1.3.5** – Perform water quality monitoring at GLWA pursuant to the terms of the Reimbursement Agreement. Project tasks include surface and groundwater sampling, data collection from installed water loggers, and development of annual report summarizing data analysis. Data collected will establish a baseline for both specific organic and non-organic sampling constituents. Data will be utilized for development of additional environmental documentation required for continuation of the Reimbursement Agreement. This data will also contribute toward some of the data required of CDFG as a member of the coalition covered by the agricultural waiver issued under the State Water Resources Control Board related to agricultural water discharge.

**1.3.6** – Information Technology (IT) staff support and maintenance for the CVPIA Refuge Water Supply Program Database.

**1.3.7** – Acquisition/Contracting Division staff support of conveyance agreements, including invoice tracking, payment processing, agreement modifications, and obligation of agreement funds.

**1.3.8** – South Central California Area Office (SCCAO) (both Fresno and Tracy offices) administration of conveyance cooperative agreements for California Department of Water Resources (DWR), Buena Vista Water Service District (BVWSD), SLCC, GWD, Central California Irrigation District (CCID), and San Luis Delta-Mendota Water Authority (SLDMWA). Initiate and monitor conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff and Reclamation R.O. Contracting Division. Coordinate with delivering entities, refuge managers, and SLDMWA on refuge water deliveries and resolution of water delivery reporting discrepancies. Reconcile and process invoices and track invoice payments.

**1.3.9** – Enter CVPIA refuges water delivery data into BOR WORKS database, coordinating with CVO, R.O., and A.O. staffs.

**1.3.10** – Northern California Area Office (NCAO) administration of conveyance cooperative agreements for Glen-Colusa Irrigation District (GCID) and BWGWD. Initiate and monitor conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff and Reclamation R.O. Contracting Division. Coordinate with delivering entities, refuge managers, and SLDMWA on refuge water deliveries and resolution of water delivery reporting discrepancies. Reconcile and process invoices and track invoice payments.

**1.3.11** – Download data from flow meters located at all points of delivery on the GLWA per conveyance cooperative agreement between Reclamation and BWGWD. Provide data to NCAO staff for coordination with BWGWD and GLWA managers. Maintain and repair flow meters.

**1.3.12** – Continue administration of conservation easement for giant garter snake habitat site in Glenn County. (Refer to 1.14.5.)

## **1.5 Evaluations, Studies, Investigations, Research**

**1.5.1** – Continue supporting the Load Reduction Monitoring Study at Grassland Wetlands. Provide funding for annual cellular telemetry data collection, storage, and access fees. This project involves wildlife studies of modified water management of Grassland Resource Conservation District (GRCD) wetlands to minimize water quality impacts to the San Joaquin River. These efforts have potential application for development of water quality Best Management Practices (BMPs) for various wildlife refuges in the San Joaquin River Basin.

## **1.12 Monitoring**

**1.12.1** – Costs for water sampling analysis performed by contract laboratories. Related to the water quality monitoring and groundwater data collection at GLWA pursuant to the Reimbursement Agreement (see 1.3.5 under Technical Support).

## **1.14 Other – Describe**

**1.14.1** – Reclamation Conveyance Agreements (8 agreements) – Agreement costs for conveyance of refuge water supplies.

**1.14.2** – FWS Conveyance Agreement (1 agreement) – Agreement costs for conveyance of refuge water supplies.

**1.14.3** – CVPIA Refuge Water Supply Program Database - Phase II. Contract for Oracle Database developer to write computer program based on Reclamation Phase II enhancements design (refer to 1.3.3). This is an integrated database designed for refuge water supply accounting, delivery scheduling, tracking and invoicing.

