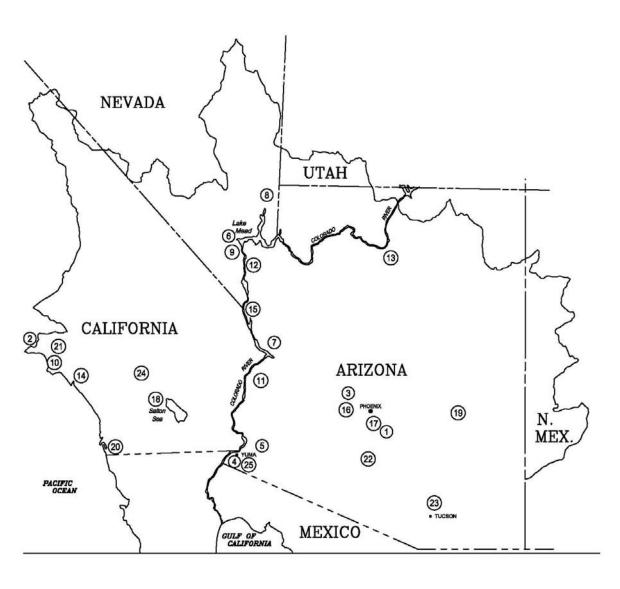
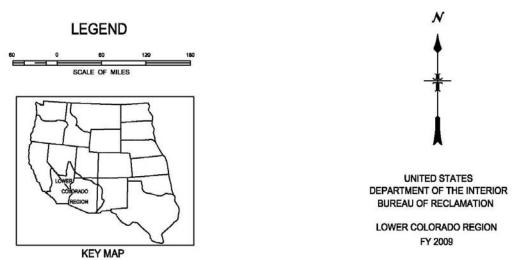
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# LOWER COLORADO REGION PROJECTS/PROGRAMS MAP KEY

- 1. Ak Chin Indian Rights Settlement Act Project
- 2. Calleguas Municipal Water District Recycling Project
- 3. Central Arizona Project
- 4. Colorado River Basin Salinity Control Project (Title I)
- 5. Colorado River Front Work/Levee System
- 6. Colorado River Water Quality Improvement Program
- 7. Endangered Species Conservation/Recovery Program
- 8. Halfway Wash Project/Study
- 9. Lake Mead/Las Vegas Wash Program
- 10. Long Beach Area Water Reclamation Project
- 11. Lower Colorado River Investigations Program
- 12. Lower Colorado River Operations Program
- 13. Northern Arizona Investigations Program
- 14. Orange County Regional Water Reclamation Project, Phase I
- 15. Parker-Davis Project
- 16. Phoenix Metropolitan Water Reclamation and Reuse Program
- 17. Salt River Project
- 18. Salton Sea Research Project
- 19. San Carlos Apache Tribe Water Settlement Act
- 20. San Diego Area Water Reclamation Program
- 21. San Gabriel Basin Project
- 22. South/Central Arizona Investigations Program
- 23. Southern Arizona Water Rights Settlement Act
- 24. Southern California Investigations Program
- 25. Yuma Area Projects

### LC Programs Not Shown on Map:

**Bureauwides Programs** 

# FY 2009 Lower Colorado Region Budget Summary

(\$ in thousands)

		FY 2009							
	FY 2008	Water &	Land	Fish &	Facility	Facility	FY 2009	Other Fed/	Total
Project	Enacted	Energy	Mgmt.	Wildlife	Operations	Maint.	Request	Non-Fed	Program
Ak Chin Indian Water Rights Settlement Act Project	8,561				9,900		9,900		9,900
Arizona Water Settlements Act	197								
Calleguas Municipal Water Dist Recycling Project	1,033	800					800	20,785	21,585
Colorado River Basin, Central Arizona Project	27,138	26,203	325		261	61	26,850	288	27,138
Colorado River Basin Salinity Control, Title I	9,290				1,650	7,794	9,444	100	9,544
Colorado River Front Work & Levee System	3,259	2,350					2,350	74,460	76,810
Colorado River Water Quality Improvement Program	207	195					195		195
Endangered Species Conservation/Recovery Project	758			666			666	300	966
Halfway Wash Project/Study	172	200					200	200	400
Hawaii Reclamation Projects	492								
Hi-Desert Water District Wastewater Collection & Reuse	492								
Inland Empire Regional Water Recycling Project	984								
Irvine Basin Groundwater & Surface Water Improvement Project	492								
Lake Mead/Las Vegas Wash Program	2,337	900					900	485	1,385
Long Beach Area Water Reclamation Project	590	692					692	10,842	11,534
Long Beach Area Desalination R/D Project	738							-	
Los Angeles Water Supply Augmentation	492								
Lower Colorado River Investigations Program	232	243					243	243	486
Lower Colorado River Operations Program	15,171	7,550		8,850			16,400	8,944	25,344
North Las Vegas Water Reuse	1,968								
North San Diego County Area Water Recycling Project	1,476								
Northern Arizona Investigations Program	379	320					320	130	450
Orange County Regional Water Reclamation Project, Phase I	2,066	558					558		558
Parker-Davis Project	0							12,983	12,983
Phoenix Metropolitan Water Reclamation & Reuse Project	246	200					200	200	400
Rancho California Water District	123								
Riverside-Corona Feeder	98								
Salt River Project	590		469		28	103	600	165	765
Salton Sea Research Project	1,132	700					700		700
San Carlos Apache Tribe Water Settlement Act	305	325					325		325
San Diego Area Water Reclamation Program	3,395	3,000					3,000	5,150	8,150
San Gabriel Basin Project	689	700					700	27,031	27,731
San Gabriel Basin Restoration Fund	2,952								
South/Central Arizona Investigations Program	900	693		25			718	718	1,436
Southern Arizona Water Rights Settlement Act Project	4,374	2,969					2,969	4,051	7,020
Southern California Investigations Program	1,073	260					260	260	520
Upper Mohave River Well Field	123								
Yuma Area Projects	22,543	1,658			6,315	13,890	21,863	50	21,913
Total - Water and Related Resources	117,067	50,516	794	9,541	18,154	21,848	100,853	167,385	268,238

## LOWER COLORADO REGION FY 2009 OVERVIEW

	FY 2	2009 REQUES	T FOR WAT	ER AND REL	ATED RESOU	RCES
FY 2008 Enacted	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	Total Program
\$117,067,000	\$50,516,000	\$794,000	\$9,541,000	\$18,154,000	\$21,848,000	\$100,853,000

The Bureau of Reclamation Fiscal Year (FY) 2009 Request for the Lower Colorado Region (Region) for Water and Related Resources totals \$100.9 million, a decrease of \$16.2 million from the FY 2008.

The Region encompasses all of the lands drained by rivers flowing into the Pacific Ocean along the coast of California south of the Tehachapi mountains and all of the lands drained by the Colorado River south of Lee Ferry, Arizona. This includes most of Arizona, the extreme western portion of central New Mexico, the southwestern corner of Utah, southern Nevada, and southern California.

With management responsibility for the Lower Division of the Colorado River, the Region encounters many of the controversies and pressures that characterize water resources management throughout the arid southwestern United States. These issues include increasing water requirements for urban use, Indian trust needs, and endangered species. Invasive species such as tamarisk, giant salvinia, and the quagga mussels are also additional water resource management pressures. Water for urban uses is a major issue as the two fastest growth areas in the United States, Las Vegas and Phoenix, and the Nation's largest metropolitan area, southern California, are located within the Region. Reclamation facilities within the Region deliver over 9 million acre-feet of water annually to customers for irrigation, municipal and industrial, and other uses; and to meet the United States' treaty obligations to Mexico. Reclamation facilities also provide flood control along the Colorado River benefiting Arizona, California, Nevada, and Mexico.

Reclamation operates and maintains three hydroelectric plants on the lower Colorado River, which can provide approximately 6.5 million megawatt-hours of energy, during normal to higher water years, and closer to 5.6 million megawatt-hours of energy during drier years to users in Arizona, California, and Nevada. Maximum powerplant capacity totals 2,454 megawatts.

Critical goals for the Region include fulfilling Secretary of the Interior's water master role on the lower Colorado River; maintaining Colorado River operations to fulfill our water delivery and power generation commitments while achieving compliance with the Endangered Species Act; continuing construction of the Central Arizona Project; and increasing water supplies through water conservation, water quality improvement, and water reuse programs.

**Water and Energy Management and Development** - This activity is funded at \$50.5 million, which is a \$17.7 million decrease from the FY 2008 enacted.

Funding of \$26.2 million for the Central Arizona Project will accomplish several objectives: continuing construction of the Indian distribution systems; continuing work to protect native fish in the Gila and Santa Cruz river basins; and completing land acquisition and start up costs associated with the endangered

species work at Roosevelt Dam. Construction on the Indian distribution systems focuses on the Gila River Indian Community system, San Xavier Farm Extension, and pre-construction activities for the San Carlos Apache system.

The Colorado River Front Work and Levee System program continues development of design alternatives and environmental compliance activities to improve river stability, prevent erosion, and reduce sediment transport along the Colorado River channel. Work will continue on construction of the Lower Colorado River Drop 2 Storage Reservoir.

The Lower Colorado River Operations Program of \$7.6 million covers all of the work necessary to carry out the Secretary's direct statutory responsibility to act as water master for the lower Colorado River. These responsibilities include the river's water management issues, implementing the California 4.4 water plan, and limiting water users to their legal entitlements.

The Southern Arizona Water Rights Settlement Act Program completes acquisitions of rights-of-way and land leases for the Farm Extension delivery system. It also completes planning, design and environmental compliance for the Farm Extension.

The funding of Title XVI water reclamation and reuse programs in the region is a major tool to help California meet its increasing water needs while maintaining its use of Colorado River water at its allocation of 4.4 million acre-feet.

**Land Management and Development** - Funding for this activity totals \$794,000, which is a \$148,000 decrease from the FY 2008 enacted. The Central Arizona Project request will continue development of trails along the aqueduct and for land management of those project lands where there are no operating entities or facilities. Salt River Project request continues stewardship of the Federal interest in project lands and will continue to improve recreation facilities to provide safe public use and access.

**Fish and Wildlife Management and Development** - This activity is funded at \$9.5 million, which is an \$864,000 increase from the FY 2008 enacted. The increase is due to an increased level of effort in creating and restoring habitat for covered wildlife species within the Lower Colorado River Operations Program. Funding for the fourth year of the long-term Multi-Species Conservation Program provides a means to avoid a jeopardy opinion on Reclamation's river operations. This level of funding is required to continue the reasonable and prudent alternatives and measures contained in the Fish and Wildlife Service's biological opinion on Reclamation's lower Colorado River operations and maintenance. The non-Federal partners will match the Federal funds on a 50/50 basis.

Facility Operations - This activity is funded at \$18.2 million, a \$1.7 million increase from the FY 2008 enacted. The increase is mostly due to the increased water prices for deliveries in the Ak Chin Indian Water Rights Settlement Act Project. Water rates are increasing faster than the normal inflationary rate. The remainder of the increase relates to the efforts to implement the Supervisory Control and Data Acquisition System groundwater management in the Yuma area and to help modernize administration of the river. This activity includes funding of \$9.9 million for delivery of water to the Ak Chin Indian Community under the Ak Chin Water Rights Settlement Act. Operation of drainage wells and bypass facilities for the Colorado River Basin Salinity Control Program - Title I, which assures that water delivered to Mexico continues to meet salinity requirements defined by Minute 242 of the Mexican Treaty; and operations of the Colorado River facilities.

**Facility Maintenance and Rehabilitation** - The activity is funded at \$21.8 million, which is a \$887,000 decrease from the FY 2008 enacted. The decrease is due to a reduced level of effort in bankline maintenance activities and completion of the reconstruction of the Drainage Pump Outlet Channels to increase flexibility in the groundwater management program. This activity continues maintenance of the Yuma Desalting Plan and associated facilities necessary to meet water quality standards when delivering water to Mexico. It also meets ongoing infrastructure maintenance needs on the Colorado River.

Planned Accomplishments in FY 2009 are expected to include delivery of over 9.0 million acre-feet of water in three states and the Republic of Mexico. Fish barriers are scheduled for completion on the Central Arizona Project for the Hot Springs Canyon, Redfield Canyon, and West Fork Oak Creek. The Hopi Water Management in the Northern Arizona Investigations Program and Border of the Californias Recycled Water Study in the Southern California Investigations Program will be completed. In addition, the following projects are scheduled to be either completed or partially completed in FY 2009, resulting in an increase of 59,860 acre-feet of additional available water: the Long Beach Recycled Water System Expansion (Long Beach Area Water Recycling Project); the San Gabriel Valley Reclamation, the El Monte Operable Unit Eastside and Westside Projects, the La Puente Project, and the Rio Hondo, Phase 2 (San Gabriel Basin Project); the San Gabriel Valley Groundwater Remediation – Phase 4 (San Gabriel Basin Restoration), and the Mission Basin Project (Mission Basin Brackish Groundwater Desalting Demonstration Project). The Region expects to maintain 100 percent of the water and power facilities within the Region in fair to good condition as measured by the Facility Reliability Rating.

Planned Accomplishments in FY 2008 include delivery of 9.0 million acre-feet of water in three states and the Republic of Mexico. Fish barriers are scheduled for completion on the Central Arizona Project the Bonita Creek, Spring Creek, and Redrock Canyon. Several studies will be completed: Navajo Nation Rural Water Study in the Northern Arizona Investigations Program and the San Jacinto Watershed Water Quality, Supply, and Enhancement Study in the Southern California Investigations Program. Lower Basin Shortage Guidelines will be completed with the preparation and publication of a final Environmental Impact Statement and Record of Decision. The control system to remotely operate the wells along the United States and Mexican borders will be completed. In addition, the following projects are scheduled to be either completed or partially completed in FY 2008, resulting in an increase of 113,900 acre-feet of additional available water: the Orange County Groundwater Replenishment System Project (Orange County Regional Water Reclamation Project); the San Gabriel Valley Groundwater Remediation - Phase 2 (San Gabriel Basin Restoration); a portion of the Gila River Indian Community Project (Central Arizona Project); and the Olivenhain Northwest Quadrant Project (North San Diego County Area Water Recycling Project). The Region expects to maintain 100 percent of the water and power facilities within the Region in fair to good condition as measured by the Facility Reliability Rating.

Accomplishments in FY 2007 included delivery of 9.4 million acre-feet of water in three states and the Republic of Mexico. The Tres Rios Wetlands Demonstration program was substantially completed. In addition, the following projects were either completed or partially completed in FY 2007, resulting in an increase of 8,300 acre-feet of additional available water: the Encina Basin Carlsbad Project (North San Diego County Area Water Recycling Project); and a portion of the San Xavier Rehabilitation Project (Central Arizona Project/Southern Arizona Water Rights Settlement Act Project). The Region maintained 100 percent of the water and power facilities within the Region in fair to good condition as measured by the Facility Reliability Rating.

### WATER AND RELATED RESOURCES REQUEST BY MISSION AREAS

Fiscal Year	Resource Use - Water	Resource Use - Energy	Resource Protection	Recreation	Serving Communities	Total
FY 2008 Projects	\$115,986,000	\$0	\$489,000	\$592,000	\$0	\$117,067,000
FY 2008 Bureauwides	\$8,278,000	\$0	\$141,000	\$660,000	\$0	\$9,079,000
FY 2009 Projects	\$100,187,000	\$0	\$404,000	\$262,000	\$0	\$100,853,000
FY 2009 Bureauwides	\$5,541,000	\$0	\$130,000	\$658,000	\$0	\$6,329,000

**Resource Use - Water (Deliver Water Consistent with Applicable State and Federal Law) -** The amount being requested is \$105.7 million which is a \$18.5 million decrease from FY 2008. Of the

\$105.7 million, \$60.5 million is for activities associated with operating and maintaining a safe and reliable water infrastructure, \$6.5 million is for activities associated with effective water management to optimize supply, and \$38.7 million is for activities associated with the

On April 4, 2005, the Secretary of the Interior, and over 50 non-Federal partners signed program documents to implement the Lower Colorado River Multi-Species Conservation Program (MSCP). The MSCP provides long-term endangered species act compliance for both current and future water delivery and diversion, and power production by both the United States and its water uses. The MSCP provides a unique cost share benefit in which non-Federal partners match Federal funding adjusted annually for the life of the program.

completion of construction projects to increase delivery infrastructure and water availability.

**Resource Use - Energy (Manage or Influence Resource Use to Enhance Public Benefit, Responsible Development, and Economic Value - Hydropower)** - The amount being requested is \$0, as funding for

Power benchmarking studies are conducted on the Region's powerplants and adjustments are made as needed to ensure power operations are cost effective and efficient when compared with other Federal and private facilities. In FY 2006, Davis Dam was rated a leading performer in operations and maintenance by a worldwide benchmarking firm.

major dams and power plants have been moved off budget either through the development of customer funding agreements or

legislation. This funding approach allows for the day-to-day power operations and maintenance of all hydroelectric power facilities within the Region, which directly impact various performance measures and targets for Reclamation.

Resource Protection (Watersheds, Landscapes, and Marine Resources), (Sustain Biological Communities), and (Protect Cultural and Natural Heritage Resources) - The amount being requested is \$534,000, which is a \$96,000 decrease from FY 2008. The \$534,000 is for activities associated with invasive species and cultural and natural heritage resource activities.

**Recreation (Improve the Quality and Diversity of Recreation Experiences and Visitor Enjoyment on DOI Lands)** - The amount being requested is \$920,000, which is a \$332,000 decrease from FY 2008. The amount being requested for recreation accessibility and activities to improve the quality and diversity of

recreation experiences and visitor enjoyment on DOI lands.

Serving Communities (Improve protection of lives, property and assets, advance the use of scientific knowledge, and improve the quality of life for communities we serve) - The amount being requested is \$0, as funding for law enforcement/security activities at the Hoover Dam are off budget or funded through Reclamation's Site Security Program.

#### COST AND PERFORMANCE INFORMATION

The Region utilizes a variety of "activity based" initiatives to integrate budget and performance as part of the decision making process within the Region.

In FY 2005, Reclamation began reporting Activity Based Cost/Management (ABC/M) outputs in an effort to link cost data to performance. ABC/M implementation provides an avenue to track how funds are being used, what was produced with those funds, and how the work activity contributes to achieving the Department's and the agency's goals. Within the Region, ABC/M information is provided to managers on a monthly basis for their review and use in decision making. Quarterly ABC/M cost and output activity data is reviewed by the regional ABC/M activity leads which are responsible for output reporting, as well as the Budget Management Team (BMT) for their use in making budget/performance decisions. Performance and budget shortfalls are identified and necessary actions are discussed to address any concerns identified during these management meetings.

Below is just one example of the ABC/M information that is reviewed and analyzed by managers and ABC/M activity leads within the Region:

ABC/M Cost and Performance Data – Facility Reliability Rating (UIM 4.1.1)											
Activity	ABC/M Code	Funds Obligated									
Operate Dams/Water Storage Facilities	4H	\$ 1,655,743									
Operate Conveyance Facilities	<b>4J</b>	\$ 127,121,750									
Reduce Dam Safety Risks	4L	\$ 29,780									
Maintain/Dam/Water Storage Facilities	5A	\$ 3,060,972									
Maintain Conveyance Facilities	4M	\$ 14,001,436									
Manage Project Lands	8E	\$ 3,357,101									
Assess Resource Use Impacts	<b>G</b> 7	\$ 355,489									
Implement Environmental Recommendations	8K	\$ 21,034,639									
Maintain Bridges for Resource Use	5Z	\$ 315,591									
Number of other Maintained Facilities/Structures	5H	\$ 31,677									

The costs shown include both appropriations and non-Federal funding. The above ABC/M data is also available by project and detailed cost level and is provided to managers on a monthly basis for their review and use.

Reclamation has an ABC/M Oversight Team, along with a Budget and Performance Integration Team that provides guidance and direction with Reclamation's budget and performance integration efforts. ABC/M definitions and coding instructions are reviewed annually by Reclamation's ABC/M activity leads and necessary revisions are made accordingly. Internal processes are in place within the Region to review and updated ABC/M codes as appropriate.

When formulating and developing annual work plans and budget requests, program managers review and utilize historical program costs and data. The Region utilizes an automated system to formulate and track annual program work plans and budget requests, which aligns projected work/activities and budget requests to Departmental Strategic goals with the identification of the appropriate ABC/M code for all work plans. This database system serves as a useful tool in assisting program managers and budget staff in identifying the link between the work/activities proposed and budget information with the agency's role and contribution in meeting the goals outlined in the Department's FY 2007 – FY 2012 Strategic Plan.

