2011-2012 Fiscal Year

Lower Owens River Project

Work Plan, Budget, and Schedule

Prepared by Inyo County Water Department
and
Los Angeles Department of Water and Power
February 3, 2011

2011 – 2012 FY Lower Owens River Project
Work Plan

The Inyo County Water Department and the Los Angeles Department of Water and Power jointly prepared this 2011-2012 Fiscal Year Lower Owens River Project Work plan. The Inyo County/Los Angeles Technical Group adopted this work plan on February 3, 2011. The Technical Group recommends that the Inyo County Board of Supervisors and the City of Los Angeles Board of Water and Power Commissioners or their designee approve the 2011-2012 Fiscal Year Lower Owens River Project Work plan.

Introduction

The Final Environmental Impact Report for the Lower Owens River Project (LORP) Section 2.2.1 provides that in December of each year, the Long-Term Water Agreement (LTWA) Technical Group will develop and adopt an annual work program for the LORP, which describes LORP work to be performed in the following fiscal year. This work program identifies who will perform or oversee tasks, a schedule, and a budget. This work plan and budget was prepared according to the Agreement Between the County of Inyo and City of Los Angeles Department of Water and Power Concerning Funding of the Lower Owens River Project (Funding Agreement) sections D, E, and F. Following adoption by the Technical Group, the work program will be submitted to the County and LADWP governing board for approval. Each governing board must approve the plan before this work plan and budget can be implemented it. This document is the work plan for fiscal year July 2011 – June 2012.

The objectives of this work plan are to maintain compliance with the July 11, 2007 Superior Court Stipulation and Order in case no. S1CVCV01-29768, conduct monitoring necessary to achieve the LORP goals described in the 1998 Memorandum of Understanding, maintain infrastructure necessary to the operation of the LORP, and implement adaptive management measures. The following priorities are observed in this work plan:

1. Work and activities required to maintain required flows in the river and required water supplies to other LORP components.
2. Maintenance associated with flow compliance monitoring and reporting associated with the above referenced Stipulation and Order.
3. Habitat and water quality monitoring described in the LORP Monitoring and Adaptive Management Plan, or required to comply with the requirements of the Lahontan Regional Water Quality Control Board.
4. The preparation of the LORP Annual Report as required by Section 2.10.4 of the LORP Final EIR and by Section L of the above referenced Stipulation and Order.
5. Other work or activities including the implementation of adaptive management measures.

Section 1 of this work plan covers the budget and schedule for maintenance, monitoring, mosquito abatement, weed management, salt cedar control, operations, and reporting activities. Weed management and Saltcedar control activities are identified but are funded under separate agreements and not budgeted under in this work plan. Section 2 of this work plan addresses adaptive management measures.

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The budget amount reflects the additional costs above equal sharing of work by the parties and does not include the costs of Inyo and LA staff times where they offset.

Section 1. Maintenance and Monitoring Tasks

A. Inyo/LA Tasks

The maintenance and monitoring portion of this work plan consists of seven categories of tasks: maintenance, hydrologic monitoring, biological/water quality monitoring, range monitoring, mosquito abatement, weed management, and salt cedar control.

Maintenance. Maintenance activities consist of cleaning sediment accumulations and other obstructions from water measurement facilities, cleaning sediment and aquatic vegetation from ditches, mowing ditch margins, fence repair, and adjustments to flow control structures. Estimates of the level of effort necessary for maintenance were based on the level of effort that was required during 2010 – 2011, with adjustments as required by section II.D of the Funding Agreement which allows that costs for maintenance of ditches, spillgates, and control structures that are above the baseline costs for facilities in the river corridor and Blackrock Waterfowl Management Area (BWMA) shall be shared. The estimated 2011-2012 costs for River corridor and BWMA facilities were $86,104 and $148,705 respectively, for an overall 2011-2012 operations and maintenance expenditure of $234,809. This figure reduced by the combined CPI-adjusted baseline costs for the river corridor and BWMA facilities is $105,703 (Table 6).

