

Annual Charter Report

General:

Title	Description
RWSP Administration	Administration of the Refuge Water Supply Program - Conveyance, Construction, and Water Acquisition components.

Authority:

Provision	Percentage	Comments
3406(d)(1)	39	Conveyance of Level 2 water supplies (Reimbursable by water and power users)
3406(d)(2)	6	Conveyance of Incremental Level 4 water supplies (Non-Reimbursable and Subject to Cost Share)
3406(d)(2)	37	Acquisition of Incremental Level 4 water supplies (Non-reimbursable and Subject to Cost Share)
3406(d)(5)	16	Facilities Construction for Level 2 water purposes (Reimbursable by water and power user)
3406(d)(5)	2	Facilities Construction for Incremental Level 4 water purposes (Non-reimbursable and subject to State Cost Share)

No Location IDs Listed

Watershed(s):

Watershed Name
Central Valley-Wide

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	10/1/2014	9/30/2015

No Benefits Listed

Deliverable(s):

Date	Title
11/16/2014	Contract Administration - Monthly
5/15/2015	Operating Budgets
5/15/2015	Annual Work Plans
11/16/2014	Refuge Water Delivery Reports - Monthly
11/16/2014	Water Quality Analysis Reports
10/14/2014	IRWMT Meetings - Monthly
10/1/2014	Contract Modifications
11/27/2014	Accomplishment Reports
10/1/2014	Water Purchase Contracts

Program Priority:	
Rank	Comment
1	Program Priority Comments:

Estimated Cost(s):		
Fiscal Year	Fund	Total
2015	CVPRF	\$1,514,743
2015	SIK	\$77,240
2016	CVPRF	\$1,575,332
2016	SIK	\$77,240

Final Total
\$3,244,555

Partners:	
Partner Name	
FWS	
CDFW	
GWD	

No Related Programs Listed

Narrative:	
Narrative Description	
Administrative management of the Refuge Water Supply Program components of Conveyance, Construction, and Water Acquisition. This includes administration of construction activities to increase conveyance capacity, contracting for Incremental Level 4 water, and administration of various contracts and agreements for the conveyance and delivery of both Level 2 and Incremental Level 4 water to CVPIA refuges.	

Risk Management:		
Risk Description	Likelihood	Risk Impact
Funding Shortfall	1	1

Data Management:	
Description	
Most of the Refuge Water Supply Program records are maintained in MP-410 Resources Management Division. Contract and agreement records are maintained in both MP-3800 Acquisitions Division and MP-410. Administrative costs will be tracked using FBMS and operating budget Excel spreadsheets. FBMS records are maintained electronically in MP-3600. Operating budget records are maintained in MP-410.	

Year	Activity	Activity Description
2015	Administration	Administrative management of the Refuge Water Supply Program.

Resource	Agency	Resource Type	FTE	Total Fund	Description
Pump Labor	FWS	Staff Position	1	CVPRF	Overtime required to operate temporary lift pumps at Sutter NWR during fall. Pumps must be monitored on a 12 to 24-hour cycle for lubrication and diesel refills. (Estimated FTE .02)
CVPIA Program Administration	DFW	Staff Position	1	SIK	Provides State in-kind support in administration and implementation of the Refuge Water Supply Program under CVPIA. (Estimated FTE .4)

Flow/Pump Meter Management	BOR	Staff Position	0.23	CVPRF	Collect delivery data from meters at Gray Lodge Wildlife Area and Bear Creek; perform QA/QC on data and coordinate with other BOR/FWS staff; maintain and calibrate flow meters and groundwater pump meters.
Indirect Costs	BOR	Staff Position	1	CVPRF	Indirect costs for Department of the Interior, Bureau of Reclamation, Area Office, and Regional Office administration.
Personnel Benefits	BOR	Staff Position	1	CVPRF	Personnel benefits including travel and training.
Conveyance Agreement Administration - NCAO	BOR	Staff Position	0.09	CVPRF	Administers north-of-the-Delta refuge water conveyance agreements.
SCCAO - BOR WORKS	BOR	Staff Position	1	CVPRF	Enter data for CVP water delivered to south-of-the-Delta refuges into BOR WORKS, Mid-Pacific Region's database for documenting delivery of CVP water. (Estimated FTE .03)
MP3800 Contracting Support	BOR	Staff Position	1	CVPRF	Develop acquisition, service, and construction contracts. Process conveyance contract and agreement obligations, payments, and modifications. Provide support on the use of the Automated Standard Application for Payments (ASAP) system.
MP3100 Web site Support	BOR	Staff Position	1	CVPRF	Information technology support to the Gray Lodge Wildlife Area (GLWA) flow data Web site, which provides real-time information about surface water deliveries at GLWA. (Estimated FTE .06)
MP450 GIS Support	BOR	Staff Position	1	CVPRF	Printing of Geographic Information System (GIS) maps as requested by the Refuge Water Conveyance Component. (Estimated FTE .04)
MP200 Geology	BOR	Staff Position	1	CVPRF	Hydrogeologist provides assistance including input on project descriptions and monitoring plans.
MP150 Cultural Resources	BOR	Staff Position	1	CVPRF	Provides cultural resources support for refuge water conveyance projects. (Estimated FTE .03)
Resources Division Overhead	BOR	Staff Position	1	CVPRF	Administrative support from Resources Division staff in areas such as budget, contracting, finance, human resources, and information technology,
MP157 Water Quality Monitoring	BOR	Staff Position	1	CVPRF	Implementation and oversight of water quality monitoring (WQM) sites at designated refuges to assure groundwater and recaptured return flows continue to meet regular water quality standards. Provides WQM analysis; reviews water quality reports; provides technical assistance for water acquisitions.

