

**August 5, 2005**  
**Work Plan for Fiscal Year 2006**

**I. Refuge Water Supply Program; Refuge Water Conveyance (Wheeling)  
 Component CVPIA Sections 3406(d)(1),(2) and (5)**

**II. Responsible Entities**

	<b>Agency</b>	<b>Staff Name</b>	<b>Role</b>
Lead	USBR	Dan Meier	Refuge Water Conveyance Program Manager
Co-Lead	USFWS	Dale Garrison	Refuge Water Supply Coordinator

The Refuge Water Supply Program has three components: water acquisition, water conveyance (wheeling) and facilities construction. This work plan covers water conveyance [Refuge Water Conveyance (Wheeling) Program] as well as coordination between the other two components. The refuge water acquisition component is covered in the Water Acquisition Program work plan and the refuge facilities construction component is covered in the Long-Term Facilities Construction Program and the San Joaquin Basin Action Plan Program work plans.

**III. Program Objectives for FY 2006**

The Refuge Water Supply Program endeavors to meet the mandate of Section 3406(d)(1), (2), and (5) of the 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.

**IV. Status of the Program**

The Refuge Water Conveyance (Wheeling) Program (Program) is interconnected with other refuge water supply related programs such as the Water Acquisition Program, Facilities Construction and San Joaquin Basin Action Plan. The Program conveys set quantities of water based on refuge water supply contracts using cooperative agreements with wheeling entities using Project or acquired water. There are allocations for both the 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 the Reclamation Central Valley Operations Office (CVO) and the Water Acquisition Program (WAP) announce the actual 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 Interagency Refuge Water Management Team (IRWMT). The IRWMT is organized and chaired by Reclamation, and includes Program co-lead U.S. Fish and Wildlife Service (USFWS), and cooperating entities Grassland Water District (GWD)

and the California Department of Fish and Game (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, the refuge water supply contracts between Reclamation and GWD, USFWS, and CDFG identify the requirements of each party to the contract, which includes the quantities of Level 2 and Incremental Level 4 water supplies mandated by the CVPIA to be provided by USBR on an annual basis. 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 Grassland Resource Conservation District, the district's privately-owned and managed wetlands. The costs shown in this Work Plan under conveyance cooperative agreement and water supply contract section represent the calculated costs of conveying the quantities of water identified in the contracts.

To meet the mandate of the CVPIA, ten long-term (7-50 years) conveyance cooperative agreements are currently in place and are administered by the Refuge Water Conveyance Program. The long-term agreements are with San Luis Canal Company (SLCC) (aka Henry Miller Reclamation District) (two agreements), Central California Irrigation District (CCID), GWD, San Luis & Delta-Mendota Water Authority (SLDMWA), Buena Vista Water Storage District (BVWSD), California Department of Water Resources (DWR), Biggs-West Gridley Water District (BWGWD), Tehama-Colusa Canal Authority (TCCA), and Glenn-Colusa Irrigation District (GCID).

The Reclamation area offices manage a significant portion of the agreement negotiation. The South Central California Area Office (SCCAO), including Tracy office, manages DWR, BVWSD, SLCC, GWD, CCID, and SLDMWA cooperative agreements. The Northern California Area Office (NCAO), Willows office, manages GCID, BWGWD and TCCA cooperative agreements.

## **V. FY 2005 Accomplishments**

1. Delivered Level 2 and Incremental Level 4 quantities of water per the refuge water supply contracts according to the delivery schedules provided by GWD, USFWS, and CDFG. Based on Water Year 2005 (March 1, 2005, thru February 28, 2006), approximately 377,034 AF Level 2 water and approximately 66,762 AF Incremental Level 4 water are projected to be delivered to refuge boundaries.
2. Worked with the Interagency Refuge Water Management Team (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.
3. New 7-year contract was executed with California State Department of Water Resources for conveyance of water deliveries to Kern NWR.