**1.14.4** – Provide cost share funding as a cooperative partner with CDFG for the replacement of three wells located on the GLWA. This project relates to the Reimbursement Agreement (see 1.1.1 and 1.3.1). Reclamation has relied on the use of CDFG groundwater pumps at GLWA to meet part of its obligation under CVPIA to deliver Level 2 water supplies to GLWA. CDFG is willing to continue groundwater pumping in cooperation with Reclamation. However, the majority of existing wells on the GLWA were installed decades ago primarily for agricultural purposes, with many from 40-50 years old. These wells are largely open bore construction subject to fill by siltation and/or gravel, and in some cases, to bore collapse. Production rates and efficiency of these wells continue to decrease, while repairs increase. Under the Reimbursement Agreement, Reclamation reimburses for pump and well repairs. Costs are increasing as these historical wells continue to be used beyond their intended purpose. Several existing wells have collapsed and some screens have silted in due to overuse.

CDFG has identified an immediate need for four high production wells to replace existing wells. One well is scheduled to be installed in early 2008 through grant funds. These four proposed wells will be situated along the northern part of the refuge, allowing for better water distribution and efficiency, and tie into the upper (higher elevation) portion of the upgraded internal distribution system. An additional two more wells will be needed. After assessment of production from the first four wells, locations for these two well will be determined based on areas within the system where the two wells will alleviate deficiencies while optimizing water use. CDFG has invested \$6.8M for internal conveyance distribution system improvements and upgrades as of August 2007, resulting in a much more efficient distribution system. Several older inefficient groundwater wells will be removed from service once the new replacement wells come on line.

**1.14.5** – Provide water for giant garter snake habitat on privately-owned site. Habitat was restored and is maintained annually to satisfy the mitigation requirements made necessary by refuge conveyance construction activities in the Sacramento Valley. Water is provided through groundwater pumping on the site, and this project is for Pacific Gas & Electric (PG&E) power to run one well pump. (Refer to 1.3.12.)

**1.14.6** – Lift-pump water delivered at points of delivery by GCID to convey to Colusa National Wildlife Refuge (NWR) units at higher elevation.

**1.14.7** – Delivery of water to Merced NWR through onsite groundwater pumping during the maintenance outage period of Merced Irrigation District (MID), which is expected to

occur between November 1, 2007, and February 28, 2008. This project cost is for PG&E power for the well pumps.

## ***Source Documents to CVPIA Refuge Conveyance Program:***

- Report on Refuge Water Supply Investigations, Central Valley Hydrologic Basin, California (3/1989)
- San Joaquin Basin Action Plan/Kesterson Mitigation Plan, Merced County, California (12/1989)
- Conveyance of Refuge Water Supply Project, East Sacramento Valley Study Area – Final EA/IS and Proposed FONSI/Negative Declaration (12/1997)
- Conveyance of Refuge Water Supply Project, West Sacramento Valley Study Area – Final EA/IS and Proposed FONSI/Negative Declaration (12/1997)
- Conveyance of Refuge Water Supply, South San Joaquin Valley Study Area (Kern and Pixley National Wildlife Refuges) – Final EA/IS (10/2003)
- Conveyance of Refuge Water Supplies to the East Bear Creek Unit of the San Luis National Wildlife Refuge – Final E.A. (2/2006)
- Refuge Water Supply Conveyance Alternatives Refinement Memorandum (East and West Sacramento Valley) (5/1995)
- Refuge Water Supply Long-Term Water Supply Agreements – Sacramento River Basin – Final EA/IS (1/2001)
- Refuge Water Supply Long-Term Water Supply Agreements – Tulare Lake Basin – Final EA (1/2001)
- Refuge Water Supply Long-Term Water Supply Agreements, San Joaquin River Basin – Final EA/IS (1/2001)
- Report of Recommended Alternatives – Refuge Water Supply and San Joaquin Basin Action Plan Lands (4/1995)
- San Joaquin Basin Action Plan and North Grasslands Area – Conveyance Facilities – Final EA/IS (12/1997)

## ***Status of the Program***

The Program is coordinated with the other refuge water supply related programs, being the WAP and the Refuge Facilities Construction and San Joaquin Basin Action Plan programs. The Program conveys set quantities of water based on refuge water supply contracts using cooperative agreements with wheeling entities using Project and acquired water. There are allocations for both Level 2 and Incremental Level 4 water to be supplied to each refuge that serve as the Program's goals for water conveyance quantities. Each year in February and March Reclamation, CVO and WAP announce the available refuge water quantities for the contract year or water year that begins in March. At this time, an annual water delivery schedule is established for each refuge by the IRWMT. The IRWMT is chaired by Reclamation, and includes Program co-lead FWS, and cooperating entities GWD and the CDFG. The delivery schedules are closely coordinated with the Program to assure that conveyance facilities and funding resources are adequate for the scheduled water quantities.