				Program Perfori	nance Overview -	Lower Colora	do Region				
		Туре	2004 Actual	2005 Actual	2006 Actual	2007 Plan	2007 Actual	2008 Enacted	2009 President's Budget	Change from 2008 to 2009	Long- term Target (2012)
					SION AREA 1.0:				•		
	T	lı	nprove reso	urce management		ble use and sus ver Water	tain a dynamic	economy			
4.0	Outcome Goal: D	eliver	Water Cons	sistent with Appli			n Environmer	itally Responsible a	and Cost Efficient Ma	nner	
4.0.1	WATER: Acre-feet of water delivered consistent with applicable substantive and procedural requirements of Federal and State water law. (Units in Million Acre Feet or MAF)	A	10.06	8.854	9.841	9	9.45	9	9	0	9
	Contributing Projects/Programs: Reclamation will not show unit cost for this measure.										
	Comments: Long-term targets will be re-evaluated available each year. The target is not influenced by				unusual weather c	onditions. Cost	ing information	n is not provided be	cause Reclamation car	nnot control the a	mount of water
	<b>RELIABILITY:</b> Amount of acre feet of restricted capacity.	A	4,692	4,692	0	0	0	0	0	0	0
4.0.2	Contributing Projects/Programs: Restriction rep	orted	in FY 2004	and FY 2005 was	associated with the	Senator Wash	Dam.				
	<b>Comments:</b> No current restrictions in the Region.										
400	<b>RELIABILITY:</b> Percent of water facilities that do not receive Federal or State notices of violation under environmental requirements as defined by state and Federal Law.	A	100% (10/10)	100% (10/10)	100% (10/10)	90% (10/11)	100% (11/11)	83% (10/12)	83% (10/12)	0%	83% (10/12)
4.0.3	Contributing Projects/Programs: Reclamation w	ill not	show cost for	or this measure. S	ee notation below.	l .				l .	
	Comments: Unit costs for this measure will not b Resource Protection to the Resource Use section in may have on this performance measure.										
4.0.4	COST EFFECTIVENESS: Percent Change in cost to operate and maintain water storage infrastructure compared to the 5 year rolling average.	A	N/A	N/A	Baseline Data	Baseline Data	Baseline Data	Baseline Data	TBD based upon baseline data	N/A	TBD based upon baseline data
	Contributing Projects/Programs: Baseline data	is bein	g established	l.		<u> </u>			l		

		Туре	2004 Actual	2005 Actual	2006 Actual	2007 Plan	2007 Actual	2008 Enacted	2009 President's Budget	Change from 2008 to 2009	Long- term Target (2012)
	Intermed	diate (	Outcomes ar	nd Performance M	easures: Operate	and Maintain S	Safe and Reliab	le Water Infrastruc	ture		
		,	GO	AL 2 (Water) Into	ermediate Outcon	nes and Perform	nance Measure	S			
	Operate and Maintain a Safe and Reliable Water Infrastructure - Facilities Reliability: Water infrastructure is in fair to good condition as measured by the Facilities Reliability Rating (FRR).	A	100% (18/18)	100% (18/18)	100% (19/19)	100% (20/20)	100% (20/20)	100% (21/21)	100% (21/21)	0	100% (21/21)
	Federal (\$000)		N/A	\$60,248	\$49,020	\$44,803	\$57,689	\$58,266	\$50,692	(\$7,574)	\$53,733
	Non-Federal (\$000)		N/A	\$95,095	\$111,855	\$106,397	\$113,275	\$114,407	\$113,000	(\$1,407)	\$119,780
4.1.1	Total actual/projected costs (000)		N/A	\$155,343	\$160,875	\$151,200	\$170,964	\$172,673	\$163,692	(\$8,981)	\$173,513
	Actual/Projected cost per Facility (000)		N/A	\$8,630	\$8,467	\$7,560	\$8,548	\$8,223	\$7,795	(\$428)	\$8,262
	Endangered Species Program; Salton Sea Research; and Sar Comments: Reclamation's methodology for costir included under this performance goal, and therefor Resource Use section in the revised Department's F	g this e does	performance not indicate	e measure includes a true cost per fac							
	Effective Water Management to Optimize Supply - Improvements in water supply (acre feet per year) resulting from management agreements and partnerships.	A	N/A	N/A	N/A	Baseline Data	0	0	0	0	0
	Federal (\$000)		N/A	N/A	N/A	Baseline Data	\$21,544	\$21,759	\$18,931	(\$2,828)	\$20,066
	Non-Federal (\$000)		N/A	N/A	N/A	Baseline Data	\$657	\$664	\$657	(\$86)	\$696
4.2.1	Total actual/projected costs (\$000)		N/A	N/A	N/A	Baseline Data	\$22,201	\$22,423	\$19,588	\$2,835	\$20,762
	Comments: The unit of measure for this performar partnerships, mgt options)" to "acre feet". The Reg the Region captures costs under specific ABC codes performance measure definition which is currently	gion de s that l	oes not have have been ali	any performance t	argets that meet th	ne reporting crit	eria for the new	ly defined unit of m	easure. Although no	performance targe	ts are identified,
4.3.1	Address Environmental / Resource Stewardship Concerns - Requirements: Percent of environmental audit findings and reviews addressed [results pertain to both water and hydropower facilities]	A	100% (5/5)	100% (22/22)	100% (20/20)	95% (23/24)	100% (24/24)	100% (20/20)	80% (14/18)	0%	80% (14/18)
	Contributing Projects/Programs: Reclamation v	vill no	t show cost f	or this measure.							
	Comments : Audit findings have not been determinunit costs for this measure.	ed for	out years; th	nerefore targets for	out years are estir	nated and will b	oe updated as th	e number of audit f	indings are determined	d. Costs are too m	inimal to report

		Туре	2004 Actual	2005 Actual	2006 Actual	2007 Plan	2007 Actual	2008 Enacted	2009 President's Budget	Change from 2008 to 2009	Long- term Target (2012)
	Complete Construction Projects to Increase Delivery Infrastructure and Water Availability - Increased Supply: Potential acre-feet made available through completion of projects.	A	69,220	31,280	13,050	8,300	8,300	113,900	59,860	-54,040	6,000
	Federal (000)		N/A	\$51,379	\$72,056	\$47,080	\$53,443	\$53,977	\$46,960	(\$7,017)	\$49,778
	Non-Federal (000)		N/A	\$286	\$3,736	\$0	\$0	\$0	\$0	\$0	\$0
4.4.1	Total actual/projected costs (000)		N/A	\$51,665	\$75,792	\$47,080	\$53,443	\$53,977	\$46,960	(\$7,017)	\$49,778
	Actual/Projected cost per acre feet (whole dollars)		N/A	\$1,651	\$5,808	\$5,672	\$6,439	\$474	\$785	\$311	\$8,296
	Water Recyc., Long Beach Area Water Reclamation Project Project; Southern Arizona Water Rights Act Project; Fort M Comments: The amount of acre-feet can increase/decrea those costs associated with the individual performance measurements.	1cDow	ell Mohave Ap d on the amou nd therefore do	ache; Yuma Area Off	fice; and the Lake Mo ed during a particula cost per acre foot.	ad/Las Vegas Wa	ash Program. amation's method	ology for costing this p			
3.0	Goal: Mana	age or						at, and Economic V	alue - Hydropower		
					I	nergy					
3.0.1	Provide for Access: Number of megawatts of hydropower delivered annually	Α	N/A	N/A	N/A	2,012	2,161	2,012	2,012	0	2,012
	Comments: New measure for Reclamation in 2007	. No d	costing provi	ded. Associated co	st more appropria	tely captured in	UIM 3.1.1.				
3.0.2	Responsible Development: Percent of time in forced outage	A	Reported by the Denver Office	0.48%	0.12%	1.90%	0.22%	2.2%	2.2%	0%	2.2%
	Comments: No costing provided per agency guida	ince. A	Associated co	sts are more appro	priately captured	n UIM 3.1.1.					
3.3	Appropriate Value: Percent of base Operation and Maintenance cost for power compared to the 5-year rolling average cost, expressed as \$/MW	A			This perform	nnce measure is	reported at the	Reclamation-wide	level by the Denver O	ffice.	
3.3	Comments: The goal was new for FY 2006 and average using the past year data. Therefore, it is di costs include both appropriated and non-appropriat	fficult	to set specifi	c targets without k							

	Туре	2004 Actual	2005 Actual	2006 Actual	2007 Plan	2007 Actual	2008 Enacted	2009 President's Budget	Change from 2008 to 2009	Long- term Target (2012)
ate and Maintain Reliable, Sa	fe, and	Secure Powe	er Facilities		<u> </u>	<u> </u>				<u> </u>
t Hydropower Facilities are in on as measured by the y Rating	Α	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	0%	100% (3/3)
		N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
))		N/A	\$39,437	\$45,336	\$41,909	\$55,904	\$57,581	\$59,308	\$1,727	\$64,645
cted costs (\$000) cost per Facility (\$000)		N/A	\$39,437	\$45,336	\$41,909	\$55,904	\$57,581	\$59,308	\$1,727	\$64,645
cost per Facility (5000)		N/A	\$13,146	\$15,112	\$13,970	\$187,635	\$19,194	\$19,769	\$575	\$21,548
ects/Programs: Parker-Davis	Projec	t (Parker and	Davis Dams) and	Boulder Canyon	Project (Hoove	r Dam).		•	1	I.
mation's methodology for costi a FRR. It is also important to									facilities, and does	not provide a tru
ove Power Generation Manag	ement	to Maximize	Supply							
t Bureau of Reclamation ating units are available to the stern electrical system during demand periods		Reported by	the Denver Office		97.70%	98.90%	97.50%	97.50%	0.00%	97.50%
rgets are based on current outa it requires that major equipme long-term.										
				Recreati	on					
	Goa	l: Improve th	e Quality and Div	ersity of Recreat	ion Experience	s and Visitor E	njoyment on DOI l	Lands.		
		ntermediate	Outcome - Impro	ve Capacities to l	Provide Recrea	tion, Where A	ppropriate			
recreation facilities that meet ility standards	A	36% (6/17)	37% (6/16)	50% (8/16)	50% (8/16)	50% (8/16)	50% (8/16)	50% (8/16)	0	50% (8/16)
		N/A	\$1,157	\$1,016	\$1,342	\$2,621	\$2,647	\$2,313	(\$334)	\$2,452
))		N/A	\$7,151	\$7,206	\$8,410	\$7,050	\$7,121	\$6,196	(\$925)	\$6,568
ected Cost (\$000)		N/A	\$8,308	\$8,222	\$9,752	\$9,671	\$9,768	\$8,509	(\$1,259)	\$9,020
Cost Per Site (\$000)		N/A	\$519	\$514	\$609	\$604	\$610	\$532	(\$78)	\$564
							ı; Central Arizona Proj	ect; and Recreation and F	ish and Wildlife Prog	ram.
s include total recreation costs	or mar	nagement, ope	erations & mainter	nance, and accessi	bility improven	nents.				
ects/	Programs: Reclamation Re	Programs: Reclamation Recreation	Programs: Reclamation Recreation Mgmt. Act - 1	Programs: Reclamation Recreation Mgmt. Act - Title XXVIII; Boulder	Programs: Reclamation Recreation Mgmt. Act - Title XXVIII; Boulder Canyon Project; Lan	Programs: Reclamation Recreation Mgmt. Act - Title XXVIII; Boulder Canyon Project; Land Resources Mar		Programs: Reclamation Recreation Mgmt. Act - Title XXVIII; Boulder Canyon Project; Land Resources Management Program; Central Arizona Project; Land Resources Management Project; Land Resources Management Project; Land Resources Management Project	Programs: Reclamation Recreation Mgmt. Act - Title XXVIII; Boulder Canyon Project; Land Resources Management Program; Central Arizona Project; and Recreation and F	Programs: Reclamation Recreation Mgmt. Act - Title XXVIII; Boulder Canyon Project; Land Resources Management Program; Central Arizona Project; and Recreation and Fish and Wildlife Programs

		Туре	2004 Actual	2005 Actual	2006 Actual	2007 Plan	2007 Actual	2008 Enacted	2009 President's Budget	Change from 2008 to 2009	Long- term Target (2012)
	Goal: Sustain Biological Commun	ities o	n DOI Man	aged and Influenc	ed lands and Wate	ers in a Manner	Consistent w	ith Obligations Reg	arding the Allocation	and Use of Wate	r
	Invasive Species: Percent of baseline acres infested with invasive plant species that are controlled	A	43% (12.5/29)	68% (20/30)	42% (12.5/30)	42% (12.5/30)	80% (24/30)	60% (18/30)	60% (18/30)	0	60% (18/30)
	Federal (\$000)		\$586	\$502	\$435	\$755	\$92	\$409	\$404	(\$5)	\$428
	Non-Federal (\$000)		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.0.4	Total actual/projected costs (\$000)		\$586	\$502	\$435	\$755	\$92	\$409	\$404	(\$5)	\$428
	Actual/Projected cost per Gross Acres (\$000)		\$20	\$17	\$15	\$25	\$3	\$14	\$13	(\$1)	\$14
	Contributing Projects/Programs: Yuma Area Pr	roject	and Lake M	ead/Las Vegas Wa	ash Project						
	Comments: Acres to be treated are an estimate bas available. Performance targets have been adjusted			ect the successful t		rred in FY 2007	, ,	at the beginning of e	ach FY once more ac	curate information	becomes
3.0				End Outcome C	Goal: Protect Cult	ural and Natur	al Heritage Re	sources			
	Cultural Resources: Percent of collections in DOI inventory in good condition	A	57% (4/7)	83% (5/6)	100% (6/6)	100% (6/6)	100% (6/6)	100% (5/5)	100% (5/5)	0%	100% (5/5)
	Federal (\$000)		N/A	N/A	\$135	\$212	\$550	\$141	\$130	(\$11)	\$138
	Non-Federal (\$000)		N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Actual/Projected (\$000)		N/A	N/A	\$135	\$212	\$550	\$141	\$130	(\$11)	\$138
3.0.4	Actual/Projected Cost Per Facility (\$000)		N/A	N/A	\$23	\$35	\$92	\$28	\$26	(\$2)	\$28
	<b>Comments:</b> The number of facilities was updated associated with the Colorado River Front Work and anticipated project work.			nich was not origin		Vork/funding w					
					rove Protection of		es, and Prope	rty			
1.0.4	Law Enforcement: Percent Change in Part I Offices (LC and SSLE only)	A	N/A	N/A	N/A	Baseline Data	Baseline Data	0% (0/8)	TBD	TBD	TBD
	<b>Comments:</b> New performance measure for Reclam	ation	beginning in	January 2007. Pe	erformance targets	for outyears wil	l be updated ba	ased upon the numb	er of offenses reported	each fiscal year.	
1.0.5	Law Enforcement: Percent Change in Part II Offices (LC and SSLE only)	A	N/A	N/A	N/A	Baseline Data	Baseline Data	0% (0/85)	TBD	TBD	TBD
	Comments: New performance measure for Reclam	ation	beginning in	January 2007. Pe	erformance targets	for outyears wil	l be updated ba	ased upon the numb	er of offenses reported	each fiscal year.	
1.2.4	Law Enforcement: Percent Change in natural, cultural and heritage resource crimes (LC and SSLE only)	A	N/A	N/A	N/A	Baseline Data	Baseline Data	0%	TBD	TBD	TBD
	Comments: New performance measure for Reclam	ation	beginning in	January 2007. Pe	erformance targets	for outyears wil	l be updated ba	ased upon the numb	er of offenses reported	each fiscal year.	
101	Law Enforcement: Percent of incidents/investigations closed for Part I, Part II, and natural, cultural and heritage resource	A	N/A	N/A	N/A	Baseline Data	Baseline Data	95%	TBD	TBD	TBD
1.2.4	offenses (L.C. and SSLE only)										

# Ak Chin Indian Water Rights Settlement Act Project

LOCATION: Ak Chin Indian Reservation, Pinal County, Arizona.

**DESCRIPTION/JUSTIFICATION:** The Ak Chin Settlement Act facilitates delivery of Colorado River water through the Central Arizona Project to 16,000 acres of irrigated lands on the Ak Chin Indian Reservation. The Act requires that this water be delivered at no cost to the Ak Chin Community.

**AUTHORIZATION:** P.L. 95-328, Settlement of Ak Chin Water Rights Claims, July 28, 1978, P.L. 98-530; The Ak Chin Indian Water Rights Settlement Act, October 19, 1984, P.L. 106-285; Ak Chin Water Use Amendments Act of 1999, October 10, 2000; and P.L. 108-451, Arizona Water Settlements Act, December 10, 2004.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

1 Togram 1 maneral 2 ata		
Activity	FY 2008	FY 2009
Facility Operations	\$8,561,000	\$9,900,000
Enacted/Request	\$8,561,000	\$9,900,000
Non-Federal	0	0
Prior Year Funds	3,793	0
Total Program	\$8,564,793	\$9,900,000
Prior Year Funds/Non-Federal	(3,793)	0
Total Reclamation Allotment	\$8,561,000	\$9,900,000

#### **WORK PROPOSED IN FY 2009:**

**Facility Operations -** Continues the operation and maintenance functions and repairs to the delivery canal associated with the delivery of 87,200 acre-feet of Central Arizona Project water to the Ak Chin Community. The increase in funding request is due to a higher Central Arizona Project price per acre-foot for water deliveries.

Reclamation Request \$9,900,000

**SEE APPENDIX FOR:** Obligation by Function for Operating Projects

# Calleguas Municipal Water District Recycling Project

**LOCATION:** This project is located in Ventura County, California.

**DESCRIPTION/JUSTIFICATION:** This project consists of planning, designing, and constructing regional water recycling projects that include wastewater reclamation and reuse, brackish groundwater recovery, and regional salinity management projects. A total of ten specific projects are planned resulting in annual recycling or recovery of a total of 51,470 acre-feet of water in order to reduce the region's dependence on imported water supplies.

**AUTHORIZATION:** P.L. 102-575 - Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

**COMPLETION DATA:** As of September 30, 2007, this project is 49 percent completed. The project is scheduled for completion in 2014, a delay of one year from that shown in the FY 2008 Budget Justifications, due to a revised construction schedule.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$1,033,000	\$800,000
Enacted/Request	\$1,033,000	\$800,000
Non-Federal	10,711,000	20,785,000
Prior Year Funds	95	0
Total Program	\$11,744,095	\$21,585,000
Prior Year Funds/Non-Federal	(10,711,095)	(20,785,000)
Total Reclamation Allotment	\$1,033,000	\$800,000

#### **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$20,000,000	\$9,835,998	\$1,033,000	\$800,000	\$8,331,002
Adjustments 1/	103,310,000	29,258,369	10,711,000	20,785,000	42,555,631
Total	\$123,310,000	\$39,094,367	\$11,744,000	\$21,585,000	\$50,886,633

<sup>1/</sup> Includes cost-sharing of \$103,310,000 from Calleguas Municipal Water District.

# **Construction Cost Allocation and Methodology**

Allocation	FY 2008	FY 2009
Municipal and Industrial Water	\$113,990,000	\$123,310,000
Total	\$113,990,000	\$123,310,000

**METHODOLOGY:** The methodology of cost allocation has not been modified from last year. The increase of \$9,320,000 is due to updated cost estimates, all of which will be applied to the non-Federal share.

**APPROPRIATION CEILING:** P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, imposed a ceiling of \$20,000,000. The Federal obligation is \$20,000,000 which does not exceed the appropriation ceiling.

#### **WORK PROPOSED FOR FY 2009:**

**Water and Energy Management and Development** - Continues work on construction of a regional water recycling project in the Calleguas Municipal Water District service area.

21,585,000

Non-Federal - Calleguas Municipal Water District

(20,785,000)

800,000

Reclamation Request \$800,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Project Repayment for FY 2009 Status of NEPA Compliance

# Colorado River Basin Project Central Arizona Project

**LOCATION:** The Central Arizona Project is located in Maricopa, Pima, Gila, La Paz, Mohave, Coconino, Yavapai, and Pinal Counties of Arizona; San Bernardino County, California; Clark County, Nevada; Grant County, New Mexico; and Kane and Washington Counties, Utah. The transmission lines serve both power and water development portions of the project. They are located in Coconino, Mohave, Yavapai, and Maricopa Counties, Arizona; Kane and Washington Counties, Utah; Clark County, Nevada; and San Bernardino County, California. The Non-Indian Distribution Systems are located in Maricopa, Pinal, and Pima Counties, Arizona.

**DESCRIPTION/JUSTIFICATION:** The Central Arizona Project is a multipurpose water resource development and management project which provides irrigation, municipal and industrial water, power generation, flood control, outdoor recreation, environmental enhancement, and sediment control. In addition, the project will provide delivery of tribal homeland water, partial settlement of Indian water rights claims, and economic benefits accruing from leasing of Indian agricultural water rights to municipal entities. It will provide a partial replacement water supply to 417,773 acres of irrigable lands, which consists of 280,873 acres of non-Indian agricultural land and up to 136,900 acres of reservation land. In addition, there is up to 764,276 acre-feet of water provided annually for direct municipal and industrial use. The water demand was re-estimated in the 1996 Water Supply Study and, beginning in FY 1997, incorporated into the official cost allocation. In 2000, the water supply delivery estimates were modified to reflect the agreements reached under the settlement negotiations. Benefits to recreation, flood, and sediment control are provided. The sediment control benefits associated with Buttes Dam, Middle Gila Division have been indefinitely deferred. The maximum benefits for recreation will be realized upon completion of the recreation development associated with the Tucson area. Benefits for flood and sediment control were realized upon completion of the modified Theodore Roosevelt Dam in 1996 along with the power benefits associated with the completed New Waddell Dam. In addition, a power entitlement of 546,750 kilowatts is available to the project through terms of the Navajo Project Participation Agreement.

AUTHORIZATION: P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by P.L. 102-575 - Title XXVIII, Reclamation Recreation Management Act, October 30, 1992; P.L. 90-537, Colorado River Basin Project Act, September 30, 1968; P.L. 97-293 - Title II, Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982; P.L. 97-373, Amend Colorado River Basin Project Act, December 20, 1982; P.L. 100-512, Salt River Pima Maricopa Indian Community Water Rights Settlement Act, October 20, 1988; P.L. 101-628, Fort McDowell Indian Community Water Rights Settlement Act of 1990, December 28, 1990; P.L. 102-497, To Make Technical Amendments to Certain Indian Statutes, October 24, 1992; P.L. 102-575 - Title XXXVII, San Carlos Apache Tribe Water Rights Settlement Act of 1992, October 30, 1992, as amended; P.L. 102-575 - Title XXXIX, Siphon Repair and Replacement, October 30, 1992; P.L. 103-434 - Title I, Yavapai-Prescott Indian Water Rights Settlement, October 31, 1994; P.L. 108-447, Division C, Consolidated Appropriations Act of 2005, December 8, 2004; and P.L. 108-451, Arizona Water Settlements Act, December 10, 2004, as amended by P.L. 110-148, December 21, 2007.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water and Improve the Quality and Diversity of Recreation Experiences.

**COMPLETION DATA:** Initial operation of the first generation unit at the Navajo Generating Station began on May 31, 1974. Operation of the last (third) generating unit began April 30, 1976. Initial water via the Hayden-Rhodes Aqueduct was delivered to the Phoenix metropolitan area in 1985. Initial water delivery was made to users of the Fannin-McFarland Aqueduct and to users in Pinal County in 1986. Initial water delivery to the Ak-Chin Indian Community was made in June 1987. Water deliveries to northern Pima County were made in 1989 and were made to the Tucson area in August 1992.

Water delivery to the Salt River Pima Maricopa Indian Community began in July 1997. Title III of the Arizona Water Settlements Act, the Southern Arizona Water Rights Settlement Amendments Act of 2004 revised the completion date from July 12, 1993 to January 1, 2009, for the Schuk Toak District and January 1, 2016 for the San Xavier District of the Tohono O'Odham Nation. Notice was given to the Tohono O'Odham Nation on September 25, 1992, that the Central Arizona Project aqueduct was capable of making canal side water deliveries. Water deliveries to the Schuk Toak District began in June 2000. Partial water deliveries began in January 2001 to the existing San Xavier Farm and the Farm rehabilitation project was completed in 2007. Fort McDowell Indian Community pre-settlement planning activities, authorized under the Central Arizona Project, were completed in September 1991. Construction of their delivery system was accomplished under the Small Reclamation Projects Act, as required by the Fort McDowell Indian Community Water Rights Settlement Act of 1990, P.L. 101-628. The Yavapai-Prescott Indian Community's water settlement was ratified October 31, 1994. This resulted in a water right allocation exchange agreement dated December 28, 1995, between the cities of Scottsdale, Prescott, and Nogales; Cottonwood Water Works; Mayer Domestic Water Improvement District; Rio Rico Utilities; and Camp Verde Water System, Inc. Under the agreement, any financial compensation for the Community's water allocation may only be used towards water development. The Gila River Indian Community delivery and distribution system is under construction. The Community has progressively completed system components resulting in staged water deliveries beginning in 2005, with full deliveries sometime after 2015. Firm water delivery dates for the remaining Indian communities (Sif Oidak, San Carlos-Apache, Pascua Yaqui, Camp Verde, and Tonto Apache) will be determined when planning is complete.

Water deliveries to the Non-Indian Distribution Systems were made to Harquahala Valley Irrigation District in 1985; Tonopah Irrigation District and Chaparral City Water Company in 1986; and New Magma Irrigation and Drainage District in 1987. Full deliveries were made to Queen Creek, San Tan, and Chandler Heights Citrus Irrigation Districts in 1989. Full deliveries were made to Maricopa-Stanfield and Hohokam Irrigation and Drainage Districts in 1990. The Central Arizona Irrigation and Drainage District was capable of receiving full deliveries in February 1991.

As of September 30, 2007, the Central Arizona Project is 85 percent complete. The percent complete is a composite of the Central Arizona Project, Water and Power Development, and the Non-Indian Distribution Systems.