4. Continued development of an integrated database for refuge water supply accounting, delivery scheduling, tracking and invoicing. Contract advertised for Contract IT Oracle Programmer for purpose of completing database design. Expect contract award by September, 2005.
5. Transitioned from fiscal year funding periods (October thru September of following year) to contract water year funding periods (March thru February of following year) on all Reclamation conveyance agreements.
6. Coordinated with CVO, WAP, and the Federal, State and private refuges on water needs and delivery schedules to ensure that contract obligations were met. CVO was responsible for providing Level 2 water supplies and the Water Acquisition Program component was responsible for acquiring Incremental Level 4 supplies.
7. Negotiated a second groundwater pumping reimbursement agreement with California State Department of Fish and Game to supplement Level 2 surface water supplies up to full Level 2 allocation for the Gray Lodge Wildlife Area. Additionally, negotiated an amendment to extend performance period, with further extensions expected through contract water year 2008, after which the Reclamation-contracted facilities construction at Biggs-West Gridley Water District should be completed, with BWGWD providing conveyance of full Level 2 and Incremental Level 4 water supplies.
8. Final Criteria for Refuge Water Management Plans (Criteria) made available to public in October, 2004.
9. Supported start-up work on the Load Reduction Monitoring Study at Grassland Wetlands. Involves wildlife studies of modified water management of Grassland Resource Conservation District wetlands to minimize San Joaquin River water quality impacts. These efforts have potential application for development of water quality Best Management Practices (BMPs) for various wildlife refuges in the San Joaquin River Basin.
10. Participated with Water Acquisition Program in the investigation for potential of using groundwater resources, including conjunctive use, to augment Incremental Level 4 supplies.
11. Developed the "Invoice Assistant" program to assist SCCAO Tracy Office with the complex process of reconciling monthly water delivery invoices from CCID, SLCC, GWD, and SLDMWA, with monthly refuge water delivery reports.

## VI. Tasks, Costs, Schedules and Deliverables

### A. Narrative Explanation of Tasks.

1. *Program Management.* (Total of 5.12 FTEs.)  
Continue overall development, coordination and budget oversight of the Refuge Water Conveyance Program.
- 1.1 *Program Management [Reclamation Regional Office (R.O)].*  
Initiate and track FY06 obligations; monitor expenditures of funds. Monitor specific conveyance cooperative agreements and reimbursement agreements obligations in coordination with area offices staff, R.O. contracting division, delivering entities, refuge managers and IRWMT. Reconcile and process

- invoices and track invoice payments.
- 1.1.1 *Program Management (Reclamation SCCAO Fresno Office).*  
Initiate and monitor FY06 conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff, Reclamation R.O. Contracting Division, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments. Develop FY07 refuge water conveyance budget.
  - 1.1.2 *Program Management (Reclamation SCCAO Tracy Office).*  
Initiate and monitor FY06 conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff, Reclamation R.O. Contracting Division, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments. Develop FY07 refuge water conveyance budget
  - 1.1.3 *Program Management (Reclamation NCAO Willows Office).*  
Initiate and monitor FY06 conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff, Reclamation R.O. Contracting Division, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments. Develop FY07 refuge water conveyance budget
  - 1.1.4 *Program Management – Gray Lodge WA Reimbursement Agreement (Reclamation R.O.)*  
Monitor Gray Lodge Deep Well Pumping Reimbursement agreement obligations in coordination with CDFG, and refuge manager. Reconcile and process invoices and track invoice payments.
  - 1.1.5. *Gray Lodge WA Reimbursement Agreement (Reclamation R.O.).*  
Negotiate and execute amendment to Gray Lodge Deep Well Pumping Reimbursement Agreement with California Department of Fish and Game extending the term for an additional 12 months.

The Refuge Water Conveyance Program uses a temporary reimbursement agreement with California Department of Fish and Game to reimburse for deep well pumping costs at the Gray Lodge Wildlife Area (Gray Lodge WA). The purpose of groundwater pumping is to supplement Level 2 surface water deliveries up to full Level 2 allocation requirements established in CVPIA under 3406(d). A long-term water conveyance and facility construction agreement with Biggs-West Gridley Water District (BWGWD) was executed on September 23, 2003, to convey Level 2 and Incremental Level 4 surface water to Gray Lodge WA. The agreement establishes minimum water delivery amounts during the five year conveyance facilities design and construction phase, which are significantly below the full Level 2 allocation for Gray Lodge, with no Incremental Level 4 deliveries. Groundwater pumping from wells located on the refuge is used to supplement Level 2 water supplies during the construction phase of the BWGWD agreement. Reclamation is responsible to assure full Level 2

water allocation is delivered to the boundary of Gray Lodge WA annually. Reclamation Refuge Water Conveyance Program manages this agreement. Upon completion of facilities construction, BWGWD will be able to convey full Level 2 and Incremental Level 4 allocations to Gray Lodge WA.