Hydrologic Monitoring. Hydrologic monitoring consists of monitoring, analyzing, and reporting river baseflows and seasonal habitat flows, the flooded extent of the Blackrock Waterfowl Management Area (BWMA), the levels of the Off-River Lakes and Ponds, and baseflows, pulse flows, and seasonal habitat flows to the Delta. Estimates of the level of effort required for hydrologic monitoring were based on the level of effort required during 2010–2011. Hydrologic monitoring costs are $173,802 (Table 2).

Currently, the flooded acreage of the BWMA is being measured by walking the perimeter of the flooded area on foot with GPS eight times per year. Fieldwork is being jointly conducted by LADWP and Inyo County staffs, with analysis and reporting being conducted by hydrography staff.

Biological/Water Quality Monitoring. Biological and water quality monitoring is related to the tasks indicated in the Table 4.01 of the LORP Monitoring and Adaptive Management Plan (MAMP). The MAMP prescribes fewer monitoring tasks and a less intensive monitoring effort in calendar year 2011, than in last fiscal year's work plan. Note that in this year's work plan, baseflow compliance and Off-River Lakes and Ponds flooded extent are included under the Hydrologic Monitoring task and budget. Monitoring will be jointly conducted by Inyo and LA with the hours allocated by each agency given in the attached budget table (Table 3).

The MOU Consultant, will be involved with the seasonal habitat flow recommendation, seasonal habitat flooding extent, data analysis and reporting, and the annual report preparation including adaptive management recommendations (Table 4).

Range Monitoring. Range monitoring is related to the tasks described in section 4.6 of the MAMP. Two types of monitoring will take place that are directly related to the management of livestock grazing: irrigated pasture condition scoring and utilization trend. Irrigated pasture

condition scoring is a tool used by managers to systematically track the condition of irrigated pastures. Utilization monitoring tracks the amount of biomass removed from non-irrigated fields. Woody species recruitment monitoring was added in September 2010 in order to assess potential livestock influences on regeneration of desirable woody species. Range monitoring will be conducted by LADWP and is not a shared cost, and therefore not budgeted for in this work plan (Table 5).

Mosquito Abatement. For the fiscal year 2011–2012, the Owens Valley Mosquito Abatement Program (OVMAP) will continue a comprehensive Integrated Mosquito Management Plan (IMMP) when addressing the new and developing sources within the LORP in accordance with its mission of protecting public health. This IMMP consists of an expansion of currently used materials and methods for the surveillance and control of mosquitoes across the OVMAP boundary as well as contingency planning for late season flushing flows. The $60,000 budget anticipates field surveillance of potential larval habitat for mosquito production, larviciding, pupaciding, adult mosquito surveillance with light traps, mosquito borne disease surveillance, and treatment for adult mosquitoes.

Weed Control. The Inyo/Mono Counties Agricultural Commissioner's Office receives funding from LADWP to control and eradicate several different invasive weed species both within the LORP boundaries, and in areas within the watershed that may serve as a seed source that could impact the LORP area. These invasive weed species include *Lepidium latifolium, Acroptilon repens, Cirsium arvense, Centaurea solstitialis, Centaurea maculosa,* and *Carderia draba*. These populations are managed using integrated pest management methods, including mechanical, chemical, and biological controls. Currently, there are 32 separate sites totaling 304 gross acres that Agricultural Commissioner's Office manages within the LORP boundaries.

Along with weed treatment activities, the Agricultural Commissioner's Office provides mapping and monitoring of these infestations from year to year. Information gathered includes net and gross acreage, species, location, and the date when the selected management activity was conducted. The Agricultural Commissioner's Office also provides outreach to the public that is specific to the weed issues threatening the LORP, through educational materials targeting recreationalists visiting the area, and responds to and interacts with the public regarding any new weed locations found within the LORP area. LORP weed control activities are funded through agreements outside of the LORP Annual Work Plan, and are therefore not included in the budget presented here.