#### SUMMARIZED FINANCIAL DATA

#### **Program Financial Data**

8		
Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$26,331,000	\$26,203,000
Land Management and Development	592,000	325,000
Facility Operations	215,000	261,000
Facility Maintenance & Rehabilitation	0	61,000
Enacted/Request	\$27,138,000	\$26,850,000
Non-Federal	496,000	288,000
Prior Year Funds	21,587	0
Total Program	\$27,655,587	\$27,138,000
Prior Year Funds/Non-Federal	(517,587)	(288,000)
Total Reclamation Allotment	\$27,138,000	\$26,850,000

#### **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Lower Colorado River Basin Development Fund 1/	\$4,582,315,185	\$3,364,973,435	\$26,787,000	\$26,451,000	\$1,164,103,750
Non-Indian Distribution Systems <u>2</u> /	240,951,222	240,951,222	0	0	0
Project Total	\$4,823,266,407	\$3,605,924,657	\$26,787,000	\$26,451,000	\$1,164,103,750
Adjustments <u>3</u> /	854,670,782	697,456,171	456,000	402,000	156,356,611
Total Costs	\$5,677,937,189	\$4,303,380,828	\$27,243,000	\$26,853,000	\$1,320,460,361

<sup>&</sup>lt;u>1</u>/ Represents total Federal obligations financed under authority of section 309(a), P.L. 90-537, Colorado River Basin Project Act for the Lower Colorado River Basin Development Fund, as amended by P.L. 108-451, Arizona Water Settlements Act.

- 2/ Represents total Federal obligations financed under authority of section 309(b), P.L. 90-537, Colorado River Basin Project Act, as amended by P.L. 97-373.
- 3/ This amount includes \$2,529,000 for Central Arizona Project and \$-71,982 for the Non-Indian Distribution Systems for transfer of property; \$229,845,000 contributions provided on modified Plan 6 by local entities; \$12,540,911 for recreation provided by Maricopa County; \$35,581,000 by cost-sharing recreation partners for Tucson Terminal Storage and the aqueduct recreation; \$59,433,863 for non-cash contributions provided by the repayment entities for the Non-Indian Distribution Systems; \$985,000 advanced by the State of Arizona for advance planning work; \$861,838 provided by Maricopa County for construction of Castle Hot Springs Road; \$638,478 provided by Salt River Project for the upgrade to the

Theodore Roosevelt Dam Power plant; and \$300,000 contributed by the State of New Mexico for drilling at Conner dam site. The city of Tucson's contribution of \$84,039 for the Tucson Pipeline is included, as is the Central Arizona Water Conservation District's contribution of \$98,645 for a modification of the New River Siphon replacement along with \$45,713,000 in non-Federal construction by Central Arizona Water Conservation District for deficiency work for the Aqueduct, Permanent Operating Facilities and New Waddell Dam. The adjustment also includes \$96,458 reimbursable municipal and industrial interest during construction for the Non-Indian Distribution Systems for Chaparral City Water Company, Queen Creek Irrigation District, Chandler Heights Citrus Irrigation District, and San Tan Drainage District. Interest during construction on the Lower Colorado River Basin Development Fund is \$319,023,068 for municipal and industrial, and \$147,012,464 for commercial power.

**Construction Cost Allocation and Methodology** 

Allocation	FY 2008	FY 2009
Irrigation <u>1</u> /	\$1,507,134,420	\$1,518,452,298
Power	672,853,798	672,965,093
Municipal and Industrial Water	1,461,605,053	1,466,858,491
Recreation	162,239,157	162,624,498
Environmental Enhancements <u>2</u> /	288,000	288,000
Flood Control	122,643,916	122,624,453
Non-Indian Distribution Systems <u>3</u> /	300,409,561	300,409,561
Indian Distribution Systems <u>4</u> /	735,064,000	773,944,000
Other <u>5</u> /	145,904,005	152,612,795
Unallocated Costs <u>6</u> /	489,246,000	507,158,000
Total	\$5,597,387,910	\$5,677,937,189

- 1/ FY 2008 includes \$1,058,296,811 for costs allocated to Indian irrigation which is eligible for deferral under the Leavitt Act and \$460,155,487 which is allocated to non-Indian irrigation and is reimbursable.
- 2/ Environmental enhancement is one of the originally authorized project purposes under Title III, Section 301(a) of P.L. 90-537.
- 3/ Includes all costs associated with the Non-Indian Distribution Systems. These costs are not allocated as part of the allocation procedure, but are assigned directly to the entities constructing and repaying these facilities. Systems include those for municipal use, \$4,524,173 and ten irrigation districts, \$295,885,388.
- 4/ Indian Distribution Systems is listed separately because water may be used for irrigation, domestic, municipal, and industrial purposes on the reservations in accordance with the Secretary's Decision published March 24, 1983.
- 5/ Includes non-reimbursable costs of \$45,247,978 for cultural resources as authorized under Section 7 of the Archeological and Historic Preservation Act of 1974 (P.L. 93-291), \$3,500,000 for Pima County flood and erosion control near the city of Marana, and \$50,911,629 non-reimbursable siphon repair costs as authorized under Title XXXIX of P.L. 102-575. Also, includes prepaid costs of \$985,000 for the State of Arizona, \$963,000 for contributed investigation costs, \$900,277 for the Colorado River Division studies, \$861,838 from Maricopa County, Arizona, \$638,478 from Salt River Project for Reclamation to evaluate increasing power generation at the Theodore Roosevelt, \$300,000 from the State of New Mexico, \$84,039

from the City of Tucson for the Tucson pipeline, Maricopa County recreation cost share of \$12,540,911, recreation partners cost share of \$35,581,000 for Tucson Reliability and Hayden-Rhodes and Tucson aqueducts, and \$98,645 from Central Arizona Water Conservation District for New River Siphon modification.

6/ Includes costs of \$435,227,000 for the Middle Gila Division and Upper Gila Division which will be allocated when all the beneficiaries and repayment entities are identified and functions determined. Also includes \$71,931,000 for the Drainage Division. P.L. 108-451 provides funding for the ultimate construction of the Upper Gila Division at a minimum of \$66 million and a maximum of \$128 million, if certain conditions are met and the State of New Mexico decides to move forward with a New Mexico Unit of the CAP. Construction of the Middle Gila and Drainage divisions has been deferred indefinitely.

**METHODOLOGY:** The allocation process was recently reviewed, resulting in no change to the methodology. The same methodology was used for the cost allocation as was presented in the FY 2008 Budget Justifications. The following is a summary of impacts on individual allocations:

**Irrigation** increased \$11,317,878 primarily due to allocating more water for Indians which increased costs allocated to irrigation.

**Power** increased \$111,295 as a result of joint costs allocated to power.

**Municipal and Industrial water** increased \$5,253,438 primarily due to increased costs of Tucson Terminal Storage construction.

**Recreation** increased \$385,341 due to a revised estimate of the remaining recreation associated with the project.

Environmental Enhancement did not change.

**Flood Control** decreased \$19,463 due to a decrease in the joint costs allocated to Theodore Roosevelt Dam.

Non-Indian Distribution Systems did not change.

**Indian Distribution Systems** increased \$38,880,000 due to a revised estimate for the indexed future costs for Indian distribution systems.

**Other** increased \$6,708,790 due to increased cost estimates for cultural resource mitigation and recreation cost share for the Tucson Reliability and aqueduct features of the project.

Unallocated Costs increased \$17,912,000 due to indexing to October 2008 projected prices.

### **OTHER INFORMATION:**

Water Allocations: A final notice of allocation of project water for Indian irrigation use was published in the Federal Register on October 18, 1976. On December 1, 1980, the Secretary announced a modified allocation and raised the Indian's priority for receiving water. The modified allocation also increased the amount of project water allocated as Indian Priority water to 309,828 acre-feet. The Secretary approved the allocation of project water to non-Indian irrigation users, municipal and industrial water users, and Indian users on February 10, 1983. On November 28, 1990, the Fort McDowell Indian Community Water Rights Settlement Act was passed that authorized the Secretary to convert Harquahala Valley Irrigation District's original Central Arizona Project agricultural priority water to an Indian priority water of up to 33,251 acre-feet. Upon conversion action the Indian Priority water increases to 343,079 acre-feet. Ten contracts providing water to 12 Indian communities have been executed. Settlement negotiations concerning operations and repayment of the Central Arizona Project resulted in a Stipulated Settlement filed with the Federal Court May 9, 2000, and finalized on November 21, 2007. The Arizona Water Settlements Act, P.L. 108-451 was signed into law December 10, 2004 and amended in December 2007. The Secretary reallocated water on August 25, 2006 in accordance with the Act, which provides up to 667,724 acre feet under contract with Arizona Indian Tribes or available to the Secretary of Interior for

future assignment to Arizona Indian Tribes. Similarly, up to 764,276 acre feet is under contract or available to non-Indian municipal and industrial entities, the Arizona Department of Water Resources, and Non-Indian Agricultural entities.

Water Service Contracts: The Secretary approved a water service subcontract form in July 1983 and by the Central Arizona Water Conservation District in November 1983. All of the original Non-Indian irrigation districts have declined or relinquished their subcontracted entitlements. The New Magma Irrigation and Drainage District had its subcontract terminated under a plan approved by the United States Bankruptcy Court in 1995. A portion of the Maricopa Stanfield Irrigation and Drainage District's entitlement was reassigned to the Arizona State Land Department, who currently hold the only Non-Indian Agricultural subcontract. There are 58 municipal and industrial water service subcontracts totaling 620,678 acre-feet. In March 1991, the State of Arizona provided recommendations to the Secretary for non-contracted water. On February 5, 1992, the Secretary published in the Federal Register the final notice reallocating 29.3 percent of the project water supply which was allocated to non-Indian agricultural uses, but not yet contracted. Draft contracts were developed by Reclamation but never offered due to independent and unapproved contract actions taken by the Central Arizona Water Conservation District. The Arizona Department of Water Resources sent a recommendation to the Secretary of the Interior on January 20, 2000, to allocate the remaining current unallocated municipal and industrial priority water to various municipal and industrial entities within the State. The Secretary made final allocations on August 25, 2006, to coincide with the Arizona Water Settlements Act, P.L. 108-451 as described above. The Act also provides for amendments to CAP contract and subcontracts to provide permanent service contracts with initial delivery terms of at least 100 years. The Tohono O'odham Nation CAP water delivery contract was amended pursuant to the Arizona Water Settlement Act and was executed on May 5, 2006. The Gila River Indian Community's CAP water delivery contract was amended pursuant to the Arizona Water Settlement Act and was executed on May 15, 2006.

<u>Power</u>: The Colorado River Basin Project Act provided for the Secretary of the Interior to enter into an agreement with non-Federal interests, whereby the Federal government acquired the right to 24.3 percent of the power produced at the non-Federal Navajo Generating Station. The agreement also includes the delivery of power and energy over the transmission facilities to delivery points within the Central Arizona Project area. Capital improvements of approximately \$101.8 million for new sulfur dioxide scrubbers reduced visibility degradation pollution. These became operational in August 1999.

Plan 6: The Central Arizona Project, as originally authorized, included Orme Dam and Reservoir. In 1984, Plan 6 replaced this regulatory storage component of the Central Arizona Project. Plan 6 originally included New Waddell Dam, Modified Theodore Roosevelt Dam, and Cliff Dam. In June 1987, Cliff Dam was deleted from Plan 6 by mutual agreement with the State, the Secretary, Congressional, and environmental interests. The funding agreement was amended in October 1987, to reflect the deletion of Cliff Dam from Plan 6. Construction of all Plan 6 facilities, including Safety of Dams, is complete. The funding agreement was amended again on December 21, 1993, to reassign the water rights and repayment obligation of the Hohokam Irrigation and Drainage District to the Plan 6 city participants to satisfy the Cliff Dam water entitlement. Section 4(a) of the Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of October 1988, P.L. 100-512, provided the Community with 7,000 acre-feet of storage space from the cities' share of the new conservation space behind Theodore Roosevelt Dam. This decreased the cities' contribution by \$1,208,000. This portion of Theodore Roosevelt Dam was federally funded in FY 1995 from Reclamation's Indian Water Rights Settlement Act Project, reducing the CAP share of the cost.

<u>Siphons</u>: After a 1987 corrosion monitoring program, Reclamation determined that six Hayden-Rhodes siphons contained defects that could cause failures. Reclamation studies determined that the principle causes of the siphon deterioration were defective wire used to reinforce the concrete pipe and incomplete encasement of the prestressing wire with portland cement slurry and mortar coating. Reclamation's Contracting Officer rendered a Final Decision on September 28, 1995, concluding the contractor was liable to the government for the siphons' distress and demanded reimbursement of \$39.5 million for the repair and replacement costs. The contractor appealed the Final Decision to the Interior Board of Contract Appeals.

On June 8, 1999, the Judge issued a decision denying the contractor's Motion for Partial Summary Judgment. The hearing began on November 6, 2000. On January 4, 2001, the judge issued an order staying trial proceedings pending the parties' attempts to resolve the appeals through mediation. A final settlement agreement, approved by the Interior Board of Appeals Judge on January 28, 2003, provided for payment to be made to the Bureau of Reclamation for \$10,000,000. The settlement has been paid in full and an order dismissing the appeals with prejudice has been issued. Repairs have been substantially completed on the siphons. The total cost to repair all six siphons is estimated at \$101.8 million. Title XXXIX, Siphon Repair and Replacement, of P.L. 102-575, October 30, 1992, made 50 percent of the siphon repair costs non-reimbursable.

Gila River Biological Opinion Litigation: On April 20, 1994, pursuant to Section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service issued its final Biological Opinion on the transportation and delivery of Central Arizona Project water to the Gila River Basin. The Opinion concluded that long-term deliveries of Central Arizona Project water would jeopardize the continued existence of four native threatened or endangered fish species. In order for the project to avoid the likelihood of jeopardizing the continued existence of these species, the U.S. Fish and Wildlife Service identified several reasonable and prudent alternatives that Reclamation would be required to implement. The measures include construction of fish barriers, public education programs, fish monitoring, and long-term funding for research and conservation actions.

On March 7, 1997, the Southwest Center for Biological Diversity filed a lawsuit in U.S. District Court in Phoenix, Arizona, alleging the Opinion was inadequate and both Reclamation and the U.S. Fish and Wildlife Service were in violation of the Endangered Species Act. On August 24, 1997, both lawsuits against the Secretary were consolidated.

The District Court ruling on September 26, 2000, denied in part and granted in part the Southwest Center for Biological Diversity's motion. The court ruled the reasonable and prudent alternatives were not arbitrary and capricious, but the amendments to the Opinion issued by U.S. Fish and Wildlife Service to grant more time for Reclamation to implement the Reasonable and Prudent Alternatives were arbitrary and capricious, and therefore directed Reclamation to re-initiate consultation. The court further ruled Reclamation was in violation of Section 9 because "take" of listed species was imminent, and the "take" was attributable to project water deliveries. However, the Court found the Southwest Center for Biological Diversity's request for injunctive relief, "to sever the water connections between the Central Arizona Project and the habitat of listed species" too vague. The consultation was completed on April 17, 2001. Reclamation agreed to implement additional fish barriers to aid in the conservation of native fishes. These barriers must be completed in 5-year increments staged over the next 15 years from the date of the re-negotiation. In addition, Reclamation agreed to allow the U.S. Fish and Wildlife Service to add administrative costs to the native fish conservation and non-native fish eradication measures. The Reasonable and Prudent Alternatives from the 1994 Opinion will continue to be implemented. The parties agreed on a stipulation of final judgment and the Court issued its final order on June 12, 2001.

Southwestern Willow Flycatcher Litigation: Reclamation initiated formal consultation with the U.S. Fish and Wildlife Service on potential impacts from operation of the Modified Roosevelt Dam on the endangered southwestern willow flycatcher in September 1995. On January 8, 1996, Reclamation was sued by the Southwestern Center for Biological Diversity which alleged that Reclamation should supplement its 1990 environmental assessment on Modified Roosevelt Dam due to newly identified impacts to the flycatcher. On March 12, 2000, the Federal judge ruled on the Southwestern Center for Biological Diversity's motion for summary judgment. The court concluded that the U.S. Fish and Wildlife Service fully complied with the requirements under the Endangered Species Act. The court further concluded that Reclamation did not act arbitrarily or capriciously in its evaluation of alternatives in the 1996 environmental assessment and that Reclamation did not violate the National Environmental Policy Act.

**APPROPRIATION CEILING:** Appropriations authorized are \$4,375,918,000 (October 2008). The comparable Federal obligation is \$4,582,315,185 which exceeds the appropriation ceiling by more than the amount of contingencies included in the obligation. Legislation to provide additional appropriation ceiling would be needed to complete the total project as authorized. Current estimated commitments are within the existing ceiling due to the indefinite deferral of \$390,830,000 for the Middle Gila Division and Drainage System.

The Non-Indian Distribution Systems authorized by Section 309(b) of P.L. 90-537 and P.L. 97-373 were completed in FY 1997. The final Federal obligation is \$240,951,222. The authorized ceiling at the time of substantial completion was \$347,466,000 (October 1996).

#### **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development -

Regulatory Storage Division - New Waddell Dam - Completes contract closing activities.

9,000

<u>Theodore Roosevelt Dam</u> - Completes land acquisition and startup costs associated with Section 7 Biological Opinion for the endangered southwestern willow flycatcher, and program administration.

509,000 518,000

**Total Regulatory Storage Division** 

1 .....

<u>Upper Gila Division</u> - Continues to collect and evaluate technical, environmental, socio-economic, and cultural resource issues to assist New Mexico in determining the feasibility of a constructed project.

500,000

<u>Tucson Reliability Division</u> - Begins investigation of land and right-of-way acquisition for the Northwest Reservoir. Continues coordination with the City of Tucson regarding a method to provide a reliability feature for the city's approximate 140,000 acre-feet per year allocation of Central Arizona Project water. Continues the design report in conjunction with the environmental impact statement and Record of Decision. Continues to resolve issues of cost, repayment, operation and recreational opportunities. Completes preliminary design including sizing and siting of the Northwest Reservoir.

467,000

<u>Indian Distribution Division</u> - Begins development of a plan for a reliable municipal water source for the Tonto Apache reservation subsequent to the selection of a preferred alternative. Begins construction and completes cultural resource activities for Phase I of the San Xavier Farm Extension. Continues construction of bridge and check structures associated with BW-1A and BW-1B (Pima Canal) on the Pima

Maricopa Irrigation Project. Continues acquisition of right of way for the Pima Canal. Begins the design and the environmental impact statement and completes the investigations for the San Carlos Apache water conveyance system. Continues investigation of alternatives for the delivery and distribution of the Yavapai Apache water delivery system and evaluation of issues associated environmental impacts and affected water rights pertaining to a CAP water exchange in the Verde River watershed. Continues support activities performed on the Gila River Indian Community Pima Maricopa Irrigation Project which includes engineering and design, cultural resource and environmental compliance, project management and administration, as well as Reclamation oversight. Continues providing overall program administration for all Tribal programs for the implementation of the CAP Indian Distribution Division.

18,371,000

Other Project Costs - Program Administration - Continues project management activities for the consolidated Central Arizona Project. These activities include implementation of the stipulated settlement agreement, preparation of reports on the entire project to meet congressional and departmental requirements relating to the project's overall construction program, and workers compensation associated with injuries incurred during the construction of Central Arizona Project.

845,000

<u>Curation Facilities</u> - Continues refinement of the archaeological database, public education and outreach program, and curation management, training, and oversight for the Huhugam Heritage Center repository.

720,000

Native Fish Protection - Begins and completes construction of the West Fork Oak Creek, Hot Springs Canyon and Redfield Canyon fish barriers. Continues working with the U.S. Fish and Wildlife Service to meet legal requirements under the Section 7 Biological Opinion for the Gila River including non-native fish eradication, native fish conservation, and the education and information program. Begins construction of the Blue River fish barrier.

4,782,000

Total Other Project Costs

6,347,000

Subtotal, Water and Energy Management and Development

\$26,203,000

#### Land Management and Development -

Recreation Development - Of the recreational development originally authorized under the project, continues park development at Reach 11 with the City of Phoenix, trail development with Pima County, and park development with the town of Marana.

Non-Federal Non-Cash Participation - City of Phoenix, Pima County, Marana

(248,000)

248,000

<u>Land Management</u> – Continues land management activities for Reclamation lands for which there is no operating entity or facilities. These activities include coordination with the Bureau of Land Management to return excess withdrawn lands; review of applications, mandatory reports, and record management actions; as well as, cultural resource administration and field reviews.

63,000

Recreation Management - Continues sponsorship of the "Catch a Special Thrill (CAST) for Kids" fishing day at Lake Pleasant. 14,000

Subtotal, Land Management and Development

325,000

#### **Facility Operations -**

### <u>Distribution Systems</u> –

Continues to administer amended repayment and water allocation contracts with distribution system entities to comply with the Arizona Water Settlements Act. Continues reviewing crop census reports, monitoring water district reserve funds, determining interest for non-agricultural water use and co-mingling fees, performing municipal and industrial conversion actions, collection actions on delinquent payments, and other administrative actions. Continues performance of engineering reviews on relocation of facilities and executing land use agreements.

301,000

Non-Federal Cash Contributions: Various (40,000) 261,000

Subtotal, Facility Operations

261,000

**Facility Maintenance and Rehabilitation -** Continues dam safety, program management, structure and facility examinations, preparation and review of examination reports, which was previously funded under Facility Operations.

61,000

Subtotal, Facility Maintenance and Rehabilitation

61,000

Reclamation Request \$26,850,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Land Certification

Obligations by Function for Operating Projects

Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investments

# Colorado River Basin Salinity Control Project - Title I

**LOCATION:** This project is located in southwestern Arizona in Yuma County and southeastern California in Imperial County.

**DESCRIPTION/JUSTIFICATION:** The project activities include maintaining the Yuma Desalting Plant; maintaining the U.S. Bypass Drain and the Mexico Bypass Drain; ensuring desalting/replacement obligations are minimized; and maintaining Mexican Treaty salinity requirements.

The project provides for the enhancement and protection of the quality of water available in the Colorado River for the United States and the Republic of Mexico and to comply with the requirements of Minute 242 approved August 30, 1973, under the 1944 Treaty with Mexico. In executing the plan to reduce the quantity and improve the quality of Wellton-Mohawk Division drainage so the majority of it can be credited toward treaty deliveries, several measures were implemented: (1) construction of the Yuma Desalting Plant; (2) construction of the bypass drain in the United States and Mexico; (3) implementation of the Wellton-Mohawk Irrigation Efficiency Improvement Program; (4) Wellton-Mohawk acreage reduction; (5) Painted Rock Reservoir land acquisition and operation schedule modification; (6) construction of the Main Outlet Drain Extension Siphon; and (7) completion of fish and wildlife mitigation measures.

**AUTHORIZATION:** P.L. 93-320, Colorado River Basin Salinity Control Act, Title I, June 24, 1974; and P.L. 96-336, Amend Colorado River Basin Salinity Control Act, September 4, 1980.

COMPLETION DATA: As of September 30, 2007, the project was 92 percent complete. The Protective and Regulatory Pumping Unit and associated features were completed in FY 1979; 14 wells and associated features on the Protective and Regulatory Pumping Unit were completed in FY 1979; the Coachella Canal Unit Replacement was completed in FY 1984; an additional 7 wells and associated features were completed in FY 1984; and the remainder of the wells and associated features will be completed as required. The Desalting Complex Unit was completed in FY 1991 and test operation of the main facility was completed and production of desalting water began in FY 1992. In FY 1993, the Yuma Desalting Plant was placed in ready reserve status and will continue to operate at this level for the near future. Construction of the remaining features associated with the Yuma Desalting Complex Unit will be completed as necessary and a new completion date will be determined.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

## SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

Activity	FY 2008	FY 2009
Facility Operations	\$1,622,000	\$1,650,000
Facility Maintenance and Rehabilitation	7,668,000	7,794,000
Enacted/Request	\$9,290,000	\$9,444,000
Non-Federal	100,000	100,000
Prior Year Funds	11,249	0
Total Program	\$9,401,249	\$9,544,000
Prior Year Funds/Non-Federal	(11,249)	(100,000)
Total Reclamation Allotment	\$9,290,000	\$9,444,000

#### **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$453,075,000	\$413,826,847	\$0	\$0	\$39,248,153
Adjustments	715,000	715,000	0	0	0
Total	\$453,790,000	\$414,541,847	\$0	\$0	\$39,248,153

# **Construction Cost Allocation and Methodology**

Allocation	FY 2008	FY 2009
Irrigation	\$45,938,000	\$45,938,000
Mexican Treaty	407,688,000	407,688,000
Other 1/	164,000	164,000
Total	\$453,790,000	\$453,790,000

Nonreimbursable preauthorization investigations costs (P.L. 92-149).