- 1.1.6 *Mendota Wildlife Area Reimbursement Agreement (Reclamation R.O.)*  
Negotiate a reimbursement agreement with CDFG to cover costs of conveyance utilizing a temporary alternate conveying entity during the “down” times of the Mendota Pool. This action will be taken pursuant to Reclamation’s responsibility to meet full Level 2 water needs of the refuges.

Delivery of Level 2 water supplies to the Mendota Wildlife Area is periodically interrupted when the Mendota Pool is drawn down due to unexpected and needed maintenance, which has been performed during the month of December. The drawing down of Mendota Pool has typically occurred every other year; however, this event has occurred for the last two consecutive years. Due to the age and condition of the Mendota Dam, the possibility exists that the frequency of a “down event” will increase, perhaps more than once in a water year. During these “down” times, the refuge manager must coordinate Level 2 water deliveries with a non-contract water district using an alternate conveyance route. Reclamation does not have an agreement in place with a conveying entity providing an alternate conveyance system to deliver Level 2 water supplies to Mendota WA during these “down” periods. Thus, conveyance fees are charged to CDFG for this temporary conveyance of water to Mendota WA.

- 1.1.7 *Gray Lodge WA Water Accounting (Reclamation R.O.)*  
Develop standard water accounting for invoicing purposes related to Level 2 and future Incremental Level 4 water deliveries at Gray Lodge Wildlife Area. Analyze various water accounting alternatives; identify one systematic equitable water accounting method for water deliveries to Gray Lodge WA, and incorporate into conveyance administration.
- 1.1.8 *Budget Monitoring and Development (Reclamation R.O.)*  
Monitor FY06 refuge water conveyance budget; develop FY07 operating budget in accordance with work plan. Prepare work plan based on identified goals and estimated funding needs for FY07. Prepare FY09-13 Activity Plan. Develop FY06 accomplishment report.
- 1.1.9 *Refuge Water Database Program (Reclamation R.O.)*  
Continue development of an integrated database for refuge water supply accounting, delivery scheduling, tracking and invoicing. Refuge Water Database is expected to be operational in CY2006 for internal Reclamation use on a client-server base, with projected integration to web-base utilization extending access to various stakeholders, including refuge managers, by CY2007.

- 1.1.10 *Refuge Water Database Marketing Plan (Reclamation R.O.)*  
Develop marketing plan incorporating current and future developmental and operational costs for Refuge Water Database Program. Reclamation Business Resource Center (BRC) extends their requirements for marketing plans (financial plans) to computer database development projects in order to track developmental and incremental costs, along with establishing needs for software security plan development.
- 1.1.11 *Incremental Level 4 Cost Share Development (Reclamation R.O.)*  
Continue to formulate current cost share apportionment for the State of California related to Level 4 water supplies, including water acquisition, certain conveyance construction, and water deliveries costs. CVPIA Section 3406(d)(3) establishes cost share requirements for the State of California associated with implementation of 3406(d)(2) covering Incremental Level 4 water acquisitions and conveyance for the refuges. Continue research and development of systematic approach to collection and documentation of expenditure data and in-kind service documentation between both agencies in establishing cost share amounts. Coordinate efforts with CDFG.
- 1.1.12 *Groundwater Study (Reclamation R.O.)*  
Continue participation in the Phase II process of the long range planning study “Evaluation of Groundwater Potential for Level 4 Refuge Water Supplies”. The initial study was issued in July 2004 and identified groundwater data needs, refuges with the highest potential to use onsite groundwater to meet Incremental Level 4 water needs, and potential short-term and long-term implementation. Phase II of this study continues in FY06.
- 1.2 *Budget Monitoring and Development (FWS)*  
FWS Regional Office staff monitor the FWS portion of FY06 Refuge Water Conveyance budget; track FY06 obligations; monitor expenditures; develop FWS portion of FY07 conveyance budget. Monitor conveyance cooperative agreement obligations in coordination with FWS R.O. contracting staff, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments.
- 1.3 *Water Quality Monitoring and Groundwater Data at Gray Lodge WA – Technical Support (Reclamation R.O. MP-157)*  
Continue water quality monitoring at Gray Lodge WA pursuant to terms of Gray Lodge Deep Well Pumping Reimbursement Agreement between Reclamation and CDFG. This agreement includes a provision covering responsibilities between both parties; one specific to Reclamation is the continuance of water quality monitoring of both well water and surface water in order to determine what effects deep well pumping may have on water quality. Continue expanding the baseline data development.
- 1.3.1 *Groundwater Data for San Joaquin Valley Refuges - Technical Support (Reclamation R.O. MP-200)*  
Continue groundwater pumping data collection to build upon existing data.