To meet the mandate of the CVPIA to provide annual refuge water supplies, Reclamation has entered into long-term water supply contracts with GWD, FWS, and CDFG that identify the requirements of each party to the contract. There are five refuge water supply contracts: two with CDFG for water to Gray Lodge, Los Banos, Volta, Mendota and North Grasslands Wildlife Areas; two with the FWS for water to Sacramento, Delevan, Colusa, Sutter, San Luis, Merced, Kern and Pixley Wildlife Refuges; and one with GWD for water to GRCD, the district's privately-owned and managed wetlands. The costs shown in this work plan for conveyance cooperative agreements in the Program Tasks, Description and Budget section represent the calculated costs of conveying the quantities of water identified in the contracts.

Furthermore, in meeting the CVPIA requirement to convey refuge water, Reclamation currently has eight long-term (7-50 years) conveyance agreements that are administered by the Program, along with one FWS 40-year conveyance agreement, also administered under the Program. These long-term agreements are with SLCC (two agreements), CCID, GWD, SLDMWA, BVWSD, DWR, BWGWD, and GCID.

The Program utilizes cooperative agreements to reimburse delivering entities for costs of conveying Level 2 and Incremental Level 4 water supplies through Federal, State, and private water distribution systems to the refuges. Current conveyance agreements are with DWR; BVWSD; SLCC (two agreements with SLCC under this Program); GWD; CCID; SLDMWA; GCID; and BWGWD. Reclamation has two A.O.s that manage a significant portion of the conveyance agreement negotiation and administration for all but one agreement, the A.O.s being SCCAO, including Fresno and Tracy offices, and NCAO, Willows office. The FWS California-Nevada Office (CNO) administers one agreement, being one of the two SLCC conveyance agreements.

### ***FY 2007 Accomplishments***

1. Coordinated with the IRWMT to develop Level 2 and Incremental Level 4 water delivery schedule scenarios, expedite refuge monthly water delivery schedules, and prioritize limited Incremental Level 4 water supplies.
2. Delivered Level 2 and Incremental Level 4 quantities of water per the refuge water supply contracts according to the delivery schedules provided by GWD, FWS, and CDFG. Based on Water Year 2006 (March 1, 2006, thru February 28, 2007), approximately 365,583 acre-feet of Level 2 water and approximately 89,045 acre-feet of Incremental Level 4 water were delivered to refuge boundaries. Additionally, an estimated amount of 25,922 acre-feet of Level 2 water was provided to one refuge under an existing mitigation agreement under Federal Energy Regulatory Commission license through Merced Irrigation District (non-Project water).
3. Negotiated a third amendment to the groundwater pumping reimbursement agreement with California State Department of Fish and Game for the purpose of supplementing Level 2 surface water supplies up to full Level 2 allocation for the GLWA. This agreement is expected to be extended until the Reclamation-contracted facilities construction at BWGWD is completed, after which BWGWD will have the capacity to provide conveyance of full Level 2 and Incremental Level 4 water supplies to the GLWA.