**METHODOLOGY:** The methodology of cost allocation has not been revised.

**APPROPRIATION CEILING:** Ceiling calculation will no longer be prepared until such time as there is a need to construct additional Yuma Desalting Plant facilities. The authorized ceiling was \$547,290,000 (October 2003) and the comparable estimated total Federal obligation was \$453,790,000. The ceiling authorization is adequate to cover the project as currently proposed.

**OTHER INFORMATION:** Reclamation is currently proceeding along three paths regarding the Yuma Desalting Plant operations. Reclamation will continue to maintain the Plant in a "ready-reserve" status and correct design deficiencies as funds become available. With adequate funding, the Plant could be ready for long-term operation at full capacity within 4 years. Reclamation will continue a demonstration program to test the viability of paying entitlement holders of Colorado River water to voluntarily forbear use of water on a temporary basis as funds become available in FY 2008 and FY 2009. Finally, a public planning process for identifying and evaluating alternative possibilities for Bypass Drain flow replacement or recovery has been initiated. In 2008, Reclamation will collaborate with representatives from California, Arizona and Nevada to further analyze these alternatives. Reclamation completed a

demonstration operation of the plant for 90 days at about 10 percent of full capacity in 2007. A Post-Demonstration Run Evaluation Report will be available in the first quarter of 2008.

#### WORK PROPOSED FOR FY 2009:

Facility Operations - Continues collection and analysis of required data to enable Reclamation to satisfy its obligations under the Colorado River Basin Salinity Control Act. Continues efforts to ensure drainage flows from the Wellton-Mohawk Irrigation and Drainage District are minimized, thereby, reducing the Federal desalting and/or replacement obligation. Continues salinity accounting at the Northern International Boundary and Imperial Dam, as required by the U.S. Mexico Water Treaty. Continues operation of portions of the Yuma Desalting Plant and the A-22 sludge disposal facility. This includes the electrical, compressed air, sewage disposal, and distribution systems, as well as, associated Main Outlet Drain Extension intake and discharge equipment. Continues activities required to purify feedwater to the Yuma Desalting Plant. Continues Pilot System 1 operation in support of all research testing conducted at the Water Quality Improvement Center, including equipment operation, data collection, and performance of high recovery reverse osmosis tests.

Facilities Maintenance and Rehabilitation - Continues efforts to ensure the Yuma Desalting Plant is capable of operations to meet the Mexico treaty and other Federal requirements. These efforts include long-term maintenance of essential Yuma Desalting Plant infrastructure and facilities. Maintains the A-22 sludge disposal facilities and ramps and operational functions of the Yuma Water Quality Improvement Center research features and systems. Performs quality assurance activities of plant readiness. Ensures appropriate environmental compliance is initiated and maintained. Preserves the potable water source treatment system. Continues work associated with transfer of technology to entities other than Reclamation on a cost-shared or cost-reimbursed basis through testing at the Yuma Water Quality Improvement Center, designated a National Center for Water Treatment Technology. Continues research technology and methods to reduce operating costs at the Yuma Desalting Plant and exploration of new technology to keep the Yuma Desalting Plant viable as a tool to address future water resource needs. The increase in funding is due to increasing costs related to a new maintenance contract for maintaining the Yuma Desalting Plant. Additionally, the Yuma Desalting Plant has transitioned from construction to operation status which necessitates comprehensive plant inspections and reviews.

Non-Federal: Water Users - Yuma Water Quality Improvement Center

6,692,000
(100,000)
6,592,000

Continues routine maintenance of the United States and Mexico sections of the Bypass Drain, Protective and Regulatory Pumping Unit, and mitigation features constructed under the Title I authority. The decrease is due to revised funding schedules which will postpone the contract to repair and upgrade the Main Outlet Drain, Main Outlet Drain Extension and Bypass Drain control structures.

1,202,000

Subtotal, Facilities Maintenance and Rehabilitation

7,794,000

**Reclamation Request** 

\$9,444,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Obligations by Function for Operating Projects

Project Repayment FY 2009 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investments

### Colorado River Front Work and Levee System

**LOCATION:** This project is located in Mohave, La Paz, and Yuma Counties in western Arizona; Riverside, San Bernardino, and Imperial Counties in southeastern California; and Clark County in southern Nevada.

**DESCRIPTION/JUSTIFICATION:** The Colorado River Front Work and Levee System extends approximately 700 river miles from Lee's Ferry, Arizona (the division point between the upper and lower Colorado River Basins), to the International Boundary between the United States and Mexico. Colorado River Front Work and Levee System is a drainage and minor construction program to control floods, improve navigation, and regulate the flows of the Colorado River. The lower Colorado River requiring maintenance extends about 280 river miles from Davis Dam to the border, and transverses three wildlife refuges, five Indian reservations, and six irrigation districts. For administrative purposes, this reach of the river has been divided into ten operational divisions. These divisions, starting at Davis Dam and proceeding in order downstream, are: Mohave Valley, Topock Gorge, Havasu, Parker, Palo Verde, Cibola, Imperial, Laguna, Yuma, and Limitrophe. Major project facilities include Senator Wash Dam and Reservoir, which is an off-stream pump generating plant, as well as water crossing facilities, armored banklines, and flood control levees.

The Drop 2 Storage Reservoir will replace lost storage capacity at Senator Wash Dam, reduce excess flows to the Republic of Mexico, improve operational control on the lower Colorado River, and avoid mismatches in water orders and diversions from the Colorado River below Parker Dam. The Secretary is directed by Section 396 of Public Law 109-432, notwithstanding any other provision of law and without delay, to design and provide for the construction, operation, and maintenance of a regulated water storage facility at or near the All-American Canal, including all incidental works that are reasonably necessary to operate the storage facility, to provide additional storage capacity to reduce non-storable flows on the Colorado River below Parker Dam.

The project regulates the meandering river channel by the use of bankline structures with riprap protection or a riprap protected dredge channel. Settling basins for trapping sediment have been built upstream from Topock Bridge and Laguna Dam. Water salvage activities along the lower Colorado River include controlling the size of open water areas, selective clearing of phreatophytes, draining the river valley, and establishing deeper backwater areas. Major groundwater control and recovery programs have been undertaken by development of well fields and conveyance systems in the South Gila and Yuma valleys and on the Yuma Mesa.

**AUTHORIZATION:** P.L. 585, Colorado River Front Work and Levee System Adjacent to Yuma Project, March 3, 1925; P.L. 560, Colorado River Front Work and Levee System, January 21, 1927; P.L. 697, Amend Colorado River Front Work and Levee System Act, July 1, 1940; P.L. 469, Amend Colorado River Front Work and Levee System Act, June 28, 1946; P.L. 85-389, Amend Colorado River Front Work and Levee System Act, May 1, 1958; P.L. 99-450, Colorado River Floodway Protection Act, October 8, 1986; and Section 396 of P.L. 109-432, Tax Relief and Health Care Act of 2006, December 20, 2006.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

# **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$3,259,000	\$2,350,000
Enacted/Request	\$3,259,000	\$2,350,000
Non-Federal	5,845,000	74,460,000
Prior Year Funds	13,662	0
Total Program	\$9,117,662	\$76,810,000
Prior Year Funds/Non-Federal	(5,858,662)	(74,460,000)
Total Reclamation Allotment	\$3,259,000	\$2,350,000

#### **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation <sup>1/</sup>	\$162,448,000	\$123,416,943	\$3,259,000	\$2,350,000	\$33,422,057
Adjustments <sup>2/</sup>	172,291,000	1,400,000	5,845,000	74,460,000	90,586,000
Total <sup>1</sup> /	\$334,739,000	\$124,816,943	\$9,104,000	\$76,810,000	\$124,008,057

The total project increase of \$92,891,000 is due to revised estimates for the Lower Colorado River Drop 2 Storage Reservoir and Reclamation's costs have decreased due to additional contributions from Southern Nevada Water Authority.

### APPROPRIATION CEILING: None.

#### WORK PROPOSED FOR FY 2009

Water and Energy Management and Development - Continues to explore and develop concepts to minimize flood water impacts on Reclamation facilities, rural populations and agricultural facilities in the Gila Valley affected by high water elevations from the Gila River. Continues to develop design alternatives and environmental compliance activities to improve river stability, prevent erosion, and reduce sediment transport along the Colorado River channel. Continues collection of cross section data which will allow for evaluations of changes in the river and overall assessment of the river and levee system. \$1,731,000

Continues work on the Lower Colorado River Drop 2 Storage Reservoir located along the All-American Canal in southern Imperial County, California. Continues negotiations on the operation and maintenance contract for the Drop 2 Storage Reservoir. Completes additional operational studies associated with the reservoir. The reservoir will capture and save operational spill water and improve Reclamation's ability to manage water deliveries. The reservoir would contain approximately 8,000 acre-feet of storage, with a potential water savings of approximately 70,000 acre-feet per year of Colorado River water. The decrease is due to additional contributions from Southern Nevada Water Authority.

75,079,000 (74,460,000) 619,000

Non-Federal: Southern Nevada Water Authority

Reclamation Request \$2,350,000

<sup>&</sup>lt;sup>27</sup> Adjustments include contributions of \$1,400,000 from the State of California for California channel riparian restoration and contributions of \$170,891,000 from Southern Nevada Water Authority for the Lower Colorado River Drop 2 Storage Reservoir. An agreement between Southern Nevada Water Authority and Reclamation was signed in December 2007, relating to the construction phase.

### **Colorado River Water Quality Improvement Program**

**LOCATION:** This project is located in the Colorado River Basin upstream of Imperial Dam in the States of Arizona, California, and Nevada in the Lower Colorado Region.

**DESCRIPTION/JUSTIFICATION:** The purpose of this program is to develop a comprehensive, cost-effective program for water quality improvement and salinity control in the Colorado River Basin in cooperation with the Basin States and other Federal agencies.

The Colorado River is the major source of water for the southwestern United States and the Republic of Mexico. Salinity and other contaminants cause about \$750 million per year in damages to domestic, industrial, and agricultural users. The Federal Government is involved in the program because of its vast ownership of saline lands in the Basin and the existence of salinity and other contaminants found in the River. Reclamation leads the program because most of the cost-effective opportunities to control salinity and other contaminants involve improvements in irrigation efficiency and water conservation. Prevention is much more cost-effective than treating water after the salt and related contaminants enter the river system. In addition, increased concentrations of residual pharmaceuticals, fertilizers, pesticides, and personal care products are impacting the quality of limited water supplies in the lower Colorado River. For this reason, Reclamation has initiated the evaluation of effects of municipal effluent to the lower Colorado River.

**AUTHORIZATION:** P.L. 93-320, Colorado River Basin Salinity Control Act, June 24, 1974; P.L. 98-569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; and P.L. 104-298, Water Desalination Act, August 1, 1996.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

**Program Financial Data** 

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$207,000	\$195,000
Enacted/Request	\$207,000	\$195,000
Non-Federal	0	0
Prior Year Funds	3,547	0
Total Program	\$210,547	\$195,000
Prior Year Funds/Non-Federal	(3,547)	0
Total Reclamation Allotment	\$207,000	\$195,000

**Investigation Costs:** Initiation: FY 1972 Completion: Ongoing

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$10,500,000	\$9,162,565	\$207,000	\$195,000	\$935,435
Adjustments	198,808	198,808	0	0	0
Total	\$10,698,808	\$9,361,373	\$207,000	\$195,000	\$935,435

#### **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Continues Las Vegas Wash, Palo Verde Irrigation and Drainage District, and Colorado River monitoring of salinity levels and other contaminants for impacts on water quality in the lower Colorado River. Continues to evaluate the effects of urbanization on the lower Colorado River. Continues to conduct program verification, monitoring, evaluation, and coordination activities.

**Reclamation Request** 

\$195,000

### **Endangered Species Conservation/Recovery Project**

**LOCATION:** Projects are located at various sites within the Lower Colorado Region in Arizona, southern California, and southern Nevada.

**DESCRIPTION/JUSTIFICATION:** This program provides for the development and implementation of projects for the stewardship of endangered, threatened, proposed, and candidate species that are resident or migratory to habitats within the Lower Colorado Region. The principal threatened and endangered species and their habitat include the razorback sucker, southwestern willow flycatcher, Flat-tailed horned lizard, Virgin River chub, bonytail chub, Yuma clapper rail, woundfin minnow, and the Pima pineapple cactus. Specific activities include the continued monitoring of a refugia for endangered fishes on the Lower San Pedro River Preserve; several projects for the benefit of endangered fish species; and nestwatch programs for the bald eagle in central Arizona.

AUTHORIZATION: P.L. 93-205, Endangered Species Act of 1973, December 28, 1973, as amended.

**COMPLETION DATA:** These actions are taken to maintain and improve existing resident populations or localized critical habitats for migrating species within areas under Reclamation's jurisdiction within the lower Colorado River corridor and the Gila River Basin. An ultimate completion date for these actions cannot be determined. These stewardship actions will continue for as long as Reclamation manages lands, water, and power operations within the Lower Colorado Region.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

# SUMMARIZED FINANCIAL DATA

#### **Program Financial Data**

Activity	FY 2008	FY 2009
Fish and Wildlife Management and Development	\$758,000	\$666,000
Enacted/Request	\$758,000	\$666,000
Non-Federal	300,000	300,000
Prior Year Funds	0	0
Total Program	\$1,058,000	\$966,000
Prior Year Funds/Non-Federal	(300,000)	(300,000)
Total Reclamation Allotment	\$758,000	\$666,000

### **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	N/A	\$26,894,471	\$758,000	\$666,000	N/A
Adjustments <u>1</u> /	N/A	6,307,000	300,000	300,000	N/A
Total	N/A	\$33,201,471	\$1,058,000	\$966,000	N/A

<sup>1/</sup> Non-Federal and other Federal cost-sharing: U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Arizona Game and Fish Department, U.S. Forest Service, and Salt River Project.

### **APPROPRIATION CEILING: N/A.**

### **WORK PROPOSED FOR FY 2009:**

## Fish and Wildlife Management and Development -

Area Office Endangered Species Activities & Program Administration - Continues work on outreach programs at all area offices to do initial investigations into endangered species conservation and recovery projects with Federal, non-Federal, and state agencies. Continues regional endangered species coordination and management activities.

384,000

Bald Eagle Activities - Continues annual winter flights and occupancy-reproductive assessment, helicopter surveys, nestwatch activities, and participation on the Southwestern Bald Eagle Management Committee.

Reclamation's support was critical in efforts to de-list the Arizona bald eagle population and will assist in the implementation of the Arizona Bald Eagle Conservation Strategy.

421,000

Non-Federal - Various

(300,000)

121,000

<u>Lake Rearing Coves Dive Team</u> - Begins dive and boating operations as necessary to support and assist with the Lake Mohave Razorback Sucker Restoration Program. Activities include underwater videos of spawning fish, surveying backwaters, netting to monitor adult fish, and collection of larvae.

6,000

<u>San Pedro River Native Fish Pond</u> - Continues activities at an existing 3-acre pond on the Nature Conservancy's San Pedro River Preserve. Work includes monthly water quality sampling and the monitoring of stocked fish. The pond is being used to rear endangered razorback suckers and serve as refugia for other imperiled native fishes.

15,000

<u>Virgin River Endangered Fishes</u> - Begins activities on the Virgin River, in cooperation with state and Federal agencies, to reduce predation by non-native fishes on the endangered fish in the river. Reclamation currently participates on the Virgin River Fishes Recovery Team. Work will include participation in cooperative meetings, habitat improvement, conservation and recovery efforts, and habitat and population assessments.

**Reclamation Request** 

\$666,000

# Halfway Wash Project/Study

**LOCATION:** The project is located in Clark County, Nevada.

**DESCRIPTION/JUSTIFICATION:** The objective of this study is to evaluate the potential for diverting and treating water from the Lower Virgin River. The Virgin Valley Water District (District) is interested in investigating the potential for capturing and using Virgin River water. The District has completed an Integrated Water Resource Plan, which is a report on future population, water demand growth, and diversion options from the silt-laden Virgin River. Water resources in the northeastern portion of Clark County, Nevada, are becoming very scarce. The Mesquite area, served by the Virgin Valley Water District, is the fastest-growing small city in the United States.

Current plans are to capture Virgin River water through horizontal wells in the riverbed. Since the water quality is poor and the silt content high, this supply of water cannot be used for drinking and irrigation. Horizontal collector wells, or Ranney Wells, are the preferred diversion option due to the high sediment load of the Virgin River. Water pumped from the wells would induce seepage from the river, and the silt would be deposited in the river alluvium.

The District and Reclamation analyzed the river's water quality to determine the most cost-effective treatment method for the heavy silt and sediment content in the river. This year-long effort was conducted by utilizing Reclamation's mobile pilot water treatment lab. The concluding report recommended a specific water treatment plan for the Virgin River water.

The District installed a test well and observation wells at the confluence of Halfway Wash and the Virgin River. Plans to conduct pump tests to determine aquifer characteristics have been delayed due to flooding of the Virgin River in 2005. The flood events destroyed some of the observations wells, and the District was not able to replace the wells and begin pump tests until late 2006. The next step is to install a prototype horizontal collector well (Ranney Well) and test its effectiveness as a means to divert river water for municipal and agricultural use.

A full-scale pilot treatment plant then will be designed, installed, and tested by the District for 1 year to simulate treatment processes at full-scale water extraction production. Under existing authority, Reclamation may participate in the treatment process performance testing phase, not construction of the treatment plant.

**AUTHORIZATION:** Reclamation Act of 1902, June 17, 1902; and P.L. 74-46, Soil and Moisture Conservation Act, April 27, 1935 (16 U.S.C. 590a-590i).

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

**Program Financial Data** 

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$172,000	\$200,000
Enacted/Request	\$172,000	\$200,000
Non-Federal	172,000	200,000
Prior Year Funds	0	0
Total Program	\$344,000	\$400,000
Prior Year Funds/Non-Federal	(172,000)	(200,000)
Total Reclamation Allotment	\$172,000	\$200,000

**Investigation Costs:** Initiation: FY 2002 Completion: 2011

**COST-SHARING:** Virgin Valley Water District and/or Southern Nevada Water Authority

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$3,700,000	\$2,308,083	\$172,000	\$200,000	\$1,019,917
Adjustments	3,700,000	490,638	172,000	200,000	2,837,362
Total	\$7,400,000	\$2,798,721	\$344,000	\$400,000	\$3,857,279

## **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Continues to analyze the water quality data in preparation for participating in the design of a full-scale pilot reverse osmosis water treatment plant. Continues report preparation which refines future water development infrastructure plans based on findings from previous years. Completes installation of the prototype Ranney Well and begins to develop and test its production potential.

400,000

Non-Federal - Virgin Valley Water District and/or Southern Nevada
Water Authority (200

(200,000) 200,000

**Reclamation Request** 

\$200,000

# Lake Mead/Las Vegas Wash Program

**LOCATION:** Clark County, Nevada.

**DESCRIPTION/JUSTIFICATION:** The Las Vegas Wash plays an important role in environmental and water resource issues in Southern Nevada. Approximately 25 percent of the Las Vegas Wash is managed by Reclamation. Historically, the Las Vegas Wash was an ephemeral stream carrying storm flows from the Las Vegas Valley to the Colorado River and Lake Mead. Urban development over the past 60 years has resulted in continuous treated wastewater discharges that resulted in the formation of the wetlands that helped remove nutrients from these wastewater flows. However, as the rate of these discharges increased, erosion also increased, gradually destroying the existing natural treatment systems and wildlife habitat.

Today, the Las Vegas Wash is a perennial stream with flows that consist of four components: treated wastewater, storm water, urban runoff, and shallow groundwater. Accelerating erosion, declining water quality, and loss of wildlife habitat are some of the more pressing issues. Over the years, it is estimated that 11 million cubic yards of sediment and more than 1,700 acres of wetlands have been lost due to erosion. Because of the increased channelization and flows, as well as contaminated shallow groundwater, there are many problems to be resolved including reduction of erosion, improvement of water quality, and restoration of the natural treatment systems and wildlife habitat.

Due to the Federally-owned land in the Las Vegas Wash, and the impact of drainage from this land to the Colorado River and Lake Mead, Reclamation has an interest in maintaining and improving water quality. Reclamation also built the Robert B. Griffith Project (formerly the Southern Nevada Water Project), and outflows from that project affect the Las Vegas Wash.

The purpose of this project is to develop and implement a management strategy for the Las Vegas Wash, to improve water quality, and reduce the salinity and sediment transport in the Wash, while providing environmental enhancement and recreational opportunities. To date, ten of 22 grade control structures have been built. Four were constructed by Reclamation. These, along with bank stabilization activities, have reduced the volume of sediment transported. Reclamation continues to assist in construction, revegetation efforts, scientific studies, and biological restoration activities.

**AUTHORIZATION:** P.L. 74-46, Soil and Moisture Conservation Act, April 27, 1935; P.L. 106-541, Water Resources Development Act of 2000, December 11, 2000; P.L. 109-103, Energy and Water Development Appropriations Act, 2006, Section 115, November 19, 2005; and P.L. 110-161, Consolidated Appropriations Act, 2008, Division C, Section 206, December 26, 2007.

**COMPLETION DATA:** As of September 30, 2007, this project is 57 percent complete.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

8		
Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$2,337,000	\$900,000
Enacted/Request	\$2,337,000	\$900,000
Non-Federal	1,260,000	485,000
Prior Year Funds	5,327	0
Total Program	\$3,602,327	\$1,385,000
Prior Year Funds/Non-Federal	(1,265,327)	(485,000)
Total Reclamation Allotment	\$2,337,000	\$900,000

#### Total Construction Costs to be Allocated

	Total Estimated	Total to			Balance to
	Cost	9/30/07	FY 2008	FY 2009	Complete
Reclamation	\$20,000,000	\$11,484,999	\$2,337,000	\$900,000	\$5,278,001
Adjustments <u>1</u> /	10,770,000	6,821,529	1,260,000	485,000	2,203,471
Total	\$30,770,000	\$18,306,528	\$3,597,000	\$1,385,000	\$7,481,472

<sup>1/</sup> Includes cost-sharing from the Clark County Flood Control District, Clark County Department of Parks and Recreation, Southern Nevada Water Authority, Las Vegas Valley Water District, Clark County Sanitation District, City of Henderson, and City of Las Vegas. P.L. 106-541, Section 529, calls for a minimum of 35 percent in non-Federal cost-share.

**APPROPRIATION CEILING:** P.L. 109-103, Energy and Water Development Appropriations Act, 2006, Section 115, November 19, 2005 increased the appropriation ceiling from \$10,000,000 to \$20,000,000. The comparable Federal obligation is \$20,000,000.