Refuge Water Supply Program continues to investigate groundwater resources potential to augment Incremental Level 4 supplies relative to those refuges in the San Joaquin Valley (SJ Valley).

1.3.2 *Water Quality Monitoring for San Joaquin Valley Refuges – Technical Support (Reclamation R.O. MP-157).*

Refuges located in the San Joaquin Valley embarked upon development of BMPs in FY05, with emphasis on water discharges into San Joaquin River and related salinity issues. Implement certain water quality sampling and monitoring to expand on existing water quality data in support of BMPs development.

1.3.3 *Refuge Water Database Design – Technical Support (Reclamation R.O. MP-420).*

Continue design of Refuge Water Database Program and coordination of design interpretation with Contract Oracle IT Programmer employee and Refuge Water Database Team.

1.3.4 *IT Staff Oracle Support – Technical Support (Reclamation R.O. MP-3100).*

Reclamation IT staff provide information transfer to Contract Oracle IT Programmer employee, with some Refuge Water Database project support.

1.4 *Contracting Support (Reclamation R.O. MP-3800).*

Continue processing funding obligation requisitions related to conveyance cooperative agreements, agreement modifications, and final invoice payments for Reclamation-led projects.

2. *Program Administration – Cooperative Agreements and Water Supply Contracts Negotiation and Administration (Reclamation and FWS).*

Manage existing long-term, interim and negotiable new long-term conveyance agreements and assist with facility improvement (construction) agreements with cooperating entities.

Using cooperative agreements as the funding mechanism, the Refuge Water Conveyance Program reimburses cooperating entities for conveying Level 2 and Incremental Level 4 water to the refuges. The area offices manage a significant portion of the conveyance agreement administration. The SCCAO, including the Tracy office, manages DWR, BVWSD, SLCC, GWD, CCID, and SLDMWA cooperative agreements. The NCAO, Willows office, manages the GCID, BWGWD and TCCA cooperative agreements. FWS manages one of the two cooperative agreements with SLCC.

Using water supply contracts, the program has agreed to provide certain quantities of water to refuges. Contract administration consists of coordinating with CVO office, WAP and the refuges on water needs and delivery schedules to ensure the contract obligations are met. CVO is responsible for providing Level 2 water supplies and the Water Acquisition Program is responsible for acquiring Incremental Level 4 supplies.

Program funding is organized in two categories - program management, and conveyance cooperative agreements and water supply contract administration. The \$7,800,000 total program budget will be split as follows:

**USBR**

\$ 571,612 program management  
\$6,066,941 wheeling agreements  
\$6,638,553 Total

**USFWS**

\$346,207 program management  
\$815,240 wheeling agreements  
\$1,161,447 Total

The majority of the funds allocated to this program, approximately 88 percent, will be used for conveyance cooperative agreements and water supply contract administration; the program reimburses water delivering entities using cooperative agreements for costs of conveying Level 2 and Incremental Level 4 water supplies through Federal, State, and private water distribution systems to the refuges. Area office staff is responsible for requesting annual conveyance agreement budget and expending funds based on water district-submitted invoices for wheeling charges.

For FY06 the program expects to wheel approximately 100 percent of Level 2 in both the Sacramento and the San Joaquin Valleys. For Incremental Level 4 water, the program expects to wheel limited quantities (approximately 6,300 AF of permanent water rights supplies) in the Sacramento Valley. Limited Level 4 water acquisitions will most likely be allocated for delivery to refuges within the San Joaquin Valley. Based on the current budget for refuge water conveyance (wheeling) only about 48,000 AF of water could be conveyed to refuges in the San Joaquin Valley. This is approximately 50% of the required Incremental Level 4. Conveyance facility delivery constraints at the Mendota, Pixley and East Bear refuges prohibit full Level 4 deliveries.

- 2.1.1 *Conveyance Agreements Payments (Reclamation SCCAO Fresno Office).* Review and reconcile invoices from conveying entities, calculate refuge water deliveries and losses, and process invoices for payments.
- 2.1.2 *Conveyance Agreements Payments (Reclamation SCCAO Tracy Office).* Review and reconcile invoices from conveying entities, calculate refuge water deliveries and losses, and process invoices for payments.