4. Completed Phase I development of an integrated database for refuge water supply accounting, delivery scheduling, and invoice tracking. Final beta testing on the database is anticipated to be completed by early FY2008, along with initiation of Phase II for the purpose of adding identified required enhancements.
5. Coordinated with CVO, WAP, and Federal, State and private refuges on water needs and delivery schedules to ensure that contract obligations were met. CVO is responsible for providing Level 2 water supplies from Project water, and the WAP is responsible for acquiring Incremental Level 4 supplies. (The majority, but not all, of Level 2 water supplies comes from Project water.)
6. Continued support for the Load Reduction Monitoring Study at Grassland Wetlands which consisted of funding annual cellular telemetry data collection, storage, and access costs. Involves wildlife studies of modified water management of Grassland Resource Conservation District wetlands to minimize water quality impacts to the San Joaquin River. These efforts have potential application for development of water quality BMPs for various wildlife refuges in the San Joaquin River Basin.
7. Participated with WAP in the investigation for potential of using groundwater resources, including conjunctive use, to augment Incremental Level 4 supplies.
8. Continued cost share development process to determine current cost share apportionment for the State of California related to Incremental Level 4 water supplies, including water acquisition, certain conveyance construction, and water delivery costs. This process is covering the last six Federal fiscal years, and efforts are coordinated with FWS, CDFG, and DWR. A final task order resulting from this process is anticipated to be completed by December 2007.
9. Negotiated a reimbursement agreement between Reclamation and CDFG for reimbursement of Level 2 water conveyance costs to CDFG for water deliveries to Mendota Wildlife Area.
10. Continued participation in the CVPIA Program Activity Report (CPAR) process which consists of a review of agency implementation of CVPIA. Also continued participation in the Program Assessment Rating Tool (PART) process required by U.S. Office of Management and Budget (OMB), an assessment of the effectiveness of current implementation procedures for the Program.
11. Participated in development of the Mendota EA/IS Public Draft which analyzes alternatives to provide firm year round water supplies to Mendota Wildlife Area. This EA/IS was distributed for public comment in June 2007.
12. Managed a conservation easement of 113 acres of giant garter snake habitat from May 1 through September 30, 2007, on a privately-owned site in Glenn County. This habitat was restored and is maintained annually to satisfy the mitigation requirements made necessary by refuge conveyance construction activities in the Sacramento Valley.

## FY 2008 Program Tasks, Description and Budget

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
<b>1.1</b>	<b>Program Management</b>						
1.1.1		2.2	<b>Reclamation</b> -- Refuge Conveyance Program Manager (Lead)(Vacant Position); Refuge Water Supply Program Specialist; Refuge Conveyance Program Assist. (Vacant Position) -- Provide oversight and administration of Refuge Conveyance Program.	9/30/2008	328,569	328,569	0
	<b>Subtotal Costs</b>				<b>328,569</b>	<b>328,569</b>	
<b>1.2</b>	<b>Program Support</b>						
1.2.1		0.5	<b>FWS</b> -- Refuge Water Supply Coordinator, (Co-lead) -- Provide Federal refuge coordination.	9/30/2008	92,424	92,424	0
	<b>Subtotal Costs</b>				<b>92,424</b>	<b>92,424</b>	
<b>1.3</b>	<b>Technical Support</b>						
1.3.1		0.08	<b>Reclamation</b> (Develop environmental documentation for continuation of Gray Lodge WA Deep Well Pumping Reimbursement Agreement.)	11/30/2007	7,846	7,846	
1.3.2		0.1	<b>Reclamation</b> (Analyze data collected from Load Reduction Monitoring Pilot Study at Grassland Wetlands.)	9/30/2008	16,500	16,500	
1.3.3		0.12	<b>Reclamation</b> (Continue design of enhancements for Refuge Water Supply Program Database project.)	9/30/2008	22,000	22,000	
1.3.4		0.1	<b>Reclamation</b> (Provide technical support in groundwater supply investigations.)	9/30/2008	17,000	17,000	
1.3.5		0.2	<b>Reclamation</b> (Continue water quality monitoring at Gray Lodge WA.)	9/30/2008	34,000	34,000	
1.3.6		0.05	IT Support staff (various IT staff), <b>Reclamation</b> (Provide IT support to Refuge Water Supply Program Database.)	9/30/2008	5,000	5,000	
1.3.7		0.1	Contracting Div Support staff (various staff), <b>Reclamation</b> (Process conveyance agreement payments and modifications.)	9/30/2008	12,000	12,000	
1.3.8		0.3	<b>Reclamation</b> (Administer refuge conveyance agreements.)	9/30/2008	59,283	59,283	
1.3.9		0.05	<b>Reclamation</b> (Enter Refuge Water Supply Program data into BORWORKS program.)	9/30/2008	6,774	6,774	
1.3.10		0.32	<b>Reclamation</b> (Administer refuge conveyance agreements.)	9/30/2008	45,397	45,397	
1.3.11		0.34	<b>Reclamation</b> (Download data from POD meters at Gray Lodge WA; maintain meters.)	9/30/2008	42,659	42,659	
1.3.12		0.06	<b>FWS</b> (Administer Giant Garter Snake mitigation in Sacramento Valley)	9/30/2008	12,200	12,200	
	<b>Subtotal Costs</b>		<b>FWS</b>		<b>12,200</b>	<b>12,200</b>	0
	<b>Subtotal Costs</b>		<b>Reclamation</b>		<b>268,459</b>	<b>268,459</b>	
<b>1.5</b>	<b>Evaluations, Studies, Investigations, Research</b>						
1.5.1			<b>Reclamation</b> -- Continue funding support for the Load Reduction Monitoring Study at Grassland Wetlands.	9/30/2008	25,000	25,000	0
	<b>Subtotal Costs</b>				<b>25,000</b>	<b>25,000</b>	
<b>1.12</b>	<b>Monitoring</b>						
1.12.1			<b>Reclamation</b> -- Laboratory water sampling analysis costs related to GLWA Deep Well Reimbursement Agreement.	9/30/2008	21,000	21,000	0
	<b>Subtotal Costs</b>				<b>21,000</b>	<b>21,000</b>	0