## **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Continues partnerships with representatives of local, state, and Federal agencies, to control erosion in the Las Vegas Wash, which in turn will prevent wetland degradation and provide habitat diversity. Continues implementation of the Comprehensive Adaptive Management Plan developed by the Las Vegas Wash Coordination Committee, which identified 44 action items for the long-term management of the Las Vegas Wash. Continues bank stabilization work as designed by the Southern Nevada Water Authority. Continues natural resource assessments and water quality monitoring. Decrease is due to revised funding schedule.

1,385,000

Non-Federal - Various

(485,000)

900,000

**Reclamation Request** 

\$900,000

# **Long Beach Area Water Reclamation Project**

**LOCATION:** This project is located in Los Angeles County, California.

**DESCRIPTION/JUSTIFICATION:** This project consists of two units:

The Alamitos Barrier Reclaimed Water Project will ultimately recycle about 8,000 acre-feet per year in lieu of imported water. Facilities will be constructed so that tertiary treated water from the existing Long Beach Water Reclamation Plant can be treated to advanced levels that can be used for groundwater injection into seawater intrusion barriers. Phase 1 was completed in 2005, and Phase 2 is scheduled to begin construction in 2009.

The City of Long Beach Recycled Water System Expansion Project will construct an expansion of an existing distribution system that allows the use of recycled water throughout the city. The expansion consists of pumps, pipes, storage facilities, and control systems that would increase use of recycled water from 4,585 acre-feet per year to 16,677 acre-feet per year (including the Alamitos Barrier project).

**AUTHORIZATION:** P.L. 102-575 - Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992, and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

**COMPLETION DATA:** As of September 30, 2007, the project is 54 percent complete. Alamitos Barrier Reclaimed Water Project is scheduled for completion in 2012, a delay of one year from that shown in the FY 2008 Budget Justifications, due to a revised funding schedule. City of Long Beach Recycled Water System Expansion Project is scheduled for completion in 2010.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

## SUMMARIZED FINANCIAL DATA

# **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$590,000	\$692,000
Enacted/Request	\$590,000	\$692,000
Non-Federal	9,116,000	10,842,000
Prior Year Funds	366	0
Total Program	\$9,706,366	\$11,534,000
Prior Year Funds/Non-Federal	(9,116,366)	(10,842,000)
Total Reclamation Allotment	\$590,000	\$692,000

### **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$19,076,000	\$10,298,998	\$590,000	\$692,000	\$7,495,002
Adjustments <u>1</u> /	57,228,000	29,024,000	9,116,000	10,842,000	8,246,000
Total	\$76,304,000	\$39,322,998	\$9,706,000	\$11,534,000	\$15,741,002

<sup>1/</sup> Includes cost-sharing of \$30,675,000 from the Water Replenishment District of Southern California for the Alamitos Barrier Reclaimed Water Project; and \$26,553,000 from the City of Long Beach for the City of Long Beach Recycled Water System Expansion Project.

**Construction Cost Allocation and Methodology** 

Allocation	FY 2008	FY 2009
Municipal and Industrial Water	\$76,304,000	\$76,304,000
Total	\$76,304,000	\$76,304,000

**METHODOLOGY:** The methodology of cost allocation has not been modified from last year.

**APPROPRIATION CEILING:** P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, imposed a ceiling of \$20,000,000. The comparable Federal obligation is \$19,076,000, which does not exceed the appropriation ceiling.

#### **WORK PROPOSED FOR FY 2009:**

# Water and Energy Management and Development -

<u>Alamitos Barrier Project - Phase 2</u> - Begins work for construction of Phase 2, which consists of an expansion of the treatment facility that was constructed under Phase 1. The increase in the funding is to start the construction for Phase 2.

5,013,000

Non-Federal - Water Replenishment District of Southern California (4,797,000) 216,000

<u>City of Long Beach Recycled Water System Expansion Project</u> - Continues work for construction of additional facilities to recycle water within the City of Long Beach.

Non-Federal - City of Long Beach

(6,044,976)

476,000

Reclamation Request \$692,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Project Repayment for FY 2009 Status of NEPA Compliance

# **Lower Colorado River Investigations Program**

**LOCATION:** The Colorado River area starting at Lee's Ferry, Arizona, to the Mexican border, including Coconiño, Mojave, La Paz, and Yuma Counties in Arizona; Clark County in Nevada; and San Bernardino, Riverside, Los Angeles, San Diego, Orange, and Imperial Counties in California.

**DESCRIPTION/JUSTIFICATION:** The objective of this ongoing program is to focus on the resolution of problems that arise from competing and often conflicting uses of the lower Colorado River. The river provides critical habitat to several endangered species and is the main source of water for agriculture, municipal use, industrial use, and power production to Arizona, southern California, southern Nevada, and the Mexican States of Sonora and Baja California. It is also an important recreational resource for residents of Arizona, California, and Nevada and a traditional cultural and economic resource for Native American tribes throughout the same region.

As demand has continued to escalate in the heavily populated and/or rapidly growing areas of southern California, southern Nevada, and northern and central Arizona, so have concerns about the availability, quality, and allocation of Colorado River water. Recently, drought conditions in southern California have depleted or diminished local supplies and imported supplies from northern California. Imported supplies from the Colorado River are also stressed from long-term drought conditions on the watershed, exacerbating the growing demands for water supplies in the Desert Southwest. Moreover, concerns about effects of water management on the river ecosystem have grown as new projects are undertaken to ensure water deliveries to these states and Mexico.

In recent years, several large metropolitan areas in the Lower Colorado Region have suffered episodes of stage 3 power outages resulting in rolling blackouts. There are several issues contributing to the problem, including deregulation of the power industry in California, increased demand, and reluctance to build new generating facilities.

The Power Evaluations Study would investigate Reclamation's opportunities to enhance power generating capabilities and review the timeliness of previous power generation enhancement studies. A review of the current power markets would be included to explore opportunities for Reclamation to provide greater assistance in the optimization of power generation and distribution in the southwestern United States where power shortages have become a concern for many citizens.

Management of the lower Colorado River by Reclamation is multi-faceted and includes, but is not limited to, water conservation, drought management, environmental restoration and enhancement, maintenance and preservation of natural treatment systems, salinity management practices, brine management and disposal, technology transfer, preservation of rural water supplies, seawater desalination, wastewater reclamation and reuse, power production, and recreation. Investigations undertaken in this program seek to facilitate cooperation and interface between entities that use lower Colorado River water in an effort to resolve conflicts.

**AUTHORIZATION:** The Reclamation Act of 1902, June 17, 1902; P.L. 93-320, as amended, Colorado River Basin Salinity Control Act of June 24, 1974; and P.L. 93-375, Sec. 9, Solar Hydro Feasibility Study Authorization, October 3, 1980.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

## **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$232,000	\$243,000
Enacted/Request	\$232,000	\$243,000
Non-Federal	232,000	243,000
Prior Year Funds	37,533	0
Total Program	\$501,533	\$486,000
Prior Year Funds/Non-Federal	(269,533)	(243,000)
Total Reclamation Allotment	\$232,000	\$243,000

COST-SHARING: Partners for the Brine Management Study include the Metropolitan Water District of Southern California, Santa Ana Watershed Project Authority, City of San Diego, San Diego County Water Authority, City of Los Angeles, California Department of Water Resources, South Orange County Wastewater Agency, Orange County Sanitation District, Sanitation Districts of Los Angeles County, Big Bear Area Regional Wastewater Agency, West Basin and Central Basin Municipal Water Districts, Arizona Department of Water Resources, City of Phoenix, City of Tucson, Southern Nevada Water Authority, Las Vegas Valley Water District, and the City of Las Vegas. Partners for the Colorado River Comprehensive Watershed Study include Bullhead City, Lake Havasu City, Needles, Blythe, Parker, Mohave County, and La Paz County. Partners for the Power Evaluations Study include California Department of Water Resources, Pacific Gas and Electric, San Diego Gas and Electric, Southern California Edison, other private utility companies, the California Public Utilities Commission, Nevada Power, and the Electric Power Research Institute.

### **WORK PROPOSED FOR FY 2009:**

## Water and Energy Management and Development -

Brine Management Study - Continues to gather data with Reclamation's partners to create a regional issue sensitivity analysis. Each office would finalize and prioritize alternatives based on criteria established in plan of study. Alternative approaches to resolving the issues as identified by the analysis would continue. Special attention would be given to approaches which afford opportunities for managing brine concentrates in an economic and environmentally acceptable manner. The study has been delayed 1 year due to work scheduling. Increase is due to revised work schedule.

 (FY 2005 - FY 2011)
 230,000

 Non-Federal - Various
 (115,000)

 115,000

Colorado River Comprehensive Watershed Study - Continues partnership with local, state, and Federal entities to refine and operate a water quality database for lower Colorado River communities. Continues collaboration with states and other entities along the river in the collection, evaluation, and use of water quality data. Continues conducting a comprehensive sampling program for nitrate, total suspended solids, and total dissolved solids in surface and ground water where water quality information is not readily available. Continues to gather information, in addition to wastewater needs and assessment, on water quality and health concerns. The study has been delayed 3 years due to work scheduling. Decrease is due to revised work schedule. (FY 2004 - FY 2015)

116,000

Non-Federal - Various

(58,000)

Non-Federal - Various (58,000) 58,000

<u>Power Evaluations Study</u> - Continues collecting data on new power generation technologies and combining new sources with current generation facilities. Continues dialogue with Federal, state, private partners, and power marketing entities to explore alternatives to optimize power generation and distribution. Evaluates, prioritizes, and compiles best alternatives for power users to consider implementing to achieve greater efficiencies. Increase is due to revised work schedule.

 (FY 2003 - FY 2010)
 140,000

 Non-Federal - Various
 (70,000)

 70,000
 70,000

**Reclamation Request** 

\$243,000

# **Lower Colorado River Operations Program**

**LOCATION:** All areas within the Lower Colorado Region boundaries.

**DESCRIPTION/JUSTIFICATION:** The Secretary of the Interior, acting through the Bureau of Reclamation, has the unique role of "water master" for the lower Colorado River. As water master, the Secretary has comprehensive authority to manage and operate the lower basin of the Colorado River. The Secretary's unique status with relation to the management of the Colorado River stems from a combination of Federal and state statutes, interstate compacts, court decisions and decrees, contracts, an international treaty with Mexico, operating criteria, and administrative decisions. Collectively these authorities are known as the Law of the River, which controls the allocation and operation of the Colorado River. Through the Lower Colorado River Operations Program (LCROP), Reclamation performs water master responsibilities on behalf of the Secretary. This role is based primarily on responsibilities delegated by Congress in the Boulder Canyon Project Act and specific requirements of the Supreme Court Decree in Arizona v. California which requires the Secretary of the Interior to administer and carry out functions related to the use of Colorado River water by entities in the lower basin states of Arizona, California, and Nevada. LCROP includes river operations, water service contracting and repayment, accounting ("Decree Accounting"), and oversight of hydropower activities. The Boulder Canyon Project Act and subsequent water delivery contracts executed over the past 70 years provide that there shall be essentially no charge for the delivery of Colorado River water in the Lower Basin; therefore, Federal appropriations are required to carry out the water master responsibilities.

The program also includes work resulting from Endangered Species Act consultations and compliance with environmental statutes such as the National Environmental Policy Act (NEPA). On April 4, 2005, the Secretary of the Interior, and the non-Federal partners signed program documents to implement the Lower Colorado River Multi-Species Conservation Program (MSCP). The U.S. Fish and Wildlife Service issued a Biological Opinion and Permit resulting from Sections 7 and 10 consultations providing long-term (50-years) compliance for flow and non-flow covered activities in the historical flood plain of the lower Colorado River, from Lake Mead to the southerly International Boundary with Mexico. The MSCP provides compliance for 26 state and Federal special status species (6 Federally listed species). Implementation of this program will include the spawning and rearing of an estimated 1.3 million native fish, creating over 8,100 acres of habitat (cotton-willow, mesquite, marsh, and backwaters), and associated monitoring, protection, and enhancement of existing habitat.

**AUTHORIZATION:** P.L. 585, Colorado River Front Work and Levee System and amendments, March 3, 1925; P.L. 642, Boulder Canyon Project Act, December 21, 1928; Fish and Wildlife Coordination Act, March 10, 1934; the 1944 Mexican Water Treaty; the 1964 Supreme Court Decree - *Arizona v. California*; P.L. 90-537, the Colorado River Basin Project Act, September 30, 1968; and P.L. 93-205, the Endangered Species Conservation Act, December 28, 1973, as amended.

**COMPLETION DATA:** This is an ongoing program.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

**Program Financial Data** 

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$7,312,000	\$7,550,000
Fish and Wildlife Management and Development	7,859,000	8,850,000
Enacted/Request	\$15,171,000	\$16,400,000
Non-Federal	8,076,000	8,944,000
Prior Year Funds	28,762	0
Total Program	\$23,275,762	\$25,344,000
Prior Year Funds/Non-Federal	(8,104,762)	(8,944,000)
Total Reclamation Allotment	\$15,171,000	\$16,400,000

**OTHER INFORMATION:** On April 4, 2005, entities in the states of Arizona, California, and Nevada signed documents to share the cost of implementing the MSCP on a 50/50 Federal-non-Federal basis. This commitment by the local partners will result in a contribution of over \$310 million (2003 dollars) during the life of the program. Goals for the first 10 years of the program include the establishment of 1,000 acres of cottonwood/willow habitat, 200 acres of mesquite, 150 acres of marsh habitat, and 120 acres of backwaters. In addition, approximately 85,000 razorback sucker and 80,000 bonytail may be stocked. The program also requires an extensive research and monitoring program. Total program costs are estimated to be almost \$200 million for the first 10 years of the program.

## **WORK PROPOSED FOR FY 2009:**

# Water and Energy Management and Development -

Administration of Colorado River - Begins development of an enlarged building to house the water master staff in one location instead of several buildings. Continues development of the Annual Operating Plan for Colorado River reservoirs; management and oversight of the Long Range Operating Criteria for Colorado River Reservoirs; and administration of Interim Surplus Guidelines for Lake Mead. Continues hydrology studies; development and maintenance of Colorado River hydrologic models and data bases, including support of telemetered data collection for real-time water use monitoring and forecasting; flood control reviews; and analysis of Colorado River and reservoir operations. Continues development and review of policies to address contemporary issues facing lower Colorado River stakeholders, studies of the river's operation and impact on Central Arizona Project operations, and generally fulfilling the requirements of the Secretary's role as water master. Continues administrative management of the Lower Colorado Region's hydro power relationships with existing and potential customers with process analyses of external activities by electric utilities and their potential impact on the Lower Colorado Region's generation facilities. Provides and maintains necessary buildings and facilities for the administration of the Colorado River. Continues operational compliance with requirements promulgated by biological opinions or NEPA compliance documents. 3.352.000

Water Contract Administration - Continues implementation of the Colorado River Water Delivery Agreement to ensure California stays within its annual allotment of 4.4 million acre-feet of Colorado River water. Continues negotiation, development, execution, and administration of Colorado River water delivery contracts under Section 5 of the Boulder Canyon Project Act. Processes requests for water transfers from stakeholders. Assesses economic impacts resulting from changes in Colorado River system operations. Maintains geographic information systems database for the land and waters within the lower basin. Completes regulations for unlawful taking of water from the lower Colorado River and takes necessary action to reduce or eliminate the unlawful taking of water.

1,375,000

Water Accounting - Continues the production of the annual accounting report of Colorado River diversions, returns, and consumptive use required by the Supreme Court Decree in Arizona v. California. Continues water accounting activities required for delivery of water to Mexico. Continues the maintenance of water accounting records required under the California Water Delivery Agreement, interstate water banking accounts under Interstate Storage and Release Agreements, and water accounting records associated with the inadvertent overrun and payback policy. Approves annual water orders from Colorado River entitlement holders through administration of the 43 CFR 417 (reasonable & beneficial use) regulation. Continues to conduct a well inventory along the lower Colorado River to identify unauthorized users of Colorado River water. Continues the development and use of techniques for calculation of consumptive use by water users and irrigation districts along the mainstem of the Colorado River for verification of water use and estimating unmeasured return flows. Develops policy related to Colorado River water accounting issues. Continues the development of data for the consumptive uses and losses report for the lower Colorado River basin. 2,917,000 Non-Federal - Various (94.000)2,823,000

Subtotal - Water and Energy Management and Development

\$7,550,000

## Fish and Wildlife Management and Development -

Lower Colorado River Multi-Species Conservation Program - Continues implementation of the Multi-Species Conservation Program (MSCP), which provides long-term Endangered Species Act compliance for both current and future water delivery and diversion, and power production by both the United States and its water users. The program will provide quality habitat to conserve populations of 26 species, including the Federally endangered razorback sucker, bonytail chub, southwestern willow flycatcher, and Yuma clapper rail. The increase in funding for Fish and Wildlife Management and Development is needed to meet the timeline of continuing to develop and the need to operate and maintain approximately 200 additional acres of newly created habitat.

- Fish Augmentation Augmenting the populations of razorback sucker and bonytail chub is a major component of the MSCP. The long term goal of the augmentation program is to provide a total of 660,000 razorback suckers and 620,000 bonytail chub for reintroduction into the lower Colorado River. The program has three primary work areas: 1) Acquire 40,000-50,000 fish larvae annually for grow-out; 2) Develop and maintain facilities to grow out the native fish; and 3) Rear 12,000 razorback sucker and 8,000 bonytail chub annually to target size and stock into the MSCP project areas. These population augmentations will provide the nucleus for stable populations, reverse the declining trend in existing abundance, create opportunities for subsequent species research and management, provide significant benefits related to the effects of the covered activities, and contribute to addressing other threats.
- <u>Species Research and System Monitoring</u> Species research provides the necessary information required to create and manage covered species habitats and populations. Work tasks focus on

identifying known covered species life requisites and habitat requirements and addressing information gaps necessary for directing the successful establishment and management of created habitats through conservation area development and management. System Monitoring focuses on collecting data on existing covered species populations and habitats. One of the early focuses of the program is to develop multi-species monitoring protocols which will reduce long term dollars expended on monitoring while maintaining quality data.

4,240,000

- Conservation Area Development and Management The long term goal of the MSCP is the establishment and maintenance of over 8,100 acres of native cottonwood and willow, marsh and backwater habitat. To meet the long term goals of conservation area development and management, work proposed is included in one of the following four categories: 1) Conducting applied research directed at establishing cost effective methods to develop and maintain habitat; 2) Creating habitat in accordance with the Habitat Conservation Plan; 3) Providing operation and maintenance of existing conservation areas; and 4) Conducting miscellaneous tasks required to implement the MSCP in an effective manner. Specific conservation activities include development of marsh habitat through the scheduled restoration of Hart Mine Marsh, located on Cibola National Wildlife Refuge, as well as the continued establishment of cottonwood and willow habitat at the Palo Verde Ecological Reserve and Cibola Valley Conservation Area.

  7,560,000
- Post-Development Monitoring Post-development monitoring requires extensive examination of created habitats which is necessary to evaluate implementation and effectiveness of designed habitat creation projects. Data collected to accomplish pre-development monitoring of proposed projects will be conducted to document baseline conditions prior to project implementation. After habitat creation has been initiated, post development monitoring for biotic (vegetation) and abiotic (soil moisture, etc.) habitat characteristics will be conducted to document successful implementation and to record succession change within the restored areas. Changes in habitat quality over time, in conjunction with covered species monitoring, will drive post-development monitoring activities.
- Adaptive Management Program The MSCP adaptive management process is intended to be a flexible, iterative approach to long term habitat creation and management of biological resources and will be influenced over time by the results of ongoing monitoring, research, and other sources of information. The adaptive management program will address uncertainties encountered throughout program implementation. Focus will be given to gauging the effectiveness of existing conservation measures, proposing alternative or modified conservation measures, as needed, and addressing changed or unforeseen circumstances. Specific activities associated with adaptive management include: Implementation of a database management system; yearly production of an annual work plan and budget issued to all stakeholders; public outreach involving concerned stakeholder along the lower Colorado River; and continued implementation of a peer-reviewed science strategy ensuring project accomplishments.
- Administration Program Administration provides senior support and administrative support to manage implementation year number four of the MSCP. The MSCP Program Manager will direct functions and activities associated with implementation. Long-term goals include management and supervision to ensure the program is implemented in a cost-efficient, effective, and transparent manner, while achieving the requirements of the Habitat Conservation Plan. Provides and maintains necessary buildings, facilities, and support services for implementation staff.

1,500,000

Total, Lower Colorado River Multi-Species Conservation Program

17,700,000

Non-Federal: Various

(8,850,000)

8,850,000

Subtotal - Fish and Wildlife Management and Development 8,850,000

Reclamation Request \$16,400,000

# **Northern Arizona Investigations Program**

**LOCATION:** Includes the northern Arizona Counties of Mohave, Coconino, Navajo, and Apache.

**DESCRIPTION/JUSTIFICATION:** The objective of this ongoing program is to improve and increase the management of existing water supplies; identify and develop potential water supplies; and develop processes and strategies for dealing with resource issues. The northern part of Arizona, which encompasses the Little Colorado River Watershed and Colorado Plateau area, has been experiencing multiple water resource use and supply issues. Potential settlement of Native American water rights, endangered species needs, sedimentation and flooding issues, and increasing water supply needs of local communities have contributed to resource conflicts within the basin. Assistance is needed to help manage existing water supplies and to develop and implement a realistic process or strategy for dealing with water and natural resource issues.

In addition, the Federal Government has trust responsibilities for Native Americans as set forth in various treaties, statutes, and court decisions. Those tribes assuming responsibility for planning of their own natural resources may contract with Reclamation using P.L. 93-638 (Indian Self Determination, Education and Assistance Act). As such, they are in need of expertise to help develop their own capability. Tribes within this area include the Navajo, Hopi, Kaibab Paiute, Hualapai, Havasupai, and Zuni.

**AUTHORIZATION:** The Reclamation Act of 1902, June 17, 1902; and P.L. 93-638, The Indian Self-Determination, Education and Assistance Act, January 4, 1975, as amended.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

## SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$379,000	\$320,000
Enacted/Request	\$379,000	\$320,000
Non-Federal	170,000	130,000
Prior Year Funds	12,529	0
Total Program	\$561,529	\$450,000
Prior Year Funds/Non-Federal	(182,529)	(130,000)
Total Reclamation Allotment	\$379,000	\$320,000

COST-SHARING: Hopi Tribe for the Hopi Water Management Study; Hualapai Nation for the Hualapai Water Management Study; Little Colorado River Watershed Group for the Little Colorado River Watershed Study; Hopi Tribe for the Moenkopi Runoff Recharge and Recovery Study; and the Arizona Department of Water Resources, Cities of Flagstaff and Williams, Coconino County, Navajo Nation, and the Hopi Tribe for the North Central Arizona Water Supply Study.