- 2.1.3 *Conveyance Agreements Payments (Reclamation NCAO Willows Office).*  
Review and reconcile invoices from conveying entities, calculate refuge water deliveries and losses, and process invoices for payments.
- 2.1.4 *Reimbursement Agreements Payments (Reclamation R.O.).*  
Review and reconcile invoices from CDFG, calculate refuge groundwater deliveries, and process invoices for payments
- 2.2 *Conveyance Agreement Payments (FWS R.O.).*  
Review and reconcile invoices from conveying entities, calculate refuge water deliveries and losses, and process invoices for payments.
- 3. *Interagency Coordination (Reclamation R.O.)*  
The program lead (Reclamation) organizes and chairs the Interagency Refuge Water Management Team (IRWMT) meetings. This includes coordination with the program partner, USFWS, and with cooperating entities, Grassland Water District (GWD), and the California Department of Fish and Game (CDFG). The team will coordinate and develop the annual refuge water delivery schedule and facilitates ongoing water management issues.
- 4. *Program Planning (Reclamation R.O.)*  
Program planning is necessary to ensure the program meets both long-term and short-term refuge water supply needs. The program must comply with all Federal and State laws, monitor program progress, maintain adequate records and provide information to interested parties. Planning includes NEPA compliance, accounting and audits, IRWMT coordination, field monitoring, Level 2 and Incremental Level 4 scheduling, WORKS database modifications, Internet applications and website, and refuge facilities maps.
  - 4.1 *Website – Program Planning (Reclamation R.O.).*  
Update existing Refuge Water Supply website; explore with MP-700 moving majority of Refuge Water Supply web information to MP-410 website; coordinate with the WAP to examine the potential to merge program information onto the WAP public website that can be accessed by the Refuge Managers and the delivering Districts.
  - 4.2 *Mapping – Program Planning (Reclamation R.O.).*  
Build on existing GIS maps to develop detailed maps of the Refuges and their associated existing and potential conveyance systems.
  - 4.3 *NEPA Documentation – Program Planning (Reclamation R.O.).*  
Initiate NEPA documentation development to cover anticipated term

extension of Gray Lodge Deep Well Pumping Reimbursement Agreement thru WY2008

5. *Pilot Study Funding (Reclamation R.O.).*  
The Load Reduction Monitoring Study at Grassland Wetlands involves wildlife studies of modified water management of Grassland Resource Conservation District wetlands to minimize San Joaquin River water quality impacts. These efforts have potential application for development of water quality BMPs for various wildlife refuges in the San Joaquin River Basin. Program supports continued research and monitoring by Reclamation environmental specialist involved in this study.

#### **Additional Funding Needs**

The budget of \$7,800,000 for the Program for FY06 will meet the conveyance requirements based on the quantities of full Level 2 and limited quantities of Incremental Level 4 (approximately 6,300 AF in Sacramento Valley and 48,000 AF in the San Joaquin Valley) for WY06 (March 1, 2006 thru February 28, 2007). However, it should be noted that additional Incremental Level 4 water supplies acquired beyond these amounts could not be conveyed without augmenting the current budget.