Saltcedar Control. The County Water Department's saltcedar control program will concentrate on cutting tamarisk in the tributaries to the Lower Owens River channel and adjacent spreading basins. The purpose of working on the LORP is to reduce the likelihood of spreading saltcedar throughout the Owens River re-watered channel. A top priority for the salt cedar program will be to locate all river sites where tamarisk seedlings and resprouts were identified in the 2009 and the 2010 Rapid Assessment Surveys Accessible tamarisk will be removed by hand, or by cutting and treating with herbicide (where allowed). Additionally, work will begin to remove slash, created by years of cutting in the LORP area. Salt Cedar Control staff include: one permanent employee, one shared employee, and six seasonal field assistants that work on the salt cedar control program during the treatment season, October through April. The California Department of Forestry (CDF) work crews will assist in efforts to treat slash.

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Monitoring and follow-up treatments by the Saltcedar Project Coordinator will occur during the balance of the year. LORP saltcedar control activities are funded through agreements outside of the LORP Annual Work Plan, and are therefore not included in the budget presented here.

Maintenance and Monitoring Tasks Budget
Table 6 summarizes the costs of monitoring for the fiscal year July 1, 2011 through June 30, 2012 and specifies the costs incurred by Inyo County, Los Angeles, and the cost of the MOU consultant.

Generally, there is an effort to have staff hours for Inyo County and LADWP offset one another for conducting the biologic and water quality monitoring. For 2010-2011, there are 234 total people days necessary to complete the proposed biological and water quality monitoring, of which LADWP has 6 more people days allocated than Inyo County at a cost of $2,400. There is no offset of County for the Maintenance, Operations, or Hydrologic monitoring to be performed by LADWP. Additionally, LADWP has allocated 108 people days for Range Monitoring, which is not a shared monitoring cost. Based on this budget, Inyo is required to compensate Los Angeles $48,278 for the differential in expenditures for Biologic and Water Quality, Maintenance, Operations, and Hydrologic monitoring. Subtracting the dollars Inyo County will spend during the fiscal year from the amount spent by LADWP, and dividing this figure by two obtains this figure.

LADWP and Inyo County will split the $4,975 spent for the repair for water quality test equipment used in the LORP monitoring and studies.

Table 6. Summary 2010- 2011 Fiscal Year Monitoring and Adaptive Management Budget.

Inyo County	Staff Work Days	Value of Additional Staff Time, Materials, and Equipment	Payments
Hydrologic Monitoring	0	0	
Bio and Water Quality	114	0	
Operations and Maintenance	0	0	
Mosquito Abatement		$30,000	
MOU Consultant		$180,384	
Biological Equipment Repair		$4,975	
Adaptive Management	0	0	
Inyo County Totals	114	$215,359	$48,278*
LADWP			
Hydrologic Monitoring		$173,802	
Biologic and Water Quality	120	$2,400	
Operations and Maintenance		$105,713	
Mosquito Abatement		$30,000	
Adaptive Management	0	0	
LADWP Totals	120	$311,915	
Combined Total	234	$527,274	

* ½ of the difference LADWP and Inyo County totals
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**Footnote to Table 6. Post Implementation Credit and Trust Account balances.

	Adjustment	Balance of Post-Imp Credit held by LADWP
Original Post Implementation Credit	$2,253,033	$2,253,033
Increase Post Imp Credit by 2.9% based on the July 2007 price Index	$65,338	$2,318,371
County's obligation for July 11, 2007 to June 30, 2008 period	$243,524	$2,074,847
Increase the remaining balance of the Post Implementation Credit by 5.7% based upon the July 2008 price index	$118,266	$2,193,113
County's obligation for 2008-2009 fiscal year	$243,524	$1,949,589
Reduce the remaining balance of the Post Implementation Credit by 1.3% based upon the April 2009 price index	$25,345	$1,924,244
County's share of the costs for the 2009-2010 work plan and budget, including adaptive management.	$266,176	$1,658,068
Increase the remaining balance of the Post Implementation Credit by 1.9% based upon the April 2010 price index effective July 10, 2010	$25,465	$1,683,533
County's share of the costs for the 2010-2011 work plan and budget, including adaptive management effective July 21, 2010.	$317,805	$1,365,728
County's share of the costs for the 2011-2012 work plan and budget, including adaptive management.	$48,278	

The County's balance in the Post Imp Credit Account held by LADWP as of July 21, 2010 is $1,365,728

The Trust account Balance for January 2011 is $3,805,399.36.