Environmental Specialist	BOR	Staff Position	0.20	CVPRF	Provides environmental support and prepares compliance documents such as Environmental Assessments for refuge conveyance and facilities construction contracts and projects.
Environmental Specialist - Senior	BOR	Staff Position	0.70	CVPRF	Provides environmental support and prepares compliance documents such as Environmental Assessments for water acquisition, refuge conveyance and facilities construction contracts and projects.
Clerical Support - MP410	BOR	Staff Position	0.43	CVPRF	Provides clerical support to Reclamation's RWSP staff.
Supervisory Oversight - MP410	BOR	Staff Position	0.43	CVPRF	Provides supervisory support for Reclamation's RWSP staff.
RWSP Support Specialist	BOR	Staff Position	1	CVPRF	Provides support services for the RWSP. Administers contracts, reconciles invoices, assists with annual work plans and budget preparation. Assists with coordination of refuge delivery schedules. Maintains delivery records for the RWSP. COR for power contracts.
Refuge Facilities Construction Component Manager	BOR	Staff Position	0.70	CVPRF	Manages, provides oversight, and administers construction projects to provide needed conveyance capacity for CVPIA refuges. Oversees planning and construction of facilities to convey full Level 4 refuge water supplies to CVPIA refuges.
Refuge Water Conveyance Component Manager	BOR	Staff Position	1	CVPRF	Manages, provides oversight, and administers the Refuge Water Conveyance Component. Negotiates and administers agreements and contracts for water conveyance and related actions. Leads the IRWMT. Identifies and develops projects to further progress toward performance goals.
Refuge Water Acquisition Component Manager	BOR	Staff Position	0.90	CVPRF	Consults with water rights and water transfer personnel, solicitor's office, etc., to negotiate, prepare, and administer water acquisition contracts for Incremental Level 4 water. Coordinates refuge delivery schedules with refuge partners. Tracks and monitors component obligations and expenditures.
Refuge Water Supply Program (RWSP) Lead	BOR	Staff Position	0.50	CVPRF	Provides Reclamation administrative oversight for all aspects of the RWSP. Provides guidance to technical support personnel on contracting, budget, and environmental issues. Participates in various meetings. Prepares and makes presentations on the RWSP.

Refuge Water Supply Program Co-Lead	FWS	Staff Position	1	CVPRF	Provides biological oversight for all aspects of the Refuge Water Supply Program. Provides guidance to technical support personnel on water contracting, budget, and environmental issues. Participates in various meetings. Prepares and makes presentations on the RWSP.
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Year	Activity	Activity Description
2016	Administration	Administrative management of the Refuge Water Supply Program.

Resource	Agency	Resource Type	FTE	Total Fund	Description
CVPIA Program Administration	DFW	Staff Position	1	SIK	Provides State in-kind support in administration and implementation of the Refuge Water Supply Program under CVPIA. (Estimated FTE .4)
Refuge Water Supply Program (RWSP) Lead	BOR	Staff Position	0.50	CVPRF	Provides Reclamation administrative oversight for all aspects of the RWSP. Provides guidance to technical support personnel on contracting, budget, and environmental issues. Participates in various meetings. Prepares and makes presentations on the RWSP.
Indirect Costs	BOR	Staff Position	1	CVPRF	Indirect costs for Department of the Interior, Bureau of Reclamation, Area Office, and Regional Office administration.
Personnel Benefits	BOR	Staff Position	1	CVPRF	Personnel benefits including travel and training.
Conveyance Agreement Administration - NCAO	BOR	Staff Position	0.09	CVPRF	Administers north-of-the-Delta refuge water conveyance agreements.
SCCAO - BOR WORKS	BOR	Staff Position	1	CVPRF	Enter data for CVP water delivered to south-of-the-Delta refuges into BOR WORKS, Mid-Pacific Region's database for documenting delivery of CVP water. (Estimated FTE .03)
MP3800 Contracting Support	BOR	Staff Position	1	CVPRF	Develop acquisition, service, and construction contracts. Process conveyance contract and agreement obligations, payments, and modifications. Provide support on the use of the Automated Standard Application for Payments (ASAP) system.
MP3100 Web site Support	BOR	Staff Position	1	CVPRF	Information technology support to the Gray Lodge Wildlife Area (GLWA) flow data Web site, which provides real-time information about surface water deliveries at GLWA. (Estimated FTE .06)
MP200 Geology	BOR	Staff Position	1	CVPRF	Hydrogeologist provides assistance including input on project descriptions and monitoring plans