### **WORK PROPOSED FOR FY 2009:**

## Water and Energy Management and Development -

<u>Hopi Water Management Study</u> - Completes selection of additional aquifer exploration site(s) and/or alluvial aquifer sites on the Reservation. Completes assessment and evaluation of potential uses of reclaimed water and report findings of selected water treatment technology pilot test. Completes report on study findings. The increase in the funding request is due to the level of effort necessary to complete the

Hopi Water Management Study. (FY 2001 - FY 2009) 190,000 Non-Federal - Hopi Tribe (15,000) 175,000

<u>Hualapai Water Management Study</u> - Continues to gather and evaluate biomonitoring data to identify potential water quality problems resulting from overgrazing. Continues identification and selection of best management practices through development of an additional three watershed management plans. The decrease is due to a revised work schedule. (FY 2007 - FY 2014)

40,000

Non-Federal - Hualapai Nation (5,000)
35,000

<u>Little Colorado River Watershed Study</u> – Continues work and study efforts with Round Valley to define conditions of water sources, uses and attributes. Continues water analysis as it pertains to supply and quality. Continues implementation of a plan of study to investigate water management issues within the Little Colorado River Watershed, where problems with deteriorated systems (agricultural and municipal), rapid growth, invasive species, sediment, salinity, drought, and reduced supplies are impacting the area, the population, and economy. The study effort is developing a water management plan and includes demonstration projects (e.g., vegetation management, groundwater quality) and watershed modeling. Continues study efforts to examine all options including water treatment, desalination, and new supplies for agriculture, livestock, and municipal uses in the study area. This study is basinwide to define the problems, identify solutions related to increasing water supplies, and improve the health of the watershed. The study has been delayed 9 years due to work scheduling and local management issues.

 (FY 2005 - FY 2020)
 100,000

 Non-Federal - Various
 (50,000)

 50,000

<u>Moenkopi Runoff Recharge and Recovery Study</u> - Completes development of a plan of study to identify and investigate potential methods for enhancing natural and artificial groundwater recharge. Begins to perform a reconnaissance field investigation to identify areas with potential for recharge and use as underground storage. The study was delayed 1 year due to revised work schedule.

 (FY 2008 - FY 2014)
 110,000

 Non-Federal - Various
 (55,000)

 55,000

North Central Arizona Water Supply Study - Continues to update study data and analysis information to support the Coconino Plateau Water Advisory Council, a regional watershed group comprised of communities, agencies, and interested publics geared toward developing a shared strategy for managing and developing northern Arizona's water supplies. Continues coordination with Federal, state, local and tribal partners to address specific problems identified in the data analysis portions of the appraisal report. Items to be addressed will be defined a priorities in the Coconino Plateau Water Advisory Council Strategic Plan. The study has been delayed 4 years due to a realignment of work scheduling. (FY 2002 - FY 2012)

Non-Federal - Various

(5,000)

**Reclamation Request** 

\$320,000

5,000

# Orange County Regional Water Reclamation Project, Phase I

**LOCATION:** This project is located in Orange County, California.

**DESCRIPTION/JUSTIFICATION:** This project will take tertiary treated reclaimed water from an existing facility operated by the Orange County Sanitation District, treat the water to advanced levels using a pretreatment and reverse osmosis process, and pump the water through a pipeline that parallels the Santa Ana River up to existing recharge facilities adjacent to the River, where the water will be used to recharge the region's groundwater basin. This initial phase will provide about 72,000 acre-feet of water annually, primarily for groundwater recharge. Other uses for this recycled water include injection into seawater intrusion barriers and landscape irrigation.

**AUTHORIZATION:** P.L. 102-575 - Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992, and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

**COMPLETION DATA:** As of September 30, 2007, the project is 87 percent complete. The project is scheduled for completion in 2009.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

## **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$2,066,000	\$558,000
Enacted/Request	\$2,066,000	\$558,000
Non-Federal	0	0
Prior Year Funds	2,209	0
Total Program	\$2,068,209	\$558,000
Prior Year Funds/Non-Federal	(2,209)	0
Total Reclamation Allotment	\$2,066,000	\$558,000

## **Total Construction Costs to be Allocated**

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	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$20,000,000	\$17,376,000	\$2,066,000	\$558,000	\$0
Adjustments 1/	461,260,000	461,260,000	0	0	0
Total	\$481,260,000	\$478,636,000	\$2,066,000	\$558,000	\$0

 $<sup>\</sup>underline{1}$ / Includes cost-sharing of \$461,260,000 from the Orange County Water District and/or the Orange County Sanitation District.

# **Construction Cost Allocation and Methodology**

Allocation	FY 2008	FY 2009
Municipal and Industrial	\$432,600,000	\$481,260,000
Total	\$432,600,000	\$481,260,000

**METHODOLOGY:** The methodology of cost allocation has not been modified from last year. The increase of \$48,660,000 is due to updated cost estimates, all of which will be applied to the non-Federal share.

**APPROPRIATION CEILING:** P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, imposed a ceiling of \$20,000,000. The comparable Federal obligation is \$20,000,000 which does not exceed the appropriation ceiling.

## **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Completes work on construction activities for the regional water recycling project in the Orange County Water District service area. The decrease in funding is due to the project completing and reaching the appropriation ceiling

Reclamation Request \$558,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Project Repayment for FY 2009 Status of NEPA Compliance

## **Parker-Davis Project**

**LOCATION:** This project is located in western Arizona, southern California, and southern Nevada.

**DESCRIPTION/JUSTIFICATION:** The Parker-Davis Project consists of Parker and Davis Dams, Lakes Havasu and Mohave, and two powerplants. The lakes have a combined storage capacity of 2,466,300 acre-feet and provide flood control, recreation, and fish and wildlife benefits. The two powerplants, with an annual power generation of approximately 2.75 billion kilowatt-hours of low-cost, renewable hydropower, serve various sectors of the southwest.

Funds are provided by Metropolitan Water District for approximately 50 percent of Parker Dam and powerplant costs. All remaining funds necessary to operate and maintain the project are provided by the power customers.

**AUTHORIZATION:** P.L. 409, Rivers and Harbors Act of 1935, August 30, 1935; P.L. 260, Reclamation Project Act of 1939 (Davis Dam Project), August 4, 1939 (authorized by the Secretary April 26, 1941); P.L. 373, Consolidate Parker Dam Power Project and Davis Dam, May 28, 1954; and P.L. 95-91, The Department of Energy Organization Act, August 4, 1977.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water and Manage or Influence Resource Use-Hydropower.

#### SUMMARIZED FINANCIAL DATA

# **Program Financial Data**

Activity	FY 2008	FY 2009
Request	\$0	\$0
Non-Federal	14,681,000	12,983,000
Total Program	\$14,681,000	\$12,983,000
Non-Federal	(14,681,000)	(12,983,000)
Total Reclamation Allotment	\$0	\$0

### **WORK PROPOSED FOR FY 2009:**

**Facility Operations -** Continues regular operation, including security costs, of the hydroelectric power and water delivery facilities. \$7,258,000

Facility Maintenance and Rehabilitation - Begins repair cycle of four generator heat exchangers at Davis Dam. Continues rehabilitation of the powerplant including generating units, high voltage transformer, and maintenance building and warehouse at Parker Dam. Continues rehabilitation of the penstock fixed-wheel gates and reconditioning of unit governors at Davis Dam. The decrease in funding is due to the Unit Control Modernization being planned for Parker Davis Project and Hoover which required bulk materials purchases; reduction of regular operations and maintenance at both facilities for security (guards and surveillance) due to refined cost estimates, and the transfer from contract to in-house labor on maintenance line item for penstock expansion joint maintenance.

5,725,000

Non-Federal - Metropolitan Water District and power customers

(12,983,000)

**Reclamation Request** 

\$0

# Phoenix Metropolitan Water Reclamation and Reuse Project

**LOCATION:** This project is located near the city of Phoenix, Maricopa County, Arizona.

**DESCRIPTION/JUSTIFICATION:** In the near future, the three main sources of water for the Phoenix metropolitan area will be fully developed. The main sources of water are the Central Arizona Project, the Salt River Project, and groundwater. In the west valley, the groundwater table has been dropping at a rate of 1 to 4 feet per year. Recharging reclaimed water into the aquifer is one way of slowing the decline in the groundwater table.

The Sub-regional Operating Group consisting of the cities of Phoenix, Scottsdale, Glendale, Mesa, and Tempe has been assessing the possibilities of storing reclaimed water through a linear recharge project in the (dry) Agua Fria River. The 91st Avenue Wastewater Treatment Plant produces approximately 150 million gallons per day of high quality effluent and would be used as the source water.

Phase I, consisting of stakeholder coordination and public information, is complete. Phase I identified the opportunities and constraints associated with the development of a linear recharge project in the Agua Fria River. Phase II is the initial technical investigation aspect of the project which includes groundwater modeling, preliminary route of pipelines, and sizing of pipelines. Phase II also includes the Environmental Impact Study and Feasibility Study. Phase III covers development of project designs and Phase IV is the construction phase.

The benefits for recharging reclaimed water in the western part of the Phoenix metropolitan area include: reducing the rate of decline of the groundwater table, reducing the demand for imported water; and providing a continuous and dependable supplemental source of water.

**AUTHORIZATION:** P.L. 102-575, Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

**COMPLETION DATA:** As of September 30, 2007, the Federal portion of the project is nine percent complete. Reclamation completed the Stakeholder Coordination and Public Information (Phase I) of the study in FY 2003. The feasibility report and Environmental Impact Study (EIS) is scheduled for completion in FY 2008. A schedule for construction of the facilities will be determined after the feasibility report is completed.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

8		
Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$246,000	\$200,000
Enacted/Request	\$246,000	\$200,000
Non-Federal	246,000	200,000
Prior Year Funds	0	0
Total Program	\$492,000	\$400,000
Prior Year Funds/Non-Federal	(246,000)	(200,000)
Total Reclamation Allotment	\$246,000	\$200,000

# **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$20,000,000	\$1,724,915	\$246,000	\$200,000	\$17,829,085
Adjustments <u>1</u> /	60,000,000	817,722	246,000	200,000	\$58,736,278
Total	\$80,000,000	\$2,542,637	\$492,000	\$400,000	\$76,565,363

<sup>1/</sup> Includes cost-sharing from City of Phoenix.

**APPROPRIATION CEILING:** P.L. 104-266 Reclamation Recycling and Water Conservation Act of 1996, imposed a ceiling of \$20,000,000. The comparable Federal obligation is \$20,000,000 which does not exceed the appropriation ceiling.

## **WORK PROPOSED IN FY 2009:**

Water and Energy Management and Development - Continues Phase III, the preliminary design of the recharge project which includes final alignment and designs of the pipeline, and recharge facilities pump stations.

400,000

Non-Federal - City of Phoenix (200,000) 200,000

Reclamation Request \$200,000

SEE APPENDIX FOR: Project Repayment FY 2009

Status of NEPA Compliance

## **Salt River Project**

**LOCATION:** The Salt River Project is located near Phoenix in central Arizona.

**DESCRIPTION/JUSTIFICATION:** The project includes an area of about 250,000 acres. The land within the project receives its irrigation water supply from the Salt and Verde Rivers and 248 pumping units for wells. About 24,715 acres receive supplemental irrigation water. The rivers are controlled with six storage dams. Four of the storage dams have hydroelectric facilities. A diversion dam serves 1,259 miles of canals, laterals and ditches of which 842 miles are lined and piped. The project is operated and maintained by the Salt River Agricultural Improvement and Power District and Salt River Valley Water User's Association under several repayment and operating agreements including the June 25, 1904 agreement, the August 30, 1910 agreement for the cross cut canal and power plant, and the September 6, 1917 agreement and amendments. Project facilities and most of the lands are Reclamation-owned. Title XXVIII of the Reclamation Projects Authorization and Adjustments Act (P.L. 102-575) permits Reclamation to cost-share with non-Federal management entities on the development, rehabilitation, and expansion of recreation and fish and wildlife areas and facilities on Reclamation projects. The partnerships are critical to continue the efficient management of Reclamation lands for the benefit of the public. Reclamation is partnering with local supporters for recreation improvements, such as the public trail system currently partnered with three cities (Phoenix, Tempe, and Scottsdale), and the Salt River Project. A provision of P.L. 108-451, Title II, the Gila River Indian Community Water Rights Settlement Act of 2004, provides that title of the Blue Ridge Dam and Reservoir will be transferred to the Federal government to benefit the Salt River Project.

**AUTHORIZATION:** The Reclamation Act of June 17, 1902 (authorized by the Secretary on March 14, 1903); Rehabilitation and Betterment Act, October 7, 1949 as amended; P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965 as amended by Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575, October 30, 1992; and P.L. 108-451, The Arizona Water Settlement Act, Title II, Gila River Indian Community Water Rights Settlement Act of 2004, December 10, 2004.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

## SUMMARIZED FINANCIAL DATA

### **Program Financial Data**

Activity	FY 2008	FY 2009
Land Management and Development	\$350,000	\$469,000
Facility Operations	240,000	28,000
Facility Maintenance and Rehabilitation	0	103,000
Enacted/Request	\$590,000	\$600,000
Non-Federal	402,000	165,000
Prior Year Funds	0	0
Total Program	\$992,000	\$765,000
Prior Year Funds/Non-Federal	(402,000)	(165,000)
Total Reclamation Allotment	\$590,000	\$600,000

### **WORK PROPOSED FOR FY 2009:**

# Land Management and Development -

<u>Recreation</u> - Continues amendment and approval of resource management plans for additional recreation improvements such as trail design, landscape, and public health facilities construction. Decrease is due to partner's revised funding schedule.

10,000

Non-Federal - Non-Cash - Cities of Phoenix, Scottsdale, and Tempe (5,000)

5,000

<u>Land Management</u> - Continues land resource management activities such as responding to right-of-way and easement issues; administering contracts, leases, permits, and conducting land field reviews. Continues implementing public information programs and compliance activities. The work is done to provide a minimum level of stewardship of Federal interests in this project. Increase is due to realignment of funding and work schedule.

624,000

Non-Federal - Individual developers and municipalities (160,000) 464,000

Subtotal, Land Management and Development

\$469,000

**Facility Operations** - Continues oversight responsibilities and functions that were included previously under the Examination of Existing Structures Emergency Management program for the seven Salt River Project dams. Includes performing Emergency Action Plan (EAP) reviews, planning and conducting EAP field exercises, performing Standard Operating Procedure (SOP) reviews and updates, and conducting associated policy reviews. Decrease is due to fund realignment within Salt River Project.

28,000

Subtotal, Facility Operations

28,000

Facility Maintenance and Rehabilitation - Continues oversight responsibilities and functions that were included previously under the Examination of Existing Structures program. Activities include planning, participation, and coordination of field inspections on Periodic Facility Review (PFR) and Comprehensive Facility Review (CFR) for high/significant hazard dams, annual exams of dams, special inspections, inspections and reports on associated facilities, job hazard analysis and review of PFR/CFR reports on seven dams and Salt River Project delivery systems. Increase due to transfer of responsibilities to the project from the Examination of Existing Structure Program.

Subtotal, Facility Maintenance and Rehabilitation

103,000

**Reclamation Request** 

\$600,000

**SEE APPENDIX FOR:** Obligation by Function for Operating Projects

# Salton Sea Research Project

**LOCATION:** Imperial and Riverside Counties, California.

**DESCRIPTION/JUSTIFICATION:** The Salton Sea (Sea), located in southeastern California, is California's largest inland lake. It is a highly saline and eutrophic lake but provides for a productive fishery and important resource for migrating birds along the Pacific Flyway. Over 400 different species of birds have been observed using the Sea and surrounding habitat. A combination of fluctuating water surface elevation, decreased water quality, and reduced future tributary inflows will result in eventual collapse of the existing fishery and associated ecosystem. A change in the existing ecosystem would impact present recreational and economic values of the Sea. In order to successfully identify and develop the most efficient and reasonable solutions to solving the complex problems of the Sea, a continuing program of engineering, physical and biological planning, research, and evaluation is needed. Reclamation currently holds title to nearly 90,000 acres of land in and immediately adjacent to the Salton Sea.

The objectives of this program are to identify reasonable, financially feasible, and efficient alternatives to: improve water quality conditions; reduce potential impacts to air quality; maintain quality habitat for migratory birds and endangered species; enhance the sport fishery; and protect human recreation values in and around the Sea. Efforts continue to determine reasonable solutions to the complex problems existing at the Sea through engineering and biological research and evaluation. A Salton Sea Study Status Report was released in January 2003, which, at the time, contained the most up-to-date information available on various proposals for full and partial restoration concepts for the Sea. This report built on the information developed and transmitted to Congress in January 2000. A Summary Report, in compliance with P.L. 108-361 was completed in December 2007, and presents information on 5 action restoration alternatives and a no action alternative.

**AUTHORIZATION:** Reclamation Act of 1902, June 17, 1902; P.L. 102-575, Title XI, Reclamation Projects Authorization and Adjustment Act, October 30, 1992; P.L. 105-372, Salton Sea Reclamation Act of 1998, November 12, 1998, as amended by P.L. 108-7, Energy and Water Development Appropriations Act, 2003, Section 213, February 20, 2003; and P.L. 108-361, Water Supply, Reliability and Environmental Improvement Act, October 25, 2004.

COMPLETION DATA: All reporting requirements of the Salton Sea Reclamation Act of 1998 (P.L. 105-372) were met on January 27, 2000, when the Secretary forwarded to Congress a draft Environmental Impact Statement/Environmental Impact Report, a Strategic Science Plan, a Draft Alternatives Appraisal Report, and an Overview and Summary Report. The passage of P.L. 108-361 required the Secretary of the Interior, in coordination with the State of California and the Salton Sea Authority, to complete a feasibility study on a preferred alternative for the Sea restoration by December 31, 2006. Although final completion of the report was delayed to ensure adequate evaluation, public review, and coordination with the State of California restoration efforts, a Summary Restoration Report and supporting Comprehensive Restoration Report was, however, finalized and released in December 2007 and January 2008, respectively.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

## **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$1,132,000	\$700,000
Enacted/Request	\$1,132,000	\$700,000
Non-Federal	0	0
Prior Year Funds	15,736	0
Total Program	\$1,147,736	\$700,000
Prior Year Funds/Non-Federal	(15,736)	0
Total Reclamation Allotment	\$1,132,000	\$700,000

## **Total Construction Costs to be Allocated**

	Total Estimated Cost	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation 1/2/	\$45,000,000	\$26,230,991	\$1,132,000	\$700,000	\$16,937,009
Adjustments <u>3</u> /	10,350,000	2,518,584	0	0	7,831,416
Total	\$55,350,000	\$28,749,575	\$1,132,000	\$700,000	\$24,768,425

<sup>1/</sup> Includes investigation costs, work on feasibility report, river reclamation, and other irrigation drainage water treatment work.

**Construction Cost Allocation and Methodology:** Not applicable, because construction is not yet authorized.

**OTHER INFORMATION:** The Secretary of the Interior on December 19, 1997, after consultation with appropriate local, state, and Federal agencies, announced that Reclamation and the Salton Sea Authority were the joint co-lead agencies in completing the planning and environmental compliance for a cost-shared effort to restore the Sea's health. Since this announcement, numerous achievements and actions have guided or influenced Reclamation's involvement in Sea restoration activities.

On November 12, 1998, Congress enacted P.L. 105-372, the Salton Sea Reclamation Act of 1998, which authorized the Secretary of the Interior, acting through Reclamation, to conduct a feasibility study. As directed by this Act, the Department of the Interior transmitted to Congress on January 27, 2000, the Salton Sea Restoration Project Draft Environmental Impact Statement/Environmental Impact Report; an Overview and Summary Report; a Strategic Science Plan prepared by the Salton Sea Science Subcommittee; and the draft Alternative Appraisal Report prepared by Reclamation. These documents, submitted to Congress and the public, provided a detailed description of the scope and results of scientific studies undertaken during the previous 18 months. The Draft Environmental Impact Statement/Environmental Impact Report provided a menu of alternatives, associated environmental impacts, alternative cost estimates, and a summary of findings and recommendation for future actions. On September 4, 2002, the Center for Biological Diversity, Cabazon Band of Mission Indians, and the

<sup>2/</sup> Reclamation costs have increased due to the additional work on the feasibility report and ongoing pilot and demonstration projects.

<sup>3/</sup> Includes cost-sharing of \$2,168,584 from the Salton Sea Authority, a joint authority of Imperial and Riverside counties, two local water districts, and the State of California for research. Also includes \$350,000 from the State of California, Department of Water Resources for the feasibility study.

Sierra Club filed a lawsuit (Case number ED CV 02-923 RT, SGLX) in the U.S. District Court (Central District of California) alleging that Reclamation had failed to comply with provisions of the Salton Sea Reclamation Act of 1998. On September 24, 2004, the court ruled in favor of the defendant, Reclamation, with a conclusion that the plaintiff(s) had not demonstrated standing.

In January 2003, Reclamation transmitted to Congress a Salton Sea Study Status Report which contained the most up-to-date information available on various new and "past" proposals for full or partial restoration of the Sea.

In the summer of 2003, a water transfer agreement between Imperial Irrigation District and the San Diego County Water Authority was executed which initiated the Quantification Settlement Agreement. This action resulted in the passage of several California state laws which, in part, required the California Resources Agency, through the Department of Water Resources (DWR) and the California Department of Fish and Game, to complete a Salton Sea Ecosystem Restoration Study and a Programmatic Environmental Impact Report. These laws also required the Resources Agency to provide these reports and a preferred restoration alternative to the State Legislature by December 31, 2006. Although the Resources Agency's reporting deadline was December 31, 2006, this deadline was extended due to various unavoidable delays. The DWR released a draft Programmatic Environmental Impact Report in November 2006, and a subsequent Final Ecosystem Restoration Study and Final Programmatic Environmental Impact Report were presented to State Legislation in May 2007. The California Resources Agency's recommended restoration alternative involves a deep north lake, a shallow south lake, and approximately 62,000 acres of saline habitat complexes. Estimated project implementation cost of their preferred alternative is approximately \$8.9 billion. The State Legislature is expected to endorse an alternative, pass appropriations, and identify a governing structure for its implementation during calendar year 2008. State Senator Ducheny has sponsored Senate Bill 187, which would appropriate bond funds for Salton Sea restoration activities during the first 5 years and identify a governance structure. The bill is presently in the State Assembly Committee.

The Salton Sea Authority continues to promote their preferred project involving a large North Lake and a smaller South Lake. The Salton Sea Authority continues to seek support from both the State of California and the Federal Congressional Task Force to study and implement its preferred concept.

On October 25, 2004, P.L. 108-361, the Water Supply, Reliability and Environmental Improvement Act, Title II, Sec. 201, the Salton Sea Study Program, was enacted which states: "Not later than December 31, 2006, the Secretary of the Interior, in coordination with the State of California and the Salton Sea Authority, shall complete a feasibility study on a preferred alternative for Salton Sea restoration".

In accordance with P.L. 108-361, Reclamation studied and evaluated various alternatives which were selected from past work for restoring the Salton Sea. Six alternative concepts, including the no action, were selected and have undergone extensive engineering and scientific evaluations based on the best data available. This work was coordinated with the Salton Sea Authority and DWR. Although Reclamation's report is intended to stand alone, the alternatives studied included all of the major concepts considered by the DWR. A draft Summary Report including objectives considered, descriptions of the alternatives, preliminary cost estimates, and viability and biological evaluations was released for public review in February 2007. Subsequent to Congressional briefings in November 2007, a Summary Report and supporting Comprehensive Restoration Report were finalized and released in December 2007 and January 2008, respectively.

**APPROPRIATION CEILING:** Appropriations authorized under P.L. 102-575 are \$10,000,000. The

comparable Federal obligation is \$10,000,000. Any future project development under this authorization would require an increase in ceiling. Appropriations authorized under P.L. 105-372, (Title I), have no ceiling connected to the authorized feasibility work. The comparable Federal obligation for the feasibility work is \$25,000,000. P.L. 105-372, (Title II), as amended by P.L. 108-7, provides a ceiling associated with work for river reclamation and other irrigation drainage water treatment actions (New and Alamo Rivers) in the amount of \$10,000,000. The comparable Federal obligation is \$10,000,000 for this work. This authorization is adequate to cover the river reclamation and other irrigation drainage water treatment actions as currently proposed.