B. Schedule

Table 7 provides a tentative schedule of key activities associated with the monitoring, maintenance and reporting for the Lower Owens River Project during the 2011 – 2012 Fiscal Year.

Table 7. Tentative schedule of activities for 2011-2012 Fiscal Year

Period	Monitoring
Jul 8, 2011- Jul 15, 2011	BWMA Flooded Extent
Aug 1 - Aug 15, 2011	RAS
Aug 15 - Aug 22, 2011	BWMA Flooded Extent
Sept 1 - Sept 9, 2011	RAS Consultation with MOU Parties
Sept 1- Sept 30, 2011	Delta Pulse Flow
Sept 15 - Sept 22, 2011	BWMA Flooded Extent
Oct 1 - Oct 28, 2011	LADWP/Inyo Prepare Draft LORP Report
Oct 1 - Oct 28, 2011	Fiscal Year 2010-2011 Workplan and Budget Reconciliation
Oct 17 - Oct 24, 2011	BWMA Flooded Extent
October 31, 2011	Draft LORP Report transmitted to MOU Consultant
October 31, 2011	Transmittal of LORP Accounting Report to Governing Boards
Nov 1 - Nov 30, 2011	MOU Consultant review Draft LORP Report and Develop Recommendations
Nov 1 - Dec 31, 2011	Delta Pulse Flow
December 1, 2011	MOU Consultant transmit Adaptive Management Recommendations to Inyo/LA
December 1, 2011	Draft LORP Report transmitted to MOU Parties
Dec 1 - Dec 30, 2011	BWMA Avian Survey
December 20, 2011	Public Meeting for Draft LORP Report
Dec 1, 2011 - Jan 30, 2012	Fiscal Year 2012-2013 Workplan and Budget Development
Feb 1 - Feb 3, 2012	Technical Group Meeting to Adopt LORP Annual Report and 2012-2013 Fiscal Year Workplan and Budget
Feb 3 – Mar31, 2012	Transmittal of LORP Workplan, Budget, and Schedule to governing boards for approval
March 1 - May 31, 2012	Delta Pulse Flow
April 2 - May 15, 2012	BWMA Avian Survey
April 16 - April 20, 2012	BWMA Flooded Extent
May 14 - May 22, 2012	BWMA Flooded Extent
May 28 - June 4, 2012	BWMA Flooded Extent
May 15 - June 15, 2012	Seasonal Habitat Flow
June 1 - July 31, 2012	Delta Pulse Flow
Jun 1 -June 29, 2012	BWMA Avian Survey

C. MOU Consultants

TASK 1 – Seasonal Habitat Flow

Seasonal habitat flows are prescribed to encourage a transition to riparian vegetation on the floodplains as well as manage channel sediments. The purpose of the habitat flow is to create a dynamic equilibrium for riparian habitat, fishery, water storage, water quality, animal migration, and biodiversity, which result in resilient productive ecological systems. Management actions are designed to achieve and maintain riparian habitats in a healthy ecological condition and establish a healthy warm water recreational fishery with habitat for native species. The LORP Monitoring and Adaptive Management Plan require the MOU consultants to recommend the annual seasonal habitat flow level to the Technical Committee based on the April runoff forecast. The river is then monitored during the flow period to evaluate adverse conditions or sudden problems. This task requires evaluation of the Owens Valley runoff conditions, review of proposed flow schedule and development of independent review and recommendations.

During the Seasonal Habitat flow, the MOU consultant has to prepare for field observations, travel, and attend meetings with the Scientific Team to discuss the progress towards meeting the LORP objectives.