MP450 GIS Support	BOR	Staff Position	1	CVPRF	Printing of Geographic Information System (GIS) maps as requested by the Refuge Water Conveyance Component. (Estimated FTE is .04)
MP150 Cultural Resources	BOR	Staff Position	1	CVPRF	Provides cultural resources support for refuge water conveyance projects. (Estimated FTE .03)
Resources Division Overhead	BOR	Staff Position	1	CVPRF	Administrative support from Resources Division staff in areas such as budget, contracting, finance, human resources, and information technology,
Environmental Specialist - Senior	BOR	Staff Position	0.70	CVPRF	Provides environmental support and prepares compliance documents such as Environmental Assessments for water acquisition, refuge conveyance and facilities construction contracts and projects.
Clerical Support - MP410	BOR	Staff Position	0.43	CVPRF	Provides clerical support to Reclamation's RWSP staff.
MP157 Water Quality Monitoring	BOR	Staff Position	1	CVPRF	Implementation and oversight of water quality monitoring (WQM) sites at designated refuges to assure groundwater and recaptured return flows continue to meet regular water quality standards. Provides WQM analysis; reviews water quality reports; provides technical assistance for water acquisitions.
Supervisory Oversight - MP410	BOR	Staff Position	0.43	CVPRF	Provides supervisory support for Reclamation's RWSP staff.
Environmental Specialist	BOR	Staff Position	0.20	CVPRF	Provides environmental support and prepares compliance documents such as Environmental Assessments for refuge conveyance and facilities construction contracts and projects.
Refuge Facilities Construction Component Manager	BOR	Staff Position	0.70	CVPRF	Manages, provides oversight, and administers construction projects to provide needed conveyance capacity for CVPIA refuges. Oversees planning and construction of facilities to convey full Level 4 refuge water supplies to CVPIA refuges.
RWSP Support Specialist	BOR	Staff Position	1	CVPRF	Provides support services for the RWSP. Administers contracts, reconciles invoices, assists with annual work plans and budget preparation. Assists with coordination of refuge delivery schedules. Maintains delivery records for the RWSP. COR for power contracts.

Refuge Water Conveyance Component Manager	BOR	Staff Position	1	CVPRF	Manages, provides oversight, and administers the Refuge Water Conveyance Component. Negotiates and administers agreements and contracts for water conveyance and related actions. Leads the IRWMT. Identifies and develops projects to further progress toward performance goals.
Refuge Water Acquisition Component Manager	BOR	Staff Position	0.90	CVPRF	Consults with water rights and water transfer personnel, solicitor's office, etc., to negotiate, prepare, and administer water acquisition contracts for Incremental Level 4 water. Coordinates refuge delivery schedules with refuge partners. Tracks and monitors component obligations and expenditures.
Refuge Water Supply Program Co-Lead	FWS	Staff Position	1	CVPRF	Provides biological oversight for all aspects of the Refuge Water Supply Program. Provides guidance to technical support personnel on water contracting, budget, and environmental issues. Participates in various meetings. Prepares and makes presentations on the RWSP.
Pump Labor	FWS	Staff Position	1	CVPRF	Overtime required to operate temporary lift pumps at Sutter NWR during fall. Pumps must be monitored on a 12 to 24-hour cycle for lubrication and diesel refills. (Estimated FTE .02)
Flow/Pump Meter Management	BOR	Staff Position	0.23	CVPRF	Collect delivery data from meters at Gray Lodge Wildlife Area and Bear Creek; perform QA/QC on data and coordinate with other BOR/FWS staff; maintain and calibrate flow meters and groundwater pump meters.

Annual Charter Report

General:

Title	Description
Inc. Level 4 Water Purchases and L2 Exchanges	Purchase of Incremental Level 4 and Exchange of L2 Refuge Water

Authority:

Provision	Percentage	Comments
3406 (d) (2)	100	

No Location IDs Listed

Watershed(s):

Watershed Name
Central Valley-Wide

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	10/1/2014	9/30/2015

Benefit(s):

Metric	Value	Units	Comment
b3 and d2 Refuge: Inc L4 Water Acquisition, including Replacement Water	33259	acre-feet	

Deliverable(s):

Date	Title
5/21/2014	Incremental Level 4 Water

Program Priority:

Rank	Comment
1	

Estimated Cost(s):

Fiscal Year	Fund	Total
2015	CVPRF	\$1,601,795
2015		\$7,029,750
2016	CVPRF	\$8,631,545
2016		\$0

Final Total
\$17,263,090

Partners:
Partner Name
FWS
CDFW
GWD

No Related Programs Listed

Narrative:

Narrative Description
 Purchase water from willing sellers such as the San Joaquin River Exchange Contractors, Grassland WD, Friant Water Users, Santa Clara Valley WD, Kern-Tulare WD and other sources including exchanges of L2 water to increase IL4 supplies.

Risk Management:

Risk Description	Likelihood	Risk Impact
Funding Shortfall	1	1

Data Management:

Description
 Water contract records are maintained in Acquisitions Division, MP-3800 and in Resources Mgt. Division, MP-410. Incremental Level 4 delivery and losses data is maintained in Resources Mgt. Divison, MP-410.

Year	Activity	Activity Description
2015	Acquisition	Execute contracts for purchase of Incremental Level 4 refuge water and exchange of L2 water to acquire IL4 water.

Resource	Agency	Resource Type	FTE	Total	Fund	Description
Water Purchase Contract with Santa Clara Valley Water District	BOR	Contracts and Agreements Contract			CVPRF	Acquire approximately 3,759 A/F of water from Santa Clara Valley Water District at \$200 A/F to meet IL4 supplies
Refuge L2 Exchanges to Acquire IL4	BOR	Contracts and Agreements Contract				Various L2 exchanges are anticipated that would result in additional IL4 water being made available. Costs to negotiate and administer agreements would be covered under admin costs - no additional costs are anticipated.
Water Purchase Contract with Grassland WD	BOR	Contracts and Agreements Contract			CVPRF	Acquire 10,000 A/F of groundwater from Grassland WD to be used to meet Inc. L4 supplies
Water Purchase Contract with San Joaquin River Exchange Contractors	BOR	Contracts and Agreements Contract				Acquire 19,500 A/F of water from the San Joaquin River Exchange Contractors at \$360.50 based on a 40% SOD Ag Allocation. Purchase is to meet IL4 supplies

Year	Activity	Activity Description
2016	Acquisition	Execute contracts for purchase of Incremental Level 4 refuge water and exchange of L2 water to acquire IL4 water.