## B. Schedule and Deliverables

#	Task	Dates		Deliverable
		Start	Complete	
1.	Program Management (Reclamation & FWS)	10/01/05	09/30/06	Refuge Water Conveyance Program development, coordination and budget oversight.
1.1	Program Management (Reclamation R.O.)	10/01/05	09/30/06	Reclamation R.O. - Track FY06 program obligations and expenditures. Monitor cooperative agreement obligations in coordination with area office staff, R.O. Contracting Division, delivering entities, refuge managers and IRWMT.
1.1.1	Program Management (Reclamation SCCAO Fresno Office)	10/01/05	09/30/06	SCCAO (Fresno office) – Monitor Conveyance Cooperative Agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff, Reclamation R.O. Contracting Division, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments.
1.1.2	Program Management (Reclamation SCCAO Tracy Office)	10/01/05	09/30/06	SCCAO (Tracy office) – Monitor Conveyance Cooperative Agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff, Reclamation R.O. Contracting Division, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments.
1.1.3	Program Management (Reclamation NCAO Willows Office)	10/01/05	09/30/06	NCAO (Willows office) – Monitor Conveyance Cooperative Agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff, Reclamation R.O. Contracting Division, delivering entities, refuge managers and IRWMT. Reconcile and process invoices and track invoice payments.
1.1.4	Gray Lodge WA Reimbursement Agrmt (Reclamation R.O.)	10/01/05	09/30/06	Reclamation R.O. – Monitor Gray Lodge Deep Well Pumping Reimbursement agreement obligations in coordination with CDFG, refuge manager and IRWMT. Reconcile and process invoices and track invoice payments.
1.1.5	Amendment to Gray Lodge WA Reimb. Agrmt (Reclamation R.O.)	10/01/05	12/31/05	Negotiate and execute amendment to Gray Lodge Deep Well Pumping Reimbursement Agreement for 12-month term extension.
1.1.6	Mendota Wildlife Area Reimbursement Agrmt (Reclamation R.O.)	10/01/05	12/31/05	Negotiate and execute a reimbursement agreement with CDFG for Mendota Wildlife Area.
1.1.7	Gray Lodge Water Accounting (Reclamation R.O.)	10/01/05	02/28/06	Analyze various water accounting alternatives; identify one systematic equitable water accounting method for water deliveries to Gray Lodge WA, and incorporate into conveyance administration.
1.1.8	Budget Monitoring & Development (Reclamation R.O.)	10/01/05	09/30/06	Reclamation R.O. – monitor FY06 Refuge Water Conveyance Program budget; develop FY07 budget.
1.1.9	Refuge Water Database Program (Reclamation R.O.)	10/01/05	09/30/06	Continue development of an integrated database for refuge water supply accounting, delivery scheduling, tracking and invoicing. Refuge Water Database is expected to be operational in CY2006 for internal Reclamation use. Administer contract for completion of database code by contract Oracle IT Programmer employee.

#	Task	Dates		Deliverable
		Start	Complete	
1.1.10	Refuge Water Database Marketing Plan (Reclamation R.O.)	10/01/05	01/31/06	Develop 'marketing' finance plan incorporating current and future developmental and operational costs for Refuge Water Database Program.
1.1.11	Incremental Level 4 Cost Share Development (Reclamation R.O.)	10/01/05	09/30/06	Continue to formulate current cost share apportionment for the State of California related to L-4 water supplies. Continue research and development of systematic approach to collection of expenditure data and in-kind service documentation between both agencies in establishing cost share amounts.
1.1.12	Groundwater Study (Reclamation R.O.)	10/01/05	09/30/06	Participate in efforts of Phase II of groundwater study.
1.2	Budget Monitoring & Development (FWS Regional Office)	10/01/05	09/30/06	FWS Regional Office – monitor FWS portion of FY06 Refuge Water Supply Program budget; develop FWS portion of FY07 budget. Monitor conveyance agreement obligations.
1.3	Water Quality Monitoring and Groundwater Data at Gray Lodge WA - Technical Support (Reclamation R.O.)	10/01/05	09/30/06	Continue water quality monitoring at Gray Lodge WA pursuant to terms of Gray Lodge Deep Well Pumping Reimbursement Agreement. Continue expanding baseline data on Gray Lodge WA wells and groundwater pumping effects.
1.3.1	Groundwater Data for SJ Valley refuges – Technical Support (Reclamation R.O.)	10/01/05	09/30/06	Groundwater pumping data collection and research related to San Joaquin Valley refuges in the investigation for potential of using groundwater resources to augment Incremental Level 4 supplies
1.3.2	Water Quality Monitoring for SJ Valley refuges - Technical Support (Reclamation R.O.)	10/01/05	09/30/06	Water quality monitoring related to development of BMPs by San Joaquin Valley refuges.
1.3.3	Refuge Water Database Design - Technical Support (Reclamation R.O.)	10/01/05	09/30/06	Continue design of Refuge Water Database Program and coordination of design interpretation with Contract Oracle IT Programmer employee.
1.3.4	IT Staff Oracle Support - Technical Support (Reclamation R.O.)	10/01/05	09/30/06	Reclamation IT staff provide information transfer to Contract Oracle IT Programmer employee, with some Refuge Water Database Project support.
1.4	Contracting Support (Reclamation R.O.)	10/01/05	09/30/06	Funding obligations, modifications, and payments processing related to cooperative agreements and contracts for Reclamation-led projects.
2.	Program Administration - Conveyance and Reimbursement Agreements and Related Costs (Reclamation R.O. & FWS Regional Office)	10/01/05	09/30/06	Conveyance cooperative agreements and reimbursement agreements administration and conveyance agreements costs.
2.1.1	Conveyance Agreement Payments (Reclamation SCCAO Fresno Office)	10/01/05	09/30/06	SCCAO (Fresno office) – Conveyance cooperative agreements payments.