Deliverables:

Written recommendation for the Seasonal Habitat Flow based on the April runoff forecast.

Written evaluation to be included in the LORP Annual Report discussing conditions encountered during the seasonal habitat flow and progress towards meeting LORP objectives and any necessary adaptive management actions.

Budget:

Monitoring of Seasonal Habitat Flow		**FY 2011-2012**		
		Hours	**Rate**	**Cost**
Labor Estimate:				
Principals		102	$132	$13,464
Associates		24	$87	$2,088
Administration		8	$66	$528
Subtotal				$16,080

TASK 2 – Flooded Extent Evaluation

Monitoring of flooded extent, which is how much land area is inundated during seasonal habitat flows, is prescribed to inform managers about the effectiveness of seasonal habitat flows. Seasonal habitat flooding extent monitoring documents what habitats are being affected by the flooding. Determining the extent and duration of the flooded area enables managers to identify which vegetation communities are inundated and are being affected by the seasonal habitat flow. This assists in determining if the seasonal habitat flows are meeting the goals of the habitat and informs the adaptive management decision-making. The seasonal habitat flow is evaluated each year to estimate the extent of flooding on river landforms. The report for this work requires review and comment from the MOU consultant with assistance from the consultant's staff to verify mapping and estimates. Flood extent results are compared to results from other tasks to analyze effectiveness in meeting LORP goals. Fieldwork for this task is completed during the Seasonal Habitat Flow monitoring.

Deliverables:

Written evaluation to be included in the LORP Annual Report discussing conditions encountered during the seasonal habitat flow flooded extent monitoring and progress towards meeting LORP objectives and any necessary adaptive management actions.

Budget:

Flood Extent Evaluation		FY 2011-2012			
		Hours	Rate	Cost	
Labor Estimate:					
Principals		48	$132	$6,336	
Associates		64	$87	$5,568	
Administration		12	$66	$792	
Subtotal				$12,696	

TASK 3 – Rapid Assessment Evaluation
Rapid Assessment Surveys (RAS) are conducted to document problems or potential management issues in LORP riverine-riparian area and provide qualitative project-level feedback regarding changes within the project area. Rapid Assessment Evaluation is performed on the river corridor, Blackrock Waterfowl Management Area, Off-River Lakes and Ponds and the Delta. LADWP and Inyo County staffs collect and processes field data, and perform data analysis, the results of which are captured in a draft RAS report. The LORP consultant reviews the RAS results to identify issues that require immediate action, and informs the MOU parties as required by the LORP Monitoring and Adaptive Management Plan. The MOU consultant will evaluate results for trends that influence monitoring and adaptive management recommendations for subsequent years.

Deliverables:

Written consultation with MOU Parties following completion of the RAS.
Written evaluation to be included in the LORP Annual Report discussing conditions encountered during the RAS, progress towards meeting LORP objectives and any necessary adaptive management actions.

Budget:

Rapid Assessment		FY 2011-2012		
		Hours	Rate	Cost
Labor Estimate:				
Principals		80	$132	$10,560
Associates		48	$87	$4,176
Administration		8	$66	$528
Subtotal				$15,264

TASK 4 – Annual Report Evaluation
At the end of October, LADWP and ICWD forward the draft annual report to the MOU consultant. The MOU consultant will evaluate the annual report for completeness and accuracy. This requires reviewing each chapter and, in some cases, revaluating or re-estimating and verifying conclusions.

Deliverables:

Written evaluation to be included in the LORP Annual Report discussing the need for any contingency monitoring as well as discussion of progress towards meeting LORP objectives and any necessary adaptive management actions.

Budget:

Annual Report		FY 2011-2012		
		Hours	Rate	Cost
Labor Estimate:				
Principals		160	$132	$21,120
Associates		440	$87	$38,280
Administration		40	$66	$2,640
Subtotal				$62,040

TASK 5– Annual Adaptive Management Recommendations
Following review and evaluation of the draft annual report and consultation with LADWP and ICWD, a final chapter for adaptive management recommendations will be written for the final annual report and submission to the LORP Technical Committee. The MOU consultant will present the recommendations to the Technical Committee as required. This will require travel time and preparation time.