Resource	Agency	Resource Type	FTE	Total	Fund	Description
Refuge L2 Exchanges to Acquire IL4	BOR	Contracts and Agreements Contract				Various L2 exchanges are anticipated that would result in additional IL4 water being made available. Costs to negotiate and administer agreements would be covered under admin costs - no additional costs are anticipated
Water Purchase Contract with San Joaquin River Exchange Contractors	BOR	Contracts and Agreements Contract			CVPRF	Acquire 19,500 A/F of water from the San Joaquin River Exchange Contractors at \$360.50 based on a 40% SOD Ag Allocation. Purchase is to meet IL4 supplies.
Water Purchase Contract with Grassland WD	BOR	Contracts and Agreements Contract			CVPRF	Acquire 10,000 A/F of groundwater at \$85 A/F to meet IL4 supplies from Grassland Water District
Contract with Santa Clara Valley Water District	BOR	Contracts and Agreements Contract			CVPRF	Acquire approximately 3,759 A/F of water from Santa Clara Valley Water District for \$200 A/F to meet IL4 supplies

Annual Charter Report

General:

Title	Description
Level 2 Refuge Water Conveyance	Conveyance of surface water and groundwater pumping for refuges

Authority:

Provision	Percentage	Comments
3406(d)(1)	100	

No Location IDs Listed

Watershed(s):

Watershed Name
Central Valley-Wide

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	3/1/2015	2/29/2016

Benefit(s):

Metric	Value	Units	Comment
Conveyance: L2 Refuge Water Convey (annual)	10280	acre-feet	L2 Groundwater Pumped for WY2015
Conveyance: L2 Refuge Water Convey (annual)	279934	acre-feet	L2 Surface Water Conveyance for WY2015
Conveyance: L2 Refuge Water Convey (annual)	44852	acre-feet	L2 Water from Diverse Sources at no Cost to RWSP for WY2015

Deliverable(s):

Date	Title
3/1/2015	Level 2 Water Conveyance to CVPIA Refuges

Program Priority:

Rank	Comment
2	Refuge Conveyance Program priority: 1 = labor & overhead 2 = L-2 conveyance 3 = Inc. L-4 conveyance

Estimated Cost(s):

Fiscal Year	Fund	Total
2015	CVPRF	\$11,488,400
2015	SIK	\$81,000
2016	CVPRF	\$15,352,211
2016	SIK	\$81,000

Final Total
\$27,002,611

Partners:
Partner Name
FWS
CDFW
GWD

No Related Programs Listed

Narrative:

Narrative Description
 Conveyance of Level 2 refuge water supplies to CVPIA refuges. This includes CVP surface water and water from diverse sources such as groundwater, mitigation water, water rights water, riparian rights water, and accretion water.
 -- FY15 represents L-2 water conveyance that can be provided within the confines of the FY15 budget, which equates to conveyance of approximately 80% of full L-2 supplies.
 -- FY16 represents projected costs to convey full L-2 supplies to those refuges with sufficient external conveyance capacity.

Risk Management:

Risk Description	Likelihood	Risk Impact
Funding shortfall	1	2
Conveyance contractor default	1	3

Data Management:

Description
 Contract and agreement records are maintained in Acquisitions Division, MP-3800 and Resources Division, MP-410. Delivery data is maintained in MP-410 on the J Drive. Flow data for Gray Lodge Wildlife Area surface water is available on the internet at:
<http://www.usbr.gov/mp/glwa/index.cfm>

Year	Activity	Activity Description			
2015	Implementation	L2 Water from Diverse Sources			
Resource	Agency	Resource Type	FTE	Total Fund	Description
Water from Diverse Sources at No Cost to RWSP	BOR	Contracts and Agreements Memorandum of Agreement	0	CVPRF	Level 2 surface water supplies provided from diverse sources with NO conveyance cost or power cost to the Refuge Water Conveyance Program. Sutter NWR 16,552 AF riparian rights; Gray Lodge WA 18,800 AF water rights; and Merced NWR 9,500 AF mitigation water from Merced ID under FERC license.

Year	Activity	Activity Description			
2015	Implementation	L2 Groundwater Pumping			
Resource	Agency	Resource Type	FTE	Total Fund	Description
FWS Costs for Pumping Level 2 Water	FWS	Contracts and Agreements Contract	1	CVPRF	Costs for lift pumping required to elevate surface water supplies at refuge boundaries for Colusa and Sutter NWRs. Limited budget restricts groundwater pumping at Merced NWR to -0- AF. (AF already included in L-2 Surface Water Conveyance Benefit).

Level 2 Diversification - Volta WW Wells	BOR	Contracts and Agreements Contract	1	CVPRF	Current budget does not provide funding for O&M and power costs for pumping Level 2 groundwater from Volta Wasteway L-2 Diversification Project wells to make a like quantity of Level 2 surface water available for use by other CVP contractors. (-0- AF included in L2 Groundwater Pumped Benefit).
BOR Costs for Pumping Level 2 Water	BOR	Contracts and Agreements Contract	1	CVPRF	Costs for pumping Level 2 groundwater, pumping plant operation, and lift pumping required to elevate surface water supplies at refuge boundaries. (10,280 AF included in L2 Groundwater Pumped Benefit) Refuges: Pixley & East Bear NWRs, Volta, Los Banos, Mendota, China Island, and Salt Slough WAs.