## FY 2008 Program Tasks, Description and Budget

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
<b>1.14</b>	<b>Other - Describe</b>						
1.14.1	Conveyance Agrmts		<b>Reclamation</b> conveyance agreements (8) costs. <b>UNFUNDED NEED of \$377,657</b> - Current FY2008 budget is insufficient. The budget will allow the Program to convey 100 percent of Level 2 water to those refuges having full delivery capacity (approximately 365,500 ac-ft). However, this current budget will not meet the funding needs required to convey an anticipated acquisition of 44,000 ac-ft Incremental Level 4.	9/30/2008	<b>7,778,365</b>	<b>7,400,708</b>	
1.14.2	Conveyance Agrmts		<b>FWS</b> conveyance agreement (1) costs.	9/30/2008	651,640	651,640	
1.14.3	Refuge Database - Phase II		<b>Reclamation -- UNFUNDED NEED</b> - Phase II of Refuge Water Database development.	9/30/2008	<b>45,000</b>		
1.14.4	Partnership thru Cooperative Agrmt		<b>Reclamation -- UNFUNDED NEED</b> - Provide funding to DFG for replacement of 3 wells at GLWA.	3/31/2008	<b>750,000</b>		
1.14.5	Mitigation Groundwater Pumping		<b>FWS -- UNFUNDED NEED</b> - Costs for groundwater pumping on giant garter snake habitat. <u>1/</u>	9/30/2008	<b>18,300</b>		
1.14.6	Lift Pumping		<b>FWS -- UNFUNDED NEED</b> - Costs for lift pumping at Colusa NWR. <u>2/</u>	9/30/2008	<b>79,300</b>		
1.14.7	Groundwater Pumping		<b>FWS -- UNFUNDED NEED</b> - Costs for groundwater pumping at Merced NWR during MID outage period. <u>3/</u>	9/30/2008	<b>158,600</b>		
	<b>Subtotal Costs</b>				<b>9,481,205</b>	<b>8,052,348</b>	<b>0</b>
	<b>FWS total cost</b>				<b>1,012,464</b>	<b>756,264</b>	<b>0</b>
	<b>Reclamation total cost</b>				<b>9,216,393</b>	<b>8,043,736</b>	<b>0</b>
	<b>Total Costs</b>				<b>10,228,857</b>	<b>8,800,000</b>	<b>0</b>
	<b>Total FTEs</b>	<b>4.46</b>					
	<p><b>In FY08, the Refuge Conveyance Program has an immediate need of \$377,657 additional funds in order to meet its primary objective of conveying approximately 365,500 acre-feet of L-2 water and an anticipated acquisition of 44,000 acre feet of Incremental L-4 water. A total overall program need of \$1,428,857 additional funds is required to meet all identified objectives for this year (\$1,428,857 includes the \$377,657 required for full conveyance of an anticipated 44,000 acre-feet of acquired Incremental L-4 water). A portion of the FY08 unfunded need has the potential to be covered by prior year unliquidated funds from Program agreement(s).</b></p> <p><u>1/</u> Actual project cost is \$15,000 plus \$3,300 (FWS overhead burden assessment of 22%).</p> <p><u>2/</u> Actual project cost is \$65,000 plus \$14,300 (FWS overhead burden assessment of 22%).</p> <p><u>3/</u> Actual project cost is \$130,000 plus \$28,600 (FWS overhead burden assessment of 22%).</p>						