Deliverables:

Written evaluation of any necessary adaptive management actions as well as discussion of progress towards meeting LORP objectives.

Budget:

Adaptive Management Recommendations		FY 2011-2012		
		Hours	Rate	Cost
Labor Estimate:				
Principals		120	$132	$15,840
Associates		72	$87	$6,264
Administration		12	$66	$792
Subtotal				$22,896

TASK 6 – Project Management and Meetings
The MOU consultant will meet with LADWP and ICWD periodically to review progress or discuss issues. The MOU consultant will manage project assignments, schedules and budgets, provide monthly progress reports to LADWP, budget assessment and invoice each month. This task will require the MOU consultant to prepare for meetings, travel, and attend meetings with the Scientific Team and MOU Parties to discuss the progress towards meeting the LORP objectives.

Budget:

Project Management and Meetings		FY 2011-2012		
		Hours	**Rate**	**Cost**
Labor Estimate:				
Principals		220	$132	$29,040
Associates		56	$87	$4,872
Administration		56	$66	$3,696
Subtotal				$37,608
		FY 2011-2012		
EXPENSES		**Hours**	**Rate**	**Cost**
Travel (Mileage 1500/trip @ $0.52-$0.56/mi)		10	$780	$7,800
Lodging		30	$125	$3,750
Per Diem		30	$75	$2,250
Subtotal				$13,800
FY 2011-2012 TOTAL				**$180,384**

Section 2. Adaptive Management Measures

Chapter 12 of the 2010 LORP Annual Report details the adaptive management recommendations made by the MOU consultants. Three of the recommendations require expenditures that would be considered a shared cost that will need to be considered and budgeted by LADWP and Inyo County. These costs are not included in this workplan for the reasons described in the discussion for each recommendation.

River Flow Modeling

The MOU Consultants have recommended that a detailed report on possible flow alternatives be presented to the MOU parties prior to the 2011 seasonal habitat flows so that various management scenarios can be reviewed and discussed, and adaptive management recommendations for future flows can be agreed upon. This work requires the MOU consultant to develop digital terrain and river flow models for the LORP. LADWP supports this recommendation. Although it presently appears that the MOU goals for the LORP are on a trajectory to be acceptably met, LADWP staff is concerned that some issues may arise and are concerned that not conducting this modeling exercise will eliminate a potentially useful adaptive management tool. Inyo County argues that while such a study may provide useful information, empirical evidence obtained through monitoring the Seasonal Habitat Flow (200 CFS) demonstrates that raising the flow does nothing to reduce aquatic vegetation, or increase woody recruitment. Higher flows, and longer duration may accomplish these objectives, but LADWP has not indicated that they would accommodate greatly increased flows, or flow duration. Lower flows in the winter may provide some aquatic vegetation control, but this can be tested empirically, off-river.

Because the Technical Committee could not agree to this adaptive management study, this work plan does not include the modeling described above. This matter may be referred to the Inyo/Los Angeles Standing Committee to resolve this disagreement.

Thibaut Ponds

In their 2010 Adaptive Management Recommendations, the MOU Consultants recommended that LADWP complete an analysis of reasonable alternatives to determine if there is a more feasible method to regain and maintain 28 acres of open water surface in the Thibaut Ponds over the life of the project.

The Thibaut Ponds are a part of the Off River Lakes and Ponds component of the Lower Owens River Project and are contained within the boundary of the Thibaut Management Unit of the Blackrock Waterfowl Management Area. The acreage of the ponds was determined to be 28 acres which must be maintained separately from the total acreage flooded in the BWMA.

The ponds are supported by water from the Los Angeles Aqueduct through the east branch of the Thibaut Spillgate and are currently kept full of water to maintain a constant depth, and existing shoreline conditions are intended to be maintained. It was recognized in the LORP EIR that an increasing abundance of marsh vegetation could degrade the quality of the ponds for habitat. The Thibaut Ponds have now become too shallow to prevent emergent vegetation from taking over and are now choked with emergent vegetation which has eliminated nearly all of the open water which was a primary reason for the original Thibaut Pond project.