Year	Activity			Activity Description		
2015	Implementation			L2 Surface Water Conveyance		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Conveyance Agreement - FWS Level 2	FWS	Contracts and Agreements Cooperative Agreement	1		CVPRF	Limited budget provides for costs to convey only 80% of Level 2 surface refuge water supplies to boundaries of two SOD refuges -- (San Luis 17,2000 AF) and (West Bear 5,766 AF). (20,966 AF included in L2 Surface Benefit)
Water District Conveyance Fees	DFW	Contracts and Agreements Memorandum of Agreement	1		SIK	Water district fees charged to convey water rights water to Gray Lodge Wildlife Area
Conveyance Agreements - Level 2	BOR	Contracts and Agreements Cooperative Agreement	1		CVPRF	Limited budget provides for costs to convey only 80% Level 2 surface water supplies to CVPIA refuges' boundaries w/sufficient external conveyance capacity, excluding San Luis & W. Bear Units & water from diverse sources or delivered at no cost to BOR. (258,969AF, included in L2 Surface Benefit)

Year	Activity			Activity Description		
2015	Monitoring			L2 Water Quality Monitoring		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Water Quality Monitoring - GLWA	BOR	Contracts and Agreements Contract	1		CVPRF	Contract laboratory water sampling analysis costs for Gray Lodge Wildlife Area water quality monitoring program for both groundwater and surface water supplies.
Bear Creek Water Loss Study	BOR	Contracts and Agreements Contract	1		CVPRF	Collect and evaluate flow data to determine conveyance water losses to the East Bear Creek Unit of the San Luis NWR Complex. Costs included in "RWSP Administration" chart for labor.

Year	Activity			Activity Description		
2016	Implementation			L2 Water from Diverse Sources		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Water from Diverse Sources at No Cost to RWSP	BOR	Contracts and Agreements Memorandum of Agreement	0		CVPRF	Level 2 surface water supplies provided from diverse sources with NO conveyance cost or power cost to the Refuge Water Conveyance Program. Sutter NWR 16,552 AF riparian rights; Gray Lodge WA 18,800 AF water rights; and Merced NWR 9,500 AF mitigation water from Merced ID under FERC license.

Year	Activity			Activity Description		
2016	Implementation			L2 Surface Water Conveyance		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Conveyance Agreement - FWS Level 2	BOR	Contracts and Agreements Cooperative Agreement	1		CVPRF	Costs to convey Level 2 surface refuge water supplies to boundaries of two SOD refuges -- (San Luis 9,000 AF) and (West Bear 7,207 AF).
Water District Conveyance Fees	BOR	Contracts and Agreements Memorandum of Understanding	1		SIK	Water district fees charges to convey water rights water to Gray Lodge Wildlife Area
Conveyance Agreements - Level 2	BOR	Contracts and Agreements Cooperative Agreement	1		CVPRF	Costs to convey Level 2 surface water supplies to boundaries of CVPIA refuges with sufficient external conveyance capacity, excluding San Luis and West Bear Units and water from diverse sources or delivered at no cost to the Refuge Water Supply Program.

Year	Activity			Activity Description		
2016	Implementation			L2 Groundwater Pumping		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Level 2 Diversification - Volta WW Wells	BOR	Contracts and Agreements Contract	1		CVPRF	O&M and power costs for pumping Level 2 groundwater from Volta Wasteway wells making a like quantity of Level 2 surface water available for use by other contractors. (2,000 AF)
BOR Costs for Pumping Level 2 Water	BOR	Contracts and Agreements Contract	1		CVPRF	Costs for pumping Level 2 groundwater, pumping plant operation, and lift pumping required to elevate surface water supplies at refuge boundaries. (10,280 AF) Refuges: Pixley & East Bear NWRs, Volta, Los Banos, Mendota, China Island, and Salt Slough WAs
FWS Costs for Pumping Level 2 Water	FWS	Contracts and Agreements Contract	1		CVPRF	Costs for pumping Level 2 groundwater and lift pumping required to elevate surface water supplies at refuge boundaries. (4,000 AF) Refuges: Merced, Sutter, and Colusa NWRs.

Year	Activity			Activity Description		
2016	Monitoring			L2 Water Quality Monitoring		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Bear Creek Water Loss Study	BOR	Contracts and Agreements Contract	1		CVPRF	Collect and evaluate flow data to determine conveyance water losses to the East Bear Creek Unit of the San Luis NWR Complex. Costs included in "RWSP Administration" chart for labor.
Water Quality Monitoring - GLWA	BOR	Contracts and Agreements Contract	1		CVPRF	Contract laboratory water sampling analysis costs for Gray Lodge Wildlife Area water quality monitoring program for both groundwater and surface water supplies.

Annual Charter Report

General:

Title	Description
Inc. Level 4 Refuge Water Conveyance	Conveyance of Incremental Level 4 refuge water supplies

Authority:

Provision	Percentage	Comments
3406(d)(2)	100	

No Location IDs Listed

Watershed(s):

Watershed Name
Central Valley-Wide

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	10/1/2014	9/30/2015

Benefit(s):

Metric	Value	Units	Comment
Conveyance: Inc L4 Refuge Water Convey (annual)	2300	acre-feet	Inc. L4 Surface Water Conveyance for WY2015
Conveyance: Inc L4 Refuge Water Convey (annual)	10000	acre-feet	Inc. L4 Groundwater Pumping for WY2015

Deliverable(s):

Date	Title
3/1/2015	Conveyance of Incremental Level 4 Refuge Water

Program Priority:

Rank	Comment
3	Refuge Conveyance Program priority: 1 = labor & overhead 2 = L-2 conveyance 3 = Inc. L-4 conveyance Conveyance of permanently purchased ACID Inc. L-4 water NOD needs to be met, even with limited budget.