#### **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Continues coordination with the California Department of Water Resources and the Salton Sea Authority to update ideas for improving aquatic habitat and maintaining current bird diversity and populations in a multi-year effort involving improvements and study of saline shallow habitat. Continues work on a 3-year pilot saline shallow wildlife habitat complex that was constructed in the summer of 2006. Work entails data collection, compilation, and analysis of the 100-acre pilot habitat. As the Salton Sea becomes saltier over time, its value as habitat is significantly reduced. While there are a number of full project alternatives for improving aquatic habitat and maintaining current bird diversity and populations, they are very expensive and come with uncertainties and risk. In an effort to find less expensive options through evaluating effectiveness and performance, the 100-acre pilot will need to be monitored for at least three years. Continues to monitor, develop, and implement actions that provide data in efforts to limit or eliminate air quality degradation associated with changes in the Salton Sea water surface level.

Reclamation Request \$700,000

## San Carlos Apache Tribe Water Settlement Act

**LOCATION:** The San Carlos Apache Tribe reservation is located in Arizona, 100 miles east of Phoenix. The reservation consists of 1.9 million acres within Graham and Gila counties. The reservation is also within three different watersheds, the Upper Gila River, the Salt River, and the San Pedro watersheds. Approximately 82 percent of the reservation is within the Gila River system, 17 percent within the Salt River system, and the remaining 1 percent within the San Pedro River system.

DESCRIPTION/JUSTIFICATION: Although located in proximity to water supply sources, the San Carlos Apache Tribe has historically not been able to use these water supplies in substantial quantities due to limited water rights and lack of resources. The San Carlos Apache Tribe has rights to irrigate 1,000 acres with 6,000 acre-feet annually of Gila River water. A Gila River Water Commissioner's 1999 report lists 350 acres of land on the San Carlos Apache Tribe Reservation as being irrigated. The Act of 1992 and the associated Water Settlement Agreement makes development of existing and additional water supplies possible. The Act increased the Tribe's water allocation by 48,945 acre-feet annually, of which 18,145 acre-feet have municipal and industrial use priority and the remaining 30,800 acre-feet are allocated as Indian priority. Under the Act, all of the Tribe's water allocation may be leased for use outside the Reservation. Other potential uses include expansion of irrigated agriculture, mining maintenance and/or development of recreational lakes. Under Section 3709(c), Reclamation's obligation under this Act is limited to acting as the lead agency in assessing and mitigating the environmental impacts of utilizing all of the Tribe's water.

**AUTHORIZATION:** P.L. 102-575 - Title XXXVII, San Carlos Apache Tribe Water Rights Settlement Act of 1992, October 30, 1992.

**COMPLETION DATA:** The biological assessment is scheduled for completion in March 2009; Section 7 consultations with the Fish and Wildlife Service will be complete by June 2009. Implementation of mitigation measures would be substantially completed in 2020. One component of mitigation will be ongoing for the life of the project. Once the project development or water leases are fully enacted, it is anticipated Reclamation will be required to purchase water as needed to maintain minimum flows in the Gila River for critical nesting periods (late May and early June) during drought years. This is estimated to occur approximately every 10 years over an estimated 50-year project life.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

# **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$305,000	\$325,000
Enacted/Request	\$305,000	\$325,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$305,000	\$325,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$305,000	\$325,000

### **Total Construction Costs to be Allocated**

	Total Estimated	Total to			Balance to
	Cost	9/30/07	FY 2008	FY 2009	Complete
Reclamation <u>1</u> /	\$47,364,000	\$236,257	\$305,000	\$325,000	\$46,497,743
Total	\$47,364,000	\$236,257	\$305,000	\$325,000	\$46,497,743

<sup>1/</sup> Total Estimated Cost revised due to the updated October 2008 price levels applied.

# **Construction Cost Allocation and Methodology**

Allocation	FY 2008	FY 2009
Irrigation <u>1</u> /	\$37,850,000	\$47,364,000
Total	\$37,850,000	\$47,364,000

<sup>1/</sup> Planning efforts are incomplete. The allocation may change upon completion of the planning report.

**METHODOLOGY:** Costs are allocated 100 percent to Irrigation.

**APPROPRIATION CEILING:** An appropriation ceiling was not included in the original authorizing legislation.

#### **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Begins nest monitoring for productivity and health of the southwestern willow flycatcher population in the Gila River. Begin Section 7 consultation if San Carlos Apache Tribe requests water exchange agreement and the agreement is implemented. Continue to monitor dam water releases, United States Geological Survey gauge data, and precipitation within the watershed. Continue surveys for southwestern willow flycatchers on the Gila River downstream of Coolidge Dam.

Reclamation Request \$325,000

**SEE APPENDIX FOR:** Status of NEPA Compliance

## San Diego Area Water Reclamation Program

**LOCATION:** This project is located in San Diego County, California.

**DESCRIPTION/JUSTIFICATION:** Greater use of reclaimed water results in decreased dependency on potable imported water including water from the Colorado River. This project consists of four units:

The San Diego Water Reclamation Project is a regional water reclamation program being implemented by the cities of San Diego and Poway, Sweetwater Authority, and Otay Water District. The project provides for the construction of five new wastewater treatment plants, expansion of an existing plant, along with distribution systems, and two conjunctive use projects. Total system capacity upon completion will be approximately 57,116 acre-feet per year.

The Escondido Water Reclamation Project is being implemented by the City of Escondido to upgrade its Hale Avenue Resource Recovery Facility from secondary treatment to tertiary treatment. A distribution system that will put the recycled water to beneficial use for non-potable purposes is also being constructed. In addition, the City of San Diego is planning to upgrade and expand its San Pasqual Water Reclamation Plant, which will produce recycled water for non-potable uses, and for a possible conjunctive use project within the San Pasqual Basin. A distribution system will also be constructed. The City of Poway will construct a distribution system that will utilize recycled water from the San Pasqual plant. When completed, the three project components will deliver a total of approximately 11,200 acre-feet of recycled water annually.

The San Diego Water Repurification Project has been stopped by the City of San Diego, and the reclaimed water and funds that would have been used for this project are now included in the San Diego Water Reclamation Project.

The Padre Dam Municipal Water District Reclamation Project will upgrade and expand an existing water treatment plant and construct a distribution system that will deliver 2,000 acre-feet of recycled water annually.

**AUTHORIZATION:** P.L. 102-575 - Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act, October 9, 1996.

**COMPLETION DATA:** As of September 30, 2007, this project is 49 percent complete. San Diego Water Reclamation Project is scheduled for completion in 2028. Escondido Water Reclamation Project is scheduled for completion in 2014, a delay of two years from that shown in the FY 2008 Budget Justifications, due to a revised construction schedule. Padre Dam Municipal Water District Reclamation Project is scheduled for completion in 2014, a delay of two years from that shown in the FY 2008 Budget Justifications, due to a revised construction schedule.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

### SUMMARIZED FINANCIAL DATA

**Program Financial Data** 

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Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$3,395,000	\$3,000,000
Enacted/Request	\$3,395,000	\$3,000,000
Non-Federal	19,051,000	5,150,000
Prior year Funds	68	0
Total Program	\$22,446,068	\$8,150,000
Prior Year Funds/Non-Federal	(19,051,068)	(5,150,000)
Total Reclamation Allotment	\$3,395,000	\$3,000,000

### **Total Construction Costs to be Allocated**

	Total Estimated Costs	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$172,590,000	\$83,901,998	\$3,395,000	\$3,000,000	\$82,293,002
Adjustments 1/	517,770,000	283,738,143	19,051,000	5,150,000	209,830,857
Total	\$690,360,000	\$367,640,141	\$22,446,000	\$8,150,000	\$292,123,859

Includes cost-sharing of \$361,087,000 from the cities of San Diego and Poway, Sweetwater Authority, and/or Otay Water District for the San Diego Water Reclamation Project; \$121,880,000 from the cities of Escondido, Poway, and/or San Diego for the Escondido Water Reclamation Project; \$3,647,000 from the City of San Diego for the San Diego Water Repurification Project; and \$31,156,000 from Padre Dam Municipal Water District for the Padre Dam Municipal Water District Reclamation Project.

**Construction Cost Allocation and Methodology** 

Allocation	FY 2008	FY 2009
Municipal and Industrial Water	\$690,360,000	\$690,360,000
Total	\$690,360,000	\$690,360,000

**METHODOLOGY:** The methodology of cost allocation has not been modified from last year.

**APPROPRIATION CEILING:** An appropriation ceiling was not included in the original authorizing legislation. P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, imposed a ceiling of \$172,590,000. The comparable Federal obligation is \$172,590,000, which does not exceed the appropriation ceiling.

## **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development -

San Diego Water Reclamation Project - Continues work on design and construction of wastewater

treatment plants and recycled water distribution systems. 7,051,000 Non-Federal - Various (4,251,000)

2,800,000

Escondido Water Reclamation Project - Resumes work on investigations for the San Pasqual Groundwater

Basin conjunctive use project. 1,099,000

Non-Federal - Various (899,000) 200,000

Reclamation Request \$3,000,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Project Repayment for FY 2009 Status of NEPA Compliance

## San Gabriel Basin Project

**LOCATION:** This project is located in the San Gabriel Valley of Los Angeles County, California.

## **DESCRIPTION/JUSTIFICATION:** This project consists of three units:

The San Gabriel Basin Demonstration Project is a conjunctive use project that was originally envisioned to address the Baldwin Park Operable Unit, an Environmental Protection Agency Superfund site that includes the most severe groundwater contamination within the San Gabriel Basin. However, after additional investigations, it was apparent that a comprehensive solution to the water supply and groundwater contamination problems was required to adequately protect the groundwater resources of the San Gabriel Basin. Additional operable units within the San Gabriel Basin, known as the El Monte, South El Monte, and Puente Valley Operable Units were included in the project to provide such a comprehensive remedy. The revised project continues to meet the original objectives by implementing conjunctive use projects that will enhance both the groundwater quality and the local and regional water supply. Treatment projects will remove volatile organic compounds and other contaminants from the groundwater, and then deliver the water for distribution. When completed, the total capacity will be about 39,000 acrefeet annually. Extraction, treatment, and distribution of San Gabriel Basin groundwater will improve the basin's groundwater quality, increase storage capacity, and expand the basin's use for regional benefits.

The Rio Hondo Water Recycling Program will distribute 5,600 acre-feet of recycled water annually from the San Jose Creek Water Reclamation Plant for landscape irrigation and industrial process water. This use of recycled water will replace the need for a like amount of potable water, thereby lessening the demand on both imported and groundwater resources. By reducing the need for groundwater pumping, this program will assist in the prevention of further migration of contamination from the San Gabriel plume, and wastewater discharges to the ocean will be decreased. Components of the program are construction of a main pump station, a booster pump station, reservoir storage facilities (10 million gallons), and approximately 40 miles of pipeline. The program is being implemented in two phases.

The San Gabriel Valley Water Reclamation Program will utilize up to 10,000 acre-feet of reclaimed water annually from the San Jose Creek Water Reclamation Plant to recharge the San Gabriel groundwater basin in order to replace and/or supplement water currently being imported and recharged. There will be no net change in the amount of water currently being recharged as a result of implementation of this program. The recharge will be accomplished in the San Gabriel River channel downstream of Santa Fe Dam. Additional facilities to use up to 13,300 acre-feet of reclaimed water annually for landscape irrigation and industrial use are also included.

**AUTHORIZATION:** P.L. 102-575 - Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; P.L. 103-126, Water and Energy Appropriations Act for 1994, October 28, 1993; P.L. 104-266, Reclamation Recycling and Water Conservation Act, October 9, 1996; and P.L. 108-418, To amend the Reclamation Projects Authorization and Adjustment Act of 1992 to increase the Federal share of the costs of the San Gabriel Basin demonstration project, November 30, 2004.

**COMPLETION DATA:** As of September 30, 2007, this project is 72 percent complete. San Gabriel Basin Demonstration Project is scheduled for completion in 2010, a delay of one year from that shown in the FY 2008 Budget Justifications, due to a revised construction and funding schedule.

Rio Hondo Water Recycling Program, Phase 1, was completed in 2005. The Rio Hondo Water Recycling Program, Phase 2, is scheduled for completion in 2011, a delay of one year from that shown in the FY 2008 Budget Justifications, due to a revised construction and funding schedule.

San Gabriel Valley Water Reclamation Program is scheduled for completion in 2011, a delay of one year from that shown in the FY 2008 Budget Justifications, due to a revised construction and funding schedule.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

## SUMMARIZED FINANCIAL DATA

## **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$689,000	\$700,000
Enacted/Request	\$689,000	\$700,000
Non-Federal	32,369,000	27,031,000
Prior year Funds	416	0
Total Program	\$33,058,416	\$27,731,000
Prior Year Funds/Non-Federal	(32,369,416)	(27,031,000)
Total Reclamation Allotment	\$689,000	\$700,000

### **Total Construction Costs to be Allocated**

	Total Estimated Costs	Total to 9/30/07	FY 2008	FY 2009	Balance to Complete
Reclamation	\$44,590,000	\$31,970,000	\$689,000	\$700,000	\$11,231,000
Adjustments 1/	146,399,010	79,882,809	32,369,000	27,031,000	7,116,201
Total	\$190,989,010	\$111,852,809	\$33,058,000	\$27,731,000	\$18,347,201

Includes cost-sharing of \$42,783,221 from the Three Valleys Municipal Water District, the San Gabriel Basin Water Quality Authority, and/or other entities for the San Gabriel Basin Demonstration Project; \$74,255,608 from the Central Basin Municipal Water District for the Rio Hondo Water Recycling Program; and \$29,360,181 from the Upper San Gabriel Valley Municipal Water District for the San Gabriel Valley Water Reclamation Program.

**Construction Cost Allocation and Methodology** 

Allocation	FY 2008	FY 2009
Municipal and Industrial Water	\$192,895,637	\$190,989,010
Total	\$192,895,637	\$190,989,010

**METHODOLOGY:** The methodology of cost allocation has not been modified from last year. The decrease of \$1,906,627 is due to updated cost estimates, all of which will be applied to the non-Federal share.

**APPROPRIATION CEILING:** An appropriation ceiling was not included in the original authorizing legislation. P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, imposed a ceiling of \$38,090,000. P.L. 108-418 increased the ceiling by \$6,500,000 so that the current ceiling is \$44,590,000. The comparable Federal obligation is \$44,590,000, which does not exceed the appropriation ceiling.

# **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development -

San Gabriel Basin Demonstration Project - Continues work on construction of wells, conveyance and pumping systems, and treatment plants.

1,900,000

Non-Federal – Various (1,500,000)

on-Federal – Various (1,500,000) 400.000

400,000

Rio Hondo Water Recycling Program - Continues work on construction of recycled water distribution pipelines. 19,945,000

Non-Federal – Central Basin Municipal Water District (19,845,000) 100,000

<u>San Gabriel Valley Water Reclamation Program</u> - Continues work on construction of recycled water pumping facilities and pipelines. 5,886,000

Non-Federal – Upper San Gabriel Valley Municipal Water District (5,686,000) 200,000

Reclamation Request \$700,000

**SEE APPENDIX FOR:** Benefit Cost Ratios as of October 1, 2008

Project Repayment for FY 2009 Status of NEPA Compliance

## **South/Central Arizona Investigations Program**

**LOCATION:** Includes the Gila River Drainage Basin; the counties of Apache, Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Navajo, Pima, Pinal, Santa Cruz, Yavapai, and Yuma in Arizona; and the counties of Hidalgo, Grant, Luna, and Catron in New Mexico.

**DESCRIPTION/JUSTIFICATION:** The objective of this ongoing program is to improve management of water resources by evaluating existing water supplies; identify possible future water supplies; and identify and analyze other resource issues. Water management and planning efforts within the state of Arizona are fragmented and many state and local government agencies lack the necessary resources to address water resource management issues without Federal assistance. Uncertainties concerning the adequacy of future water supplies exist in many areas due to rapid growth, conflicting Indian and non-Indian water rights claims, endangered species, and other environmental issues. Other issues include water quality, water use practices, the lack of a coordinated water service infrastructure, and use of water from Reclamation's Central Arizona Project. Assistance is needed to integrate the planning efforts of various local entities in order to identify long-range needs and evaluate the ability to meet the needs with available supplies.

With Federal assistance, the various municipal and Indian water providers will be brought together to cooperate on developing efficient water management strategies. Reclamation will help to identify the resource needs and constraints and attempt to identify water supply and management options available to meet these needs.

**AUTHORIZATION:** The Reclamation Act of 1902, June 17, 1902; P.L. 102-575 - Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water

### SUMMARIZED FINANCIAL DATA

## **Program Financial Data**

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Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$840,000	\$693,000
Fish and Wildlife Management and Development	60,000	25,000
Enacted/Request	\$900,000	\$718,000
Non-Federal	900,000	718,000
Prior Year Funds	52,309	0
Total Program	\$1,852,309	\$1,436,000
Prior Year Funds/Non-Federal	(952,309)	(718,000)
Total Reclamation Allotment	\$900,000	\$718,000

COST-SHARING: Cities of Phoenix, Tempe, Glendale, Mesa, Scottsdale Chandler, Goodyear, Peoria, Surprise and Tucson, Towns of Buckeye and Gilbert, Arizona-American Water Company, and Queen Creek Water Company for the Central Arizona Salinity Study; the Cities of Apache Junction, Tempe, Mesa, Chandler, Towns of Gilbert and Queen Creek, Roosevelt Water Conservation District, Gila River Indian Community, Central Arizona Groundwater Replenishment District, Arizona Water Banking Authority, Salt River Project, New Magma Irrigation and Drainage District, Chandler Heights Irrigation District, Diversified Water, Arizona Water Company, and San Tan Irrigation District for the East Valley Water Forum; Maricopa County Flood Control District for the El Rio River Restoration Study; Maricopa County Flood Control District for the Floodplain Watershed Management Study; Communities of Globe and Miami, the San Carlos Apache Indian Tribe, Gila County, Arizona Department of Water Resources, and private water companies for the Globe Miami San Carlos Water Study; Town of Buckeye, Central Arizona Groundwater Replenishment District, Arizona Water Bank, Global Water, Maricopa County, Yavapai County and local entities along the Hassayampa River for the Hassayampa Recharge Study; Gila County and Town of Payson for the Mogollon Rim Water Resource Management Study; Arizona Department of Water Resources, Santa Cruz County, and City of Nogales for the Nogales Area Water Storage Study; Towns of Casa Grande, Picacho, Eloy, Coolidge, Pinal County, and Arizona Department of Water Resources for the Pinal County Water Resources Study; Arizona Department of Water Resources, Central Arizona Groundwater Replenishment District, Southern Nevada Water Authority, and Tucson for the Salt River Valley Water Analysis and Resource Study; Pima County Flood Control, Tohono O'odham Nation, and Chui Chu District for Santa Cruz River Flood Plain; City of Sierra Vista, Huachuca City, Bisbee, Tombstone, Herford NRCD, Cochise County, State of Arizona, Association of Conservation Districts, Fort Huachuca, The Nature Conservancy, Arizona Audubon Society, and Bella Vista Water for the Sierra Vista/Upper San Pedro Study; Arizona Department of Water Resources, Maricopa Water District, Big Bug Economic Development Alliance, University of Arizona, and Yavapai County Water Advisory Committee for Upper Agua Fria Watershed; Salt River Project, City of Prescott, Yavapai County, and Arizona Department of Water Resources for the Verde River Water Resources Study; Westcaps, City of Goodyear fiscal agent for West Salt River Valley; and Graham County, the Gila Watershed Partnership, Arizona Department of Water Resources, and New Mexico Environment Department and other New Mexico state agencies for the Upper Gila River Watershed Restoration Study.

### **WORK PROPOSED FOR FY 2009:**

## Water and Energy Management and Development -

<u>Central Arizona Salinity Study -</u> Continues appropriate reports and findings documentation from the DewVap and the Brackish Groundwater Treatment Facility research. Continues the concentrate management research and demonstration project phases of the study effort. The study has been extended 1 year as a result of the identification of additional work at the partner's request.

 (FY 2002 - FY 2013)
 100,000

 Non-Federal - Various
 (50,000)

 50,000

East Valley Water Forum - Continues gathering water infrastructure data and groundwater modeling information in an effort to create an area-wide water management plan. This study will address water development and management issues for water quality, quantity, salinity, recharge and recovery, reuse, aquifer data, and monitoring. This work is critical to the East Salt River Valley communities which are among the fastest growing municipal areas in the country located in eastern Maricopa and western Pinal Counties, Arizona. The extension of the study by 5 years is due to a revised work scheduling.

 (FY 2005 - FY 2015)
 180,000

 Non-Federal - Various
 (90,000)

 90,000

<u>El Rio River Restoration Study</u> - Continues the restoration pilot project by replacement of salt cedar with native vegetation. Continues assessing restoration results which would be used to improve the plan for a future demonstration project. Continues report work on the pilot project. The study results will affect the Gila River with respect to water quantity, quality, and habitat. The decrease in funding is due to the scope of the study being revised and the study being shortened 1 year.

(FY 2004 - FY 2010)	50,000
Non-Federal - Maricopa County Flood Control District	(25,000)
	25,000

Floodplain/Watershed Management Study - Continues study efforts with Federal, state, tribal, and local agencies, and stakeholders to provide planning assistance and support for improved local flood management practices related to multi-purpose projects for improvement of water supply and quality in central Arizona. Continues to work with stakeholders to identify, implement and monitor demonstration projects as appropriate. The study has been extended 5 years due to a revised work schedule and partner funding issues. (FY 2005 - FY 2015)

Non-Federal - Maricopa County Flood Control District (30,000) 30,000

Globe Miami San Carlos Water Study - Continues to gather data to develop strategies to address water resource management needs and issues related to supply and quality with the partners and communities. The study is addressing contaminated well water from mining and wells that run dry during the hot summers. Some of the water supplies that would be evaluated during this study are Central Arizona Project water, ground water, effluent, and reclaiming impaired water. This study is looking at water quality and quantity issues and help to develop strategies to meet the water needs for the communities below Roosevelt Dam. The study has been extended 5 years due to realignment of work scheduling. (FY 2008 - FY 2016)

Non-Federal - Various (33,000) 33,000

Hassayampa Recharge Study - Begins study effort with hydrologic analysis and ground water modeling to verify the stream flow along the Hassayampa River in Central Arizona and address water resource management issues in Yavapai and Maricopa Counties. Increase is due to initial year of study effort. (FY 2009 – FY 2015)

40,000

Non-Federal - Various (20,000) 20,000

Mogollon Rim Water Resource Management Study - Continues coordination with Federal, state, local and tribal partners to address specific problems identified in the data analysis portions of the appraisal report. The study partners will complete the Hydrogeologic Framework for the study area and incorporate the information into the final study documents. The study has been extended 6 years due to work rescheduling. (FY 2003 - FY 2016)

Non-Federal - Various (60,000) 60,000 Nogales Area Water Storage Study - Continues appraisal level design and evaluation. Continues gathering and evaluating information regarding watershed issues, water resource evaluations and policy issues. Continues to develop detailed problem statement and drafting evaluation criteria and a list of alternatives that might be able to solve the identified problem. Potential water shortages on the watershed would affect farming, ranching, industrial, and municipal interests as well as damage the existing thriving riparian area. The study has been extended 5 years due to delays in partner support and commitment, funding issues and a revised work schedule. (FY 2003 - FY 2014)

Non-Federal - Various (55,000)
55,000

<u>Pinal County Water Resources Study</u> - Continues the demonstration for advanced water treatment technology to treat water with high nitrate concentration and address water quality issues. The study is examining the overall groundwater quality, the possibilities of advanced water treatment, concentrate disposal, and possibly a demonstration project in the Pinal County area. The decrease is due to the study effort time extension of 5 years due to revised work activities associated with the study effort and partner involvement. (FY 2007 - FY 2015)

Non-Federal - Various (25,000) 25,000

Salt River Valley Water Analysis and Resource Study - Continues data collection to determine if water storage availability is sufficient to supply Arizona's needs with respect to hydrologic cycles and water supply and demand during a sustained period of drought. (FY 2008- FY 2018) 120,000

Non-Federal - Various (60,000)
60,000

<u>Santa Cruz River Flood Plain</u> - Begins developing cost-share agreement and plan of study to develop alternatives to mitigate flood impacts and develop future water supplies of the Santa Cruz River in association with the Tohono O'odham Nation. Increase is due to initial year of study.