#	Task	Dates		Deliverable
		Start	Complete	
2.1.2	Conveyance Agreement Payments (Reclamation SCCAO Tracy Office)	10/01/05	09/30/06	SCCAO (Tracy office) – Conveyance cooperative agreements payments.
2.1.3	Conveyance Agreement Payments (Reclamation NCAO Willows Office)	10/01/05	09/30/06	NCAO (Willows office) – Conveyance cooperative agreements payments.
2.1.4	Reimbursement Agreement Payments (Reclamation R.O.)	10/01/05	09/30/06	Reclamation R.O. – Reimbursement agreements payments.
2.2	Conveyance Agreement Payments (FWS Regional Office)	10/01/05	09/30/06	FWS Regional Office – Conveyance cooperative agreement payments.
3.	Interagency Coordination (Reclamation R.O.)	10/01/05	09/30/06	Interagency Coordination - Reclamation R.O.
4.	Program Planning (Reclamation R.O.)	10/01/05	09/30/06	Ensure program meets both long-term and short-term refuge water supply needs. Ensure program complies with all Federal and State laws, monitor program progress, maintain adequate records and provide information to interested parties.
4.1	Website – Program Planning (Reclamation R.O.)	10/01/05	09/30/06	Update existing Refuge Water Supply website, and coordinate formatting and design changes with MP-700 and WAP.
4.2	Mapping - Program Planning (Reclamation R.O.)	10/01/05	09/30/06	Build on existing GIS maps to develop detailed maps of the Refuges and their associated existing and potential conveyance systems.
4.3	NEPA Documentation - Program Planning (Reclamation R.O.)	10/01/05	09/30/06	Initiate NEPA documentation development to cover anticipated term extension of Gray Lodge Deep Well Pumping Reimbursement Agreement thru WY2008.
5.	Pilot Study Funding (Reclamation R.O.)	10/01/05	09/30/06	Reclamation MP-200 environmental specialist work on Load Reduction Monitoring Study at Grassland Wetlands.

Explanatory Notes: The above referenced long-term (7 to 50 years) cooperative agreements include the requirement to have funds obligated prior to paying invoices for water conveyed to the refuges and wildlife habitat areas. Some of the agreements include monthly invoicing while some include quarterly invoicing. Due to the method of availability of Restoration Funds, as soon as funds are available, the funds can, and will, be obligated against the agreement with the most urgent need of funds.

**C. Summary of Program Costs and Funding Sources**

#	Task	Total Cost	Funding Sources
			RF
<b>1.</b>	<b>Program Management (Reclamation &amp; FWS) (Total)</b>	<b>\$917,819</b>	<b>\$917,819</b>
1.1 - 1.1.12	Program Mgmt (Reclamation)	\$436,613	\$436,613
1.2	Program Mgmt (FWS)	\$346,206	\$346,206
1.3 – 1.3.4	Technical Support (Reclamation)	\$130,000	\$130,000
1.4	Contracting Support (Reclamation)	\$5,000	\$5,000
<b>2.</b>	<b>Program Administration (Reclamation &amp; FWS) (Total)</b>	<b>\$6,882,181</b>	<b>\$6,882,181</b>
2.1.1 – 2.1.4	Conveyance Cooperative Agreement and Water Service Contract Administration (Reclamation)	\$6,066,941	\$6,066,941
2.2	Conveyance Cooperative Agreement and Water Service Contract Administration (FWS)	\$815,240	\$815,240
3.	Interagency Coordination	<u>1/</u>	<u>1/</u>
4.	Program Planning (Reclamation)	<u>1/</u>	<u>1/</u>
5.	Pilot Study Funding	<u>2/</u>	<u>2/</u>
<b>Total Program Budget</b>		<b>\$ 7,800,000</b>	<b>\$7,800,000</b>

Explanatory Notes: In accordance with Section 3406(d)(3) of the CVPIA, the State of California has an obligation through direct reimbursement or equivalent in-kind contributions to cover 25% of the costs related to Incremental Level 4 water supplies provided to the refuges and wildlife habitat areas. Based on historic information, to date, there has been no direct reimbursement to Reclamation by the State of California.

1/ Costs for Interagency Coordination and Program Planning are included in 1.1-1.1.12 “Program Mgmt (Reclamation)”.

2/ Costs of \$50,000 contributed towards pilot study included in 1.3-1.3.4 “Technical Support (Reclamation)” total.