Estimated Cost(s):

Fiscal Year	Fund	Total
2015	CVPRF	\$364,000
2016	CVPRF	\$3,542,655

Final Total
\$3,906,655

Partners:
Partner Name
FWS
CDFW
GWD

No Related Programs Listed

Narrative:
Narrative Description
<p>Conveyance of Incremental Level 4 refuge water supplies to CVPIA refuges. This includes acquired surface water, permanent surface water, and pumped groundwater.</p> <p>-- FY15 represents very limited quantities of Inc. L-4 water conveyance that can be provided within the confines of the FY15 budget.</p> <p>-- FY16 represents projected costs to convey approximately 36,000 AF of Incr. L-4 supplies to CVPIA refuges.</p>

Risk Management:		
Risk Description	Likelihood	Risk Impact
Conveyance contractor default	1	3
Funding shortfall	1	3

Data Management:
Description
<p>Contract and agreement records are located in Acquisitions Division MP-3800 and Resources Division MP-410.</p> <p>Delivery data is maintained in MP-410 on the J drive.</p>

Year	Activity			Activity Description		
2015	Implementation			Inc. L4 Groundwater Pumping		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Inc. L-4 Groundwater Pumping Volta WW Wells	BOR	Contracts and Agreements Contract	1		CVPRF	Limited budget does not provide for costs to cover O&M and power costs for pumping Inc. L-4 groundwater from Volta Wasteway Level 2 Diversification / Inc. L-4 Development Pilot Project (-0-AF included in Inc. L-2 Groundwater Pumped Benefit).
Inc. L4 Groundwater Pumping	BOR	Contracts and Agreements Contract	1		CVPRF	Limited budget does not provide for costs for developed Incremental Level 4 groundwater pumping and surface water lift pumping. (Acre-feet included in Incremental Level 4 Groundwater Pumped Benefit are as follows: Pixley NWR 0 AF; SOD Wildlife Areas developed Inc. L-4 water supplies at 0 AF.)

Year	Activity			Activity Description		
2015	Implementation			Inc. L4 Conveyance at No Cost to RWSP		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Inc. L4 Conveyance at No Cost to RWSP	BOR	Contracts and Agreements Contract	0		CVPRF	Incremental Level 4 water delivered with no conveyance costs to Refuge Water Supply Program -- 10,000 AF groundwater via Grassland Water District Pilot Agreement.

Year	Activity			Activity Description		
2015	Implementation			Inc. L4 Surface Water Conveyance		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Inc. L4 Surface Water Conveyance	BOR	Contracts and Agreements Cooperative Agreement	1		CVPRF	Limited budget only provides for costs to cover conveyance of 2,300 AF of permanent NOD ACID Incremental Level 4 refuge surface water supplies to boundary of Kern NWR (NOD Refuge Inc. L-4 water via transfer to SOD).

Year	Activity			Activity Description		
2015	Monitoring			Inc. L4 Water Quality Monitoring		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
Inc. L4 Water Quality Monitoring	BOR	Contracts and Agreements Contract	1		CVPRF	Contract laboratory water sampling analysis costs for Inc. Level 4 groundwater quality monitoring program at South-of-the-Delta wildlife areas. Limited budget does not provide for O&M costs to pump developed Inc. Level 4 groundwater; thus, no water quality analysis will be performed.

Year	Activity			Activity Description		
2016	Implementation			Inc. L4 Surface Water Conveyance		
Resource	Agency	Resource Type	FTE	Total	Fund	Description

Annual Charter Report

General:

Title	Description
Ref Cons - Biggs-West Gridley/Gray Lodge Refuge	Construction funding and service agreement with MPCO

Authority:

Provision	Percentage	Comments
d5	20	Facilities Construction for Level 4 benefits (Non-reimbursable and subject to State Cost Share)
d5	80	Facilities Construction for Level 2 benefits (Reimbursable by water and power users)

Location ID(s):

Latitude	Longitude
39.324947	121.816225

Watershed(s):

Watershed Name
Sacramento River Basin

Schedule:

Funding Begins	Benefits Begin	Funding Complete
4/1/2013	4/15/2014	12/31/2017

Benefit(s):

Metric	Value	Units	Comment
Construction: Full L4 Delivery Capacity	44000	acre-feet	Construction funding
Construction: Full L4 Delivery Capacity	0	completion	Service agreement

Deliverable(s):

Date	Title
5/21/2014	Service Agmt - FY2016
5/21/2014	Service Agmt - FY2015

Program Priority:

Rank	Comment
1	Construction oversight is crucial to the staying on schedule and budget

Estimated Cost(s):

Fiscal Year	Fund	Total
2015		\$2,520,980
2016		\$2,790,178

Final Total
\$5,311,158

Partners:	
Partner Name	
Gray Lodge	
FWS	
CDFW	
BWDWD	

No Related Programs Listed

Narrative:

Narrative Description

The construction funding will be added to the existing cooperative agreement with Biggs-West Gridley Water District to continue with the conveyance and infrastructure improvements that began in January 2014. Once completed, Biggs-West Gridley Water District will have the conveyance capacity to provide reliable full Level 4 water supplies to meet the timing and schedule needs of Gray Lodge Wildlife Refuge.