 (FY 2009 - FY 2014)
 50,000

 Non-Federal - Various
 (25,000)

 25,000

Sierra Vista/Upper San Pedro Study - Continues analysis needed to evaluate alternatives and completes data gathering for the Upper San Pedro/Sierra Vista area in southeastern Arizona. A lack of comprehensive water resource management planning is causing economic and environmental problems in the watershed. The goal is to develop a water resource management plan that would balance water use by the City of Sierra Vista and Fort Huachuca against the needs of the San Pedro Riparian National Conservation Area. A long list of possible augmentation has been screened to a short list on the basis of effectiveness, implement ability, and cost. The next step is to proceed with in-depth evaluations (potential feasibility studies) of the short list of alternatives. The final objective of the study is to select one or more augmentation alternatives that would allow the area to meet its goal of sustainability of human and riparian needs. The study effort time extension of 4 years is due to a revised work schedule and funding issues.

 (FY 2005 - FY 2015)
 250,000

 Non-Federal - Various
 (125,000)

 125,000

<u>Upper Agua Fria Watershed</u> - Begins identifying priority areas for evaluation and determining how best to provide assistance in the development of improved local water resource management practices, protection of Central Arizona Project facilities, and related development of multi-purpose projects. Increase is due to initial year of study. (FY 2009 – FY 2015)

40,000

Non-Federal - Various (20,000) 20,000

<u>Verde River Water Resources Study</u> - Continues data collection and analysis for appraisal level study. The Plan of Study will focus on examining a full range of problems associated with quantity and quality and developing a set of proposed alternatives which meet the needs and criteria set forth by the partnership. The study effort time extension of 3 years is due to a revised work schedule.

(FY 2007 - FY 2015) 130,000 Non-Federal - Various (65,000) 65,000

West Salt River Valley - Begins initiating follow-up work and an update of the West Salt River Valley study effort. Local partners have requested an update and continued study support. This is a continuation of the recent West Salt River Valley study effort. (FY 2009 – FY 2015)

20,000

Non-Federal - Various (10,000) 10,000

Subtotal, Water and Energy Management and Development

\$693,000

### Fish and Wildlife Management and Development:

<u>Upper Gila River Watershed Restoration Program</u> - Continues coordinating study efforts with other Federal, state, and local government agencies and stakeholders in Arizona and New Mexico. Continue analyzing potential biological constraints including endangered and invasive species management, determining water budgets, and other issues related to proposed river management strategies and demonstration projects. The study was extended 2 years due to decrease in funding and the complexity of the issues in the watershed. (FY 2000 - FY 2014)

Non-Federal - Graham County (25,000) 25,000

Subtotal, Fish and Wildlife Management and Development

25,000

Reclamation Request \$718,000

## Southern Arizona Water Rights Settlement Act Project

**LOCATION:** San Xavier and Schuk Toak Districts of the Tohono O'Odham Nation, Pima County, Arizona.

**DESCRIPTION/ JUSTIFICATION:** This project includes work funded by Reclamation for construction of Southern Arizona Water Rights Settlement Act facilities. Project facilities authorized by the Act include rehabilitation and extension of the San Xavier District Existing Farm and construction of irrigation distribution systems to service the Schuk Toak New Farm, and the San Xavier District New Farm. The San Xavier Existing Farm rehabilitation and extension, Schuk Toak New Farm and San Xavier New Farm projects are also funded under Central Arizona Project for that portion of the delivery systems which connect the on-reservation delivery systems to the Central Arizona Project. Other authorized work, such as the Tohono O'Odham Water Resource Inventory and Water Management Plan, is also carried out under this project.

The Secretary of the Interior is required to deliver annually up to 16,000 acre-feet of water to the Schuk Toak District and 50,000 acre-feet of water to the San Xavier District of the Tohono O'Odham Nation at no cost to the Nation or Districts. The Act established the Cooperative Fund as a source of funds for the Secretary to meet these obligations. The Bureau of Indian Affairs administers the Cooperative Fund and funds are transferred to Reclamation to fund operational costs.

**AUTHORIZATION:** P.L. 85, Snyder Act, November 2, 1921 and P.L. 97-293, Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982 as amended by P.L.108-451, the Arizona Water Settlements Act, December 10, 2004.

COMPLETION DATA: As of September 30, 2007, the entire project is 62 percent complete. The authorizing Act required delivery to the Tohono O'Odham Nation to begin prior to October 12, 1992. Additional legislation extended the completion date by nine months. Schuk Toak New Farm was substantially completed in FY 2000 and the San Xavier Central Arizona Project-Link pipeline was substantially complete in June, 2001. The San Xavier Existing Farm Rehabilitation was substantially completed in FY 2007 and substantial completion of Phase I (350 acres) of the San Xavier Farm Extension is now scheduled for 2011, with Phase II (approximately 1000 acres) substantial completion scheduled for 2014. A scheduled completion of the San Xavier New Farm has been deferred until the San Xavier District Council holds an irrevocable election to decide whether to construct a new farm or to accept a cash payment settlement. This election is a provision of the Arizona Water Settlements Act. The Council is required to notify the Secretary of the Interior not later than 180 days after the enforceability date of the settlement act or by January 1, 2010, whichever is later.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

**Program Financial Data** 

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Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$4,374,000	\$2,969,000
Facilities Operations	0	0
Enacted/Request	\$4,374,000	\$2,969,000
Non-Federal	0	0
Other Federal	6,231,966	4,051,417
Prior Year Funds	0	0
Total Program	\$10,605,966	\$7,020,417
Prior Year Funds/Other Federal	(6,231,966)	(4,051,417)
Total Reclamation Allotment	\$4,374,000	\$2,969,000

### **Total Construction Costs to be Allocated**

	Total Estimated	Total to			Balance to
	Cost <u>1</u> /	9/30/07	FY 2008	FY 2009	Complete
Project Total	\$72,962,000	\$45,540,002	\$4,374,000	\$2,969,000	\$20,078,998
Adjustments <u>2/</u>	3,641,000	3,641,000	0	0	0
Total	\$76,603,000	\$49,181,002	\$4,374,000	\$2,969,000	\$20,078,998

<sup>&</sup>lt;u>1</u>/ Prior to FY 1997, construction costs for this settlement act's implementation activities, in excess of Central Arizona Project authorization, were funded from Bureau of Indian Affairs transfers as well as Reclamation appropriations under Indian Water Right Settlement Acts. Total obligations through September 30, 1997, from these other programs are \$9,282,040.

**METHODOLOGY:** The methodology has not changed from that used for the FY 2008 Budget Justifications.

**APPROPRIATION CEILING:** The Act does not provide an overall appropriation ceiling. However, Section 303 (a) (4) of the Act contains an appropriation authorization of \$3,500,000 plus or minus indexing for those features of the project, which are not authorized to be constructed under any other provision of law. The San Xavier District and the remainder of the Schuk Toak District new farm will be constructed under the provision of the Snyder Act, which does not specify an appropriation ceiling.

<sup>2/</sup> Contribution received from Pima County Flood Control District towards the flood control benefits being achieved by the construction of the San Xavier Farm Rehabilitation.

### WORK PROPOSED FOR FY 2009:

# Water and Energy Management and Development -

San Xavier Farm Extension, Effluent Utilization, and Water Management Plan - Completes acquisition of rights of way and land leases for Phase I of the Farm Extension delivery system. Completes cultural resource surveys for Phase I of the Farm Extension. Completes planning, design, environmental compliance of Phase I of the Farm Extension; completes development, execution, and administration of several contracts and agreements to utilize 28,200 acre-feet per year of effluent, and completes monitoring ongoing recharge and administer related groundwater credits. The decrease in funding delays the start of construction of the Farm Extension. \$2,969,000

## **Facility Operations -**

Schuk Toak and San Xavier Water Delivery - Continues water delivery through the Central Arizona Project system, and administering payments for the Operation and Maintenance contract with the Nation and Districts to operate and maintain a 2.5 mile off-reservation pipeline used to deliver Central Arizona Project water to the Schuk Toak and San Xavier farms.

4,051,417

Other Federal - Bureau of Indian Affairs

(4,051,417)

0

**Reclamation Request** 

\$2,969,000

**SEE APPENDIX FOR:** Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2009 Summary of Irrigation Investment Status of NEPA Compliance

Status of Water Service and Repayment Contracts

## **Southern California Investigations Program**

**LOCATION:** Includes the counties of Imperial, Inyo, Mono, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura in California.

DESCRIPTION/JUSTIFICATION: The objective of this ongoing program is to help southern California entities identify cost-effective, reliable, local water supplies in order to become more self-reliant in addressing their existing and future water supply needs while reducing the pressure on imported water supplies. Southern California faces a critical situation where water demands exceed the dependable supply and imported supplies are becoming increasingly less reliable. Many water importers are experiencing increased competition from the environmental community as well as increased water demands from other areas in California and other states. Water supplies come from a number of sources, such as water imported from the Colorado River, the Sacramento-San Joaquin Delta of northern California, and other areas in California; locally developed surface supplies; groundwater; reclaimed wastewater; and seawater desalination. There is an interest in increasing and more effectively utilizing local sources of water, increasing the reliability of local water sources, improving water quality, and keeping water costs reasonable.

Reclamation's priorities in working with local entities is multi-faceted and includes, but is not limited to, promoting and implementing integrated water management initiatives, water conservation, drought management, local water supply enhancement, development of diverse water portfolios with appropriate entities, salinity management practices, brine management and disposal, water quality improvement, seawater desalination, wastewater reclamation and reuse, conjunctive use water supply opportunities, support of environmental restoration and enhancement, preservation and maintenance of natural treatment systems, technology transfer, flood management and safeguarding local water supplies. All of these priorities are being encountered in southern California. Reclamation has and would continue to demonstrate the ability to assist local entities in solving water supply problems while working with local stakeholders to reach mutually beneficial solutions.

**AUTHORIZATION:** The Reclamation Act of 1902, June 17, 1902; Migratory Bird Treaty Act of 1918, July 3, 1918; P.L. 101-233, North American Wetlands Conservation Act of 1989, October 13, 1989; and P.L. 102-575-Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Deliver Water.

#### SUMMARIZED FINANCIAL DATA

## **Program Financial Data**

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$1,073,000	\$260,000
Enacted/Request	\$1,073,000	\$260,000
Non-Federal	1,073,000	260,000
Prior Year Funds	0	0
Total Program	\$2,146,000	\$520,000
Prior Year Funds/Non-Federal	(1,073,000)	(260,000)
Total Reclamation Allotment	\$1,073,000	\$260,000

**COST-SHARING:** San Diego County Water Authority, for the Border of the Californias Recycled Water Study; Los Angeles-San Gabriel Rivers Watershed Council, Los Angeles County Department of Public Works, City of Los Angeles, Water Replenishment District of Southern California, Metropolitan Water District of Southern California, Los Angeles County Sanitation Districts, California Department of Water Resources, and California Department of Transportation for the Los Angeles Basin County Watershed Study; Mojave Water Agency, Victor Valley Water District, CA Department of Water Resources, Joshua Basin Water District, Hi-Desert Water District, and Mojave Desert Resource Conservation District for Mojave Valley Conjunctive Use Study; Padre Dam Municipal Water District, San Diego County Water Authority, Otay Water District, California Department of Water Resources, Santa Fe Irrigation District, and San Diego River Conservancy for Padre Dam New Water Supplies Study; City of San Diego, California Department of Water Resources, County of San Diego, San Diego County Water Authority, and San Diego River Conservancy for the San Diego River Watershed Assessment Study; Fallbrook Public Utilities District, Rancho California Water District, Eastern Municipal Water District, San Diego County Flood Control District, Camp Pendleton Marine Corps. Base, Western Municipal Water District, and Riverside Flood Control and Water Conservation District for the Santa Margarita River Watershed Management Study.

### **WORK PROPOSED FOR FY 2009:**

## Water and Energy Management and Development -

Border of the Californias Recycled Water Study – Resumes and completes an economic analysis of the cost and viability of developing and implementing various alternatives to supplement local water supplies. Increase is due to the completion of the study. (FY 2002 - FY 2009) 150,000

Non-Federal - San Diego County Water Authority (75,000)

75,000

Los Angeles Basin County Watershed Study - Continues work to use analytical tools to determine the location of demonstration sites to capture stormwater runoff and recharge local groundwater aquifers. Continues work to install demonstration project and finalize the monitoring for water quality, as well as assess the impacts of reduction of run-off and water use, changes in property values, and other benefits. Continues the development of the regional approach for implementation of stormwater augmentation projects in southern California and other urban areas. The study has been extended 3 years due to a revised work schedule. (FY 2003 - FY 2011)

Non-Federal - Various (20,000) 20,000

<u>Mojave Valley Conjunctive Use Study</u> - Begins to identify the opportunities to capture storm water, reclaimed water, and imported water to increase the supply and the water quality in the Mojave Basin. Increase is due to first year of study. (FY 2009 - FY 2014)

70,000

Non-Federal - Various (35,000)
35,000

Padre Dam New Water Supplies Study - Begins to investigate the location, capacity, and demands associated with each water recycling facility in San Diego County. Identify potential new sources of water supply to help San Diego County, California Become more locally reliable. Increase is due to first year of study. (FY 2009 - FY 2012)

90,000

Non Federal Various (45,000)

Non-Federal - Various (45,000) 45,000

San Diego River Watershed Assessment Study - Continues the development of a groundwater model to identify recharge opportunities. Continues to analyze and determine the impacts to water quality associated with extensive groundwater extractions. Continues to coordinate with existing and historical groundwater, land use, and environmental resources data. Continues to develop a stakeholder strategy for identifying locations for projects to recharge water throughout the watershed and develop the tools which would help decision makers determine where, when, and how to recharge dry weather run-off, storm water run-off, and reclaimed water flows. (FY 2008 - FY 2012)

Non-Federal - Various (40,000) 40,000

Santa Margarita Watershed Management Study - Continues to refine the watershed model, Santa Margarita Watershed Analysis Risk Management Framework model (WARMF), to address the water quality issues and evaluate the effectiveness of the tool for determining the assimilative capacity of the Santa Margarita River and its ability to resolve long-term issues of effluent discharge to the river. Continues to work with the Regional Water Quality Control Board to participate in the establishment of new Total Maximum Dissolved Limits (TDML) for the Basin, use the WARMF model as a tool to re-analyze existing TMDL's, address the need for site specific objective basin amendments, and address the de-listing of the Santa Margarita Estuary. (FY 2002 - FY 2010)

Non-Federal - Various (45,000) 45,000

**Reclamation Request** 

\$260,000

## Yuma Area Projects

**LOCATION:** These projects are located in western Arizona, southeastern California, and southern Nevada.

**DESCRIPTION/JUSTIFICATION:** The projects provide for operation and maintenance of Reclamation facilities from Davis Dam to the Southerly International Boundary with Mexico (approximately 276 river miles). Benefits provided by this project include irrigation, municipal and industrial water, flood and sediment control, recreation, and fish and wildlife. These facilities were constructed under the Colorado River Front Work and Levee System and Delivery of Water to Mexico Project. Delivery of Water to Mexico Project includes all activities necessary to meet the requirements of the 1944 Treaty with Mexico. The Yuma Area Projects also operate and maintain the river to deliver water to over 1 million acres of irrigable land in the United States and Mexico and to over 1,700,000 urban users in the United States and Mexico.

Program activities include operation and maintenance of the Colorado River channel and settling basins, river banklines, jetties, training structures, access roads, operating bridges, levees, flood ways, drainage and/or groundwater recovery wells and related carriage facilities, transmission lines and switchyard/substations, and operation and maintenance of fish and wildlife facilities. Also provided in the program are environmental investigations and studies to satisfy National Environmental Policy Act compliance and ensure the integrity of mitigation work. The program also provides for the operation and maintenance of reservoir facilities which include Imperial Dam, Laguna Dam, Senator Wash Dam, and Senator Wash Pumping/Generating Plant.

Water for the project is diverted from the All-American Canal to the forebay of the Siphon Drop Power Plant on the Yuma Main Canal, which then is distributed over the Valley Division and a portion of the Reservation Division. Some Reservation Division lands are served directly from turnouts on the All-American Canal above and below Siphon Drop. The Yuma Main Canal crosses underneath the Colorado River near Yuma in an inverted siphon to supply the West Main, Central, and East Main Canals of the Valley Division, which flow south and irrigate land to the Mexican border.

**AUTHORIZATION:** Reclamation Act of 1902, June 17, 1902 (Yuma Project approved by the Secretary of the Interior on May 10, 1904); P.L. 293, Yuma Auxiliary Project, January 25, 1917, as amended; P.L. 292, Second Deficiency Appropriation Act for 1924, Section 4 (The Fact Finders Act), December 5, 1924 (Gila Project approved by the President on June 21, 1937); P.L. 585, Colorado River Front Work and Levee System, March 3, 1925; P.L. 642, Boulder Canyon Project, December 21, 1928; P.L. 247, Interior Department Appropriation Act of 1948, July 30, 1947; P.L. 88-25, Delivery of Water to Mexico, May 17, 1963; P.L. 106-221, Wellton Mohawk Transfer Act, June 21, 2000; and P.L. 106-566, Conveyance to Yuma Port Authority, December 23, 2000. The projects were administratively consolidated into the Yuma Projects - with the approval of the appropriations committees in 1957.

**PERFORMANCE INFORMATION:** This project is aligned with the following *Department of the Interior's Strategic Plan* end outcome goal(s): Sustain Biological Communities and Deliver Water.

### SUMMARIZED FINANCIAL DATA

**Program Financial Data** 

Activity	FY 2008	FY 2009
Water and Energy Management and Development	\$1,626,000	\$1,658,000
Facility Operations	5,850,000	6,315,000
Facility Maintenance and Rehabilitation	15,067,000	13,890,000
Enacted/Request	\$22,543,000	\$21,863,000
Non-Federal	50,000	50,000
Prior Year Funds	17,641	0
Total Program	\$22,610,641	\$21,913,000
Prior Year Funds/Non-Federal	(67,641)	(50,000)
Total Reclamation Allotment	\$22,543,000	\$21,863,000

### **WORK PROPOSED FOR FY 2009:**

Water and Energy Management and Development - Continues regional and area office activities linked to preparation, development, and negotiation of Colorado River water entitlements/contracts and operation and maintenance contracts consistent with Colorado River water law. Continues power contract administration. Continues assistance to water districts and local resource agencies for research, field surveys, canal modernization, habitat and water conservation plans and measures. Continues assistance with public information and education programs. \$1,658,000

Facility Operations - Continues water operations along the lower Colorado River. Continues scheduling water releases from Parker Dam for delivery of water to Mexican and American water users. Continues groundwater activities including operation of drainage wells for groundwater control. Continues collection of sediment samples. Continues well inventory program below Laguna Dam to identify noncontract users of Colorado River water. Continues water accounting program to measure and account for water deliveries, water use, and return flows. The increase is due to additional efforts to implement the Supervisory Control and Data Acquisition System in support of groundwater management and efforts to modernize administration of the river. 4,205,000

Continues operational activities for land resources along the lower Colorado River. Continues Geographic Information Systems administrative oversight and technical support. Continues land records maintenance, environmental audits, and mandated land management field reviews. Continues rights-ofway, utility crossing contracts, land resource inventories, trespass resolution, and hazardous materials surveys. 949,000

Continues fish and wildlife facility operations along the lower Colorado River, including environmental awareness and habitat oversight. Continues compliance with Federal and state environmental statutes and regulations as required. Continues support of water quality law and assessment of danger of contaminants to fish and wildlife habitat. Continues efforts toward containment of the invasive plant, Salvinia Molesta, within the river and canal systems. Continues research of new eradication/control techniques for Salvinia Molesta and more effective uses of existing techniques. 1,161,000 Subtotal, Facility Operations 6,315,000

Facility Maintenance and Rehabilitation - Continues ongoing infrastructure maintenance of the lower Colorado River system. These activities include general maintenance of 684 miles of levee, bankline, access, and canal roads which results in blading 2,803 miles per fiscal year within seven river divisions and conveyance systems. Conduct field investigations and minor repairs to more than 110 bridges.

Conducts semi-annual bankline and associated structure inspections. Places rock riprap on deteriorating banklines, jetties, or training structures to maintain river stability. Perform wash fan silt debris removal to aid in river navigation and improve recreational and commercial safety. Inspects and conducts materials inventory of 59 rock and gravel stockpile sites. Inspects quarry sites and conducts necessary fence and gate repairs. The decrease is due to a reduced amount of effort in bankline maintenance activities.

4,799,000

Continues sediment control along the river and within settling basins to ensure efficient water delivery to the United States and to Mexico. This activity includes surveying sediment distribution to develop specific scope of work, engineering design, disposal site determination and permitting, dredging, quality control inspections, and all necessary environmental work. Continues work on the restoration of the old river channel behind Laguna Dam to support routine sluicing activities for Imperial Dam and restore approximately 1,100 acre-feet of capacity to the Laguna Dam Reservoir. The increase is due to the increased efforts in support of the restoration of the old river channel behind Laguna Dam.

1,902,000

Begins design for the replacement of the fire alarm panels, detection and notification devices in the Yuma Area Office to meet Life and Fire Alarm Safety Codes. Continues well-field and conveyance channel facilities maintenance. These activities include maintenance on mechanical and electric structures including pump removal and replacement of four wells. Conducts maintenance on conveyance channels including sediment removal, gate and concrete repairs. Monitors, tests, and maintains observation wells. Continues groundwater mapping to aid long-and short-term goals in managing the aquifer. Continues inspections and maintenance of dams and other structures to monitor and preserve facility reliability. Continues maintenance of area and field offices. Facility maintenance activities include roofing, painting, heating ventilation and air conditioning, electrical, structural, security, plumbing, vehicle parking, roads, storm water run-off, fire protection system, lab equipment, and lawn and pest management of the Yuma Area Office, warehouse, heavy equipment shop and other supporting buildings, as well as the Laguna and Ehrenberg Field Offices. Completes reconstruction of the Drainage Pump Outlet Channels to meet new operational requirements associated with the new groundwater management system. The decrease is due to the completion of the reconstruction of the Drainage Pump Outlet Channels to increase flexibility in the groundwater management program. 7,239,000

Non-Federal: Yuma Cogeneration Association (50,000) 7,189,000

7,189,00

Subtotal, Facility Maintenance and Rehabilitation

13,890,000

**Reclamation Request** 

\$21,863,000

**SEE APPENDIX FOR:** Obligations by Function for Operating Projects