The Thibaut Ponds will be temporarily drained in order to assess feasible methods of regaining 28 acres of open water. The project will remain water neutral by adding 28 acres to the total area flooded in the BWMA and eliminating all surface water into the project area after April, 2011. It is anticipated that during the winter 2011-2012 that the Thibaut Unit of the BWMA will be burned in preparation of bringing it on line as one of the flooded units in 2012-2013. This will allow the pond area to be treated during the burn. Drying the pond area out during the summer will ensure that burn is thorough. After the burn, LA and Inyo will develop a plan for keeping the ponds as free of emergent vegetation as possible.

The work described above will not require any expenditure beyond normal operations and maintenance. Costs associated with future management actions will be incorporated in subsequent workplans as provided for in the LORP Post-Implementation funding agreement.

Salt Cedar Slash Treatment

The MOU Consultants have recommended changes to future salt cedar treatment protocols. Inyo County is presently working on a plan to address the concerns of both the MOU Consultants and LADWP. This plan is scheduled to be completed by the end of February 2011. Implementation of a jointly developed plan will begin with initiation of the fall 2011 salt cedar treatment period. Costs for implementing these changes are subject to other methods funding and are therefore not included in this workplan and budget.

Table 1. Operations and Maintenance Budget

	Labor type	Hours	Labor Rate	Total Labor	Equiipment Type	Hours	Rate	Total Equipment
River								
Measuring Stations Maintenance (4 Stations)	Power Shovel Operator		153.12	11417.8	Mower	253.2	75.76	4196.24
	Truck Driver/MCH				3 axel dump trucks			
	Operator				Gradall			
	Building Repair Man				Backhoe and trailer			
Spillgates and Ditches					3/4 ton 4x4 pick- up			
Intake Spillgate Maintenance (3 days per year)								
	Building Repair Man	27	37.53	1013.31	3/4 ton 4x4 pick- up	27	5.77	155.79
	2 - Truck Driver/MCH	54	33.14	1789.56	3/4 ton 4x4 pick- up	27	5.77	155.79
Intake								
Mowing (3 days per year)	Operator	27	40.74	1099.98	Mower	225	10.71	2409.75
	1 - Truck Driver/MCH	36	33.14	1193.04	1 - 3 axel dump trucks	72	15.38	1107.36
Cleaning (3 days per year)	Power Shovel Operator	27	43.29	1168.83	Gradall	27	25.64	692.28
	2 - Truck Driver/MCH	54	33.14	1789.56	2 - 3 axel dump trucks	72	15.38	1107.36
Thibaut Spillgate and Ditch								
Cleaning (4 days per year)	Power Shovel Operator	36	43.29	1558.44	Gradall	36	25.64	923.04
	2 - Truck Driver/MCH	72	33.14	2386.08	2 - 3 axel dump trucks	72	15.38	1107.36
Independence Spillgate and Ditch								
Cleaning (4 days per year)	Operator	135	40.74	5499.9	Backhoe and trailer	135	14.66	1979.1
	2 - Truck Driver/MCH	270	33.14	8947.8	2 - 3 axel dump trucks	270	15.38	4152.6
Locust Spillgate and Ditch								
Cleaning (5 days per year)	Power Shovel Operator	45	43.29	1948.05	Gradall	45	25.64	1153.8
	Operator	45	40.74	1833.3	Backhoe and trailer	45	14.66	659.7
	1 - Truck Driver/MCH	45	33.14	1491.3	1 - 3 axel dump trucks	45	15.38	692.1
Georges Ditch								
Cleaning (5 days per year)	Power Shovel Operator	45	43.29	1948.05	Gradall	45	25.64	1153.8
	Operator	45	40.74	1833.3	Backhoe and trailer	45	14.66	659.7
	1 - Truck Driver/MCH	45	33.14	1491.3	1 - 3 axel dump trucks	45	15.38	692.1
Alabama Spillgate								
Cleaning (6 days per year)	Power Shovel Operator	54	43.29	2337.66	Gradall	54	25.64	1384.56
	3 - Truck Driver/MCH	162	33.14	5368.68	3 - 3 axel dump trucks	162	15.38	2491.56
Delta								
Delta Spillgate Maintenance (3 days per year)								
	Building Repair Man	27	37.53	1013.31	3/4 ton 4x4 pick- up	27	5.77	155.79
	2 - Truck Driver/MCH	54	33.14	1789.56	3/4 ton 4x4 pick- up	27	5.77	155.79
River Sub-Total				**$58,918.81**				**$27,185.57**
Blackrock Waterfowl Management Area								
Blackrock Ditch								
Mowing (25 days per year)	Operator	225	40.74	9166.5	Mower	225	10.71	2409.75
	2 - Truck Driver/MCH	450	33.14	14913	2 - 3 axel dump trucks	450	15.38	6921
Cleaning (10 days per year)	Power Shovel Operator	90	43.29	3896.1	Gradall	90	25.64	2307.6
	2 - Truck Driver/MCH	270	33.14	8947.8	2 - 3 axel dump trucks	270	15.38	4152.6
Goose Lake to River Ditch								
Cleaning (5 days per year)	Operator	45	40.74	1833.3	Backhoe and trailer	45	14.66	659.7
	1 - Truck Driver/MCH	45	33.14	1491.3	1 - 3 axel dump trucks	45	15.38	692.1
Patrol and Flow Changes (260 days per year)	Aqueduct and Reservouir K	2080	33.14	68931.2	3/4 ton 4x4 pick- up	2080	5.77	12001.6
Maitenance								
Fence (10 days per year)	Building Repair Man	90	37.53	3377.7	3/4 ton 4x4 pick- up	90	5.77	519.3
	2 - Truck Driver/MCH	180	33.14	5965.2	3/4 ton 4x4 pick- up	90	5.77	519.3
LORP Operations Sub-Total				**$118,522**				**$30,183**
River Total	$86,104.38							
	$148,705							
Total O and M	**$234,809**				CPI Adjusted O and M			**$105,713.04**