The Service Agreement will monitor construction activities on the BWGWD project. Personnel will be on site to help coordinate the construction work, verify that the work in place is per the design and specifications, monitor schedules and budgets, attend weekly project management meetings, provide construction/engineering support as needed, and prepare written daily and weekly construction update reports.

Risk Management:

Risk Description	Likelihood	Risk Impact
Lack of qualified personnel	1	2

Data Management:

Description

Project notes will be maintained by the Willows construction office. Data (project daily updates and weekly reports) will be kept on the MP410 Drive ('J') and in a project binder.

Year	Activity	Activity Description
2015	Construction	Oversee construction activities of the conveyance improvements at BWGWD. Daily and weekly reports will be prepared.

Resource	Agency	Resource Type	FTE	Total	Fund	Description
BWGWD Service Agreement - FY2015	BOR	Contracts and Agreements Contract	1			This is the contract for the project and on-site management of the construction contract.
Biggs-West Gridley/Gray Lodge Refuge Construction Contract	BOR	Contracts and Agreements Contract				This is the estimated amount of funding to be added to the existing cooperative agreement for the construction of the project.

Year	Activity	Activity Description
2016	Construction	Oversee construction activities of the conveyance improvements at BWGWD. Daily and weekly reports will be prepared.

Resource	Agency	Resource Type	FTE	Total	Fund	Description
BWGWD Service Agreement - FY2016	BOR	Contracts and Agreements Contract	1			This is the contract for the project and on-site management of the construction contract.
Biggs-West Gridley/Gray Lodge Refuge Construction Contract	BOR	Contracts and Agreements Contract				This is the estimated amount of funding to be added to the existing cooperative agreement for the construction of the project.

Annual Charter Report

General:

Title	Description
Ref Cons - Sutter NWR	Complete the design, permitting, and environmental compliance for the alternatives identified in the feasibility study

Authority:

Provision	Percentage	Comments
d5	22	Facilities Construction for Level 4 benefits (Non-reimbursable and subject to State Cost Share)
d5	78	Facilities Construction for Level 2 benefits (Reimbursable by water and power users)

Location ID(s):

Latitude	Longitude
39.067112	121.750856

Watershed(s):

Watershed Name
Sacramento River Basin

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	8/1/2015	11/30/2016

Benefit(s):

Metric	Value	Units	Comment
Construction: Planning, Design and Construction to deliver water to 19 Refuges	30000	acre-feet	The amount of water is at full build out of the project. The project is phased into two parts; a short-term solution and long-term solution. The short-term solution will be incorporated into the long-term solution.

Deliverable(s):

Date	Title
5/21/2014	Environmental Assessment - NEPA Document
5/21/2014	Short-Term Alternative Design and Specs
5/21/2014	Short-Term Alternative Permitting

Program Priority:

Rank	Comment
1	Program Priority Comments: This is the next major refuge project identified.

Estimated Cost(s):

Fiscal Year	Fund	Total
2015	CVPRF	\$700,000
2016	CVPRF	\$50,000

Final Total
\$750,000

Partners:
Partner Name
CDWR
CDFW
FWS

No Related Programs Listed

Narrative:

Narrative Description

Once the project alternatives have been identified in the feasibility study, the short-term alternative will proceed forward. This will include the design and specifications of the project, the permitting required to implement the alternative, and the environmental work. Actual construction of the short-term alternative will proceed in a future year.

Risk Management:		
Risk Description	Likelihood	Risk Impact
Timing of project permitting	1	2
Environmental review delayed	1	2

Data Management:

Description

Project information will be saved on the MP410 'J' project folder and hard copies of documents will be kept in project binders.

Year	Activity	Activity Description
2015	Environmental Compliance and Permitting	Complete the environmental compliance and permitting for the short-term solution identified in the feasibility study.

Resource	Agency	Resource Type	FTE	Total Fund	Description
Environmental compliance	BOR	Contracts and Agreements Contract		CVPRF	The environmental compliance and NEPA will be completed either by Reclamation staff or through a contract.
Environmental Permitting	BOR	Contracts and Agreements Contract		CVPRF	Permitting (404, 401, in-stream alteration, and etc.) will need to be completed before construction can begin.
Design and Construction Specifications	BOR	Contracts and Agreements Contract		CVPRF	Once the short-term alternative has been identified, construction plans and specs will need to be completed before prior to solicitation of the construction contract.
Sutter Service Agreement	BOR	Contracts and Agreements Contract		CVPRF	A Service Agreement will be needed to assist with the review of the design and construction specifications. A value engineering study may be needed.

Year	Activity	Activity Description
2016	Environmental Compliance and Permitting	Complete the environmental compliance and permitting for the short-term solution identified in the feasibility study.

Resource	Agency	Resource Type	FTE	Total Fund	Description
Sutter Service Agreement	BOR	Contracts and Agreements Contract		CVPRF	A Service Agreement with the Willows construction office will be needed. This agreement will be to help with the preparation of the solicitation.

Annual Charter Report

General:

Title	Description
Ref Cons - EBC Pumping Plant	East Bear Creek Pumping Plant repairs and improvements.