## Budget Breakout

Task	Agency	FTE	LABOR			CONTRACTS		BOR Misc. Costs	Total Costs
			Direct Salary and Benefits Costs <u>1/</u>	Admin Costs on Salary & Benefits <u>1/</u>	FWS O/H Burden Assessment: 22% of Direct Salary/Bene + Admin Costs <u>2/</u>	Contract Costs	Contract Costs FWS O/H Burden Assessment: 6% <u>2/</u>		
1.1 Program Management	FWS								
	BOR	2.2	183,976	135,593				9,000	328,569
1.2 Program Support	FWS	0.5	31,061	44,697	16,667		0		92,425
	BOR								
1.3 Technical Support	FWS	0.06	4,100	5,900	2,200		0		12,200
	BOR	1.76	147,085	102,550				18,824	268,459
1.5 Studies, Evaluations, Investigations, Research	FWS								
	BOR					25,000			25,000
1.12 Monitoring	FWS								
	BOR					21,000			21,000
1.14 Other	FWS					614,755	36,885		651,640
	BOR					7,400,707			7,400,707
FWS Total Costs		0.56	35,161	50,597	18,867	614,755	36,885		756,265
BOR Total Costs		3.96	331,061	238,143		7,446,707		27,824	8,043,735
TOTAL ALL		4.52	366,222	288,740	18,867	8,061,462	36,885	27,824	8,800,000

1/ For FWS only: The FWS develops a bio-rate which is the combination of both the salary/benefit and related administrative costs. The FWS simple definition reads, "It is an average \$\$ rate that is developed and used for estimating project costs. It incorporates a biologist's salary and benefits, supervisory, clerical and biologist support costs and all other office operating costs related to completing project tasks.

2/ FWS assesses an O/H Burden charge of 6% on all contracts/agreements related to budget object codes starting with 25, 41, and 32, and a charge of 22% on costs under all other budget object codes.

## CVPIA 5-Year Budget Plan FY 2009 - 2103

(\$ Thousands)

Funding Source	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
W&RR						0
RF	10,073	10,689	11,092	11,535	11,997	55,386
State						0
Calfed						0
Total	10,073	10,689	11,092	11,535	11,997	55,386

Note: The FY2009 – 2013 Budget Plan provides estimates of capability only. The W&RR Appropriations are displayed as amounts that might be reasonably appropriated each year. These figures do not reflect the future Congressional Appropriations process. All of these estimates will be adjusted annually as RF collections are realized.

Major activities planned for FY2009-2013:

FY2009: Convey 100% of Level 2 water to those refuges having full delivery capacity, and convey full amount of projected acquired Incremental Level 4 water.

FY2010: Same major activities for refuge water conveyance as planned for FY2009.

FY2011: Same major activities for refuge water conveyance as planned for FY2010.

FY2012: Same major activities for refuge water conveyance as planned for FY2011.

FY2013: Same major activities for refuge water conveyance as planned for FY2012.