### D. CVPIA Program Budget

#	Task	FTE	Direct Salary and Benefits Costs	Contracts Costs	Miscellaneous Costs	Admin Costs	Total Costs
<b>1.</b>	<b>Program Management (Total)</b>	<b>5.12</b>	<b>\$355,986</b>	<b>\$0</b>	<b>\$106,310</b>	<b>\$365,488</b>	<b>\$827,785</b>
1.1	Program Mgmt (Reclamation R.O.)	1.70	\$107,210	\$0	\$74,165	\$79,210	\$260,585
1.1.1	Program Mgmt (Rec. SCCAO Fresno office)	.25	\$18,948	\$0	\$800	\$17,253	\$37,001
1.1.2	Program Mgmt (Rec. SCCAO Tracy office)	.20	\$18,247	\$0	\$1,200	\$16,422	\$35,869
1.1.3	Program Mgmt (Rec. NCAO Willows office)	.90	\$65,723	\$0	\$3,000	\$39,434	\$108,157
1.1.4 thru 1.1.12	Program Mgmt (Reclamation R.O.)	Included in 1.1 above	--	--	--	--	--
1.2	Budget Monitoring and Development (FWS)	1.30	\$80,191	\$0	\$9,500	\$166,482	\$256,173
1.3 thru 1.3.2	Water Quality & Groundwater Data – Tech. Supp. (Rec. R.O.)	.35	\$25,644	\$0	\$4,755	\$19,601	\$50,000
1.3.3	Database Design – Tech. Supp. (Rec. R.O.)	.12	\$12,196	\$0	\$730	\$7,074	\$20,000
1.3.4	IT Staff Oracle Support – Tech Supp(Rec. R.O.)	.025	\$3,162	\$0	\$0	\$1,838	\$5,000
1.4	Contracting Support (Rec. R.O.)	.025	\$3,163	\$0	\$0	\$1,837	\$5,000
<b>2</b>	<b>Program Administration - Total (Convey. Agrmt Costs)</b>	<b>0.0</b>	<b>\$0</b>	<b>\$6,882,181</b>	<b>\$0</b>	<b>\$90,034</b>	<b>\$6,972,215</b>
2.1.1	Conveyance Agrmts Pymts (SCCAO Fresno)	0.0	\$0	\$302,039	\$0	\$0	\$302,039
2.1.2	Conveyance Agrmts Pymts (SCCAO Tracy)	0.0	\$0	\$4,591,178	\$0	\$0	\$4,591,178
2.1.3	Conveyance Agrmts Pymts (NCAO Willows)	0.0	\$0	\$773,724	\$0	\$0	\$773,724
2.1.4	Conveyance Agrmts Pymts (Rec. R.O.)	0.0	\$0	\$400,000	\$0	\$0	\$400,000
2.2	Conveyance Agrmt Pymts (FWS)	0.0	\$0	\$815,240	\$0	\$90,034	\$905,274
3.	Interagency Coord. (Reclamation R.O.)	Included in 1.1 above	--	--	--	--	--
4. thru 4.3	Program Planning (Reclamation R.O.)	Included in 1.1 above	--	--	--	--	--
5.	Pilot Study Funding for Load Reduction – Grassland Wetlands (Reclamation R.O.)	.25 <b>All #s included in Program Mgmt Totals</b>	\$21,502	\$0	\$9,146	\$19,352	\$50,000
	<b>Reclamation Subtotal</b>	<b>3.82</b>	<b>\$275,795</b>	<b>\$6,066,941</b>	<b>\$96,811</b>	<b>\$199,006</b>	<b>\$6,638,553</b>
	<b>FWS Subtotal</b>	<b>1.30</b>	<b>\$80,191</b>	<b>\$815,240</b>	<b>\$9,500</b>	<b>\$256,516</b>	<b>\$1,161,447</b>
	<b>TOTAL</b>	<b>5.12</b>	<b>\$355,986</b>	<b>\$6,882,181</b>	<b>\$106,311</b>	<b>\$455,522</b>	<b>\$7,800,000</b>

**Table E DRAFT CVPIA 5-Year Budget Plan FY 2007 – 2011**  
**(\$ Thousands)**

Program Description and Section		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total (\$)
	W&RR						
	RF	9,192	9,276	9,522	10,053	10,321	48,334
Refuge Conveyance Program Management and Conveyance Agreement Administration	State						
	Other (identify)						
<b>Total:</b>		9,192	9,276	9,522	10,053	10,321	48,334