Authority:

Provision	Percentage	Comments
d5	33	Facilities Construction for Incremental Level 4 benefits (Non-reimbursable and subject to State Cost Share)
d5	67	Facilities Construction for Level 2 benefits (Reimbursable by water and power users)

Location ID(s):

Latitude	Longitude
37.245334	120.84383

Watershed(s):

Watershed Name
Sacramento-San Joaquin Delta

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	6/1/2015	9/30/2015

Benefit(s):

Metric	Value	Units	Comment
Construction: Planning, Design and Construction to deliver water to 19 Refuges	0	acre-feet	Acre-feet pumped varies each year.

Deliverable(s):

Date	Title
5/21/2014	Pumps #2 Repair
5/21/2014	Pumping Plant Re-Design

Program Priority:

Rank	Comment
2	Program Priority Comments: Currently there is no funding for this project.

Estimated Cost(s):

Fiscal Year	Fund	Total
2015	CVPRF	\$50,000
2015		\$50,000

Final Total
\$100,000

Partners:
Partner Name
FWS

Related Programs:
Program Name
CVPCP

Narrative:

Narrative Description

This pumping plant has had a lot of challenges since it was built. It has been a struggle to keep it operating throughout the pumping season. Funding is needed to:

1. Repair Pump #2 which is currently inoperable. It would also be helpful if this pump could be designated as the back-up pump for priming in the event the main pump fails. Redundancy is important in the event of a problem and will allow the Plant to continue pumping water for the refuge.
2. Study the current design to make it more operationally efficient by Refuge staff. Currently the plant is subject to frequent shut downs due to alarms and notifications that need to be resolved by calling a consultant. This requires time, during which the Plant is unable to pump water for the refuge.

Currently, no funds have been allocated to the San Joaquin Action Plans Lands. Funds would need to be moved to this account from the Refuge Water Supplies, Facilities account.

Risk Management:

Risk Description	Likelihood	Risk Impact
No back-up pump	1	2
Repair Pump #2	1	1

Data Management:

Description

Data and reprotos will be maintained on MP410''''''''''''''''s 'J' Drive

Year	Activity	Activity Description
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2015	Construction	Repair Pump #2
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Resource	Agency	Resource Type	FTE	Total Fund	Description
Pump Repair	BOR	Contracts and Agreements Contract			Pump #2 is out of operation. It will need to be pulled and taken to a pump repair shop for evaluation and repair.
Denver TSC Study	BOR	Contracts and Agreements Contract		CVPRF	Study design alternatives to make the plant operation more dependable and efficient.

Annual Charter Report

General:	
Title	Description
Ref Cons -NVRWWP	North Valley Regional Recycled Water Program

Authority:		
Provision	Percentage	Comments
d5	100	Facilities Construction for Incremental Level 4 benefits (Non-reimbursable and subject to State Cost Share)

Location ID(s):		
	Latitude	Longitude
	37.494266	120.846605

No Watershed Listed

Schedule:		
Funding Begins	Benefits Begin	Funding Complete
10/1/2014	11/1/2018	9/30/2016

Benefit(s):			
Metric	Value	Units	Comment
Construction: Planning, Design and Construction to deliver water to 19 Refuges	30000	acre-feet	At full build-out, there is upto 30KAF that could possibly be made available to the refuges. These refuges include the San Luis Unit, West Bear Creek Unit, Keterson Unit, Freitas Unit, Los Banos Wildlife Area, China Island, Salt Slough Unit, Mendota Wildlife Area, volta Wildlife Area, Grasslands RCD, and Kern NWR.

Deliverable(s):	
Date	Title
11/1/2017	Permits and EIS

Program Priority:	
Rank	Comment
2	This is a currently unfunded need.

Estimated Cost(s):		
Fiscal Year	Fund	Total
2015		\$3,500,000
2016		\$3,500,000
		Final Total
		\$7,000,000

Partners:	
Partner Name	
City of Turlock	
City of Modesto	
Del Puerto Water District	

Related Programs:	
Program Name	
CVPCP	

Narrative:

Narrative Description

This project involves conveyance of tertiary treated wastewater from the cities of Turlock and Modesto into the DMC for delivery to Del Puerto Water District and refuges. Refuges that would benefit from this water includes the San Luis Unit, West Bear Creek Unit, Kesterson Unit, Freitas Unit, Los Banos Wildlife Area, China Island, Salt Slough, Mendota Wildlife Area, Grasslands Resource Conservation District, and Kern National Wildlife Refuge. At full build out, the amount of water that could be delivered to the refuges is approximately 30,000 acre-feet, depending on our level involvement with the project. Currently, funding is needed to complete the environmental work (EIS/EIR), final project design, and all the permitting required for the project.

Risk Management:		
Risk Description	Likelihood	Risk Impact
Project Approval	2	2

Data Management:

Description

Data will be managed by the consultants. Reports will be provided on progress. Final reports will include all the permits necessary to construct the project and the environmental compliance reports (EIS/EIR).

Year	Activity			Activity Description		
2015	Environmental Compliance and Permitting			Funding to complete the environmental and permitting for the project.		
Resource	Agency	Resource Type	FTE	Total Fund	Description	
NVRRWP - Consulting Contract	Local	Contracts and Agreements Contract			Environmental and permitting contract	

Year	Activity			Activity Description		
2016	Environmental Compliance and Permitting			Funding to complete the environmental and permitting for the project.		
Resource	Agency	Resource Type	FTE	Total Fund	Description	
NVRRWP - Consulting contract	Local	Contracts and Agreements Contract			Environmental and permitting work	