Basline Costs (described in Post -Imp)		River	BWMA
	Baseline CPI adjustment	$60,819.00	$67,380.00
	January 2011 0.7%	$61,244.73	$67,851.66

Table 2. Hydrolgic Monitoring Budget

	Per Day Pay	2010-2011 Predicted Person days	Predicted Labor Cost from July 1, 2010 through June 30, 2011	Estimated Equipment Cost July 1, 2010 through June 30, 2011	Total Estimated Cost July 1, 2010 through June 30, 2011
RIVER					
Base Flow Compliance Monitoring					
Hydro	$328	100	$32,800	$4,000	$36,800
Engineering	$409	20	$8,180	$0	$8,180
Seasonal Habitat Flow Monitoring					
Hydro	$328	46	$15,088	$1,840	$16,928
Data analysis					
Hydro	$328	18	$5,904	$0	$5,904
Reporting					
Hydro	$328	17	$5,576	$680	$6,256
Engineering	$409	75	$30,675	$0	$30,675
BLACK ROCK WATERFOWL AREA					
Monitoring					
Hydro	$328	59	$19,352	$2,360	$21,712
Engineering	$409	3	$1,227	$0	$1,227
Data analysis					
Hydro	$328	15	$4,920	$0	$4,920
Engineering	$409	21	$8,589	$0	$8,589
Reporting					
Hydro	$328	10	$3,280	$0	$3,280
Engineering	$409	36	$14,724	$0	$14,724
OFF RIVER LAKES AND PONDS					
Lake Level Monitoring					
Hydro	$328	10	$3,280	$400	$3,680
Data analysis					
Hydro	$328	3	$984	$0	$984
Reporting					
Hydro	$328	4	$1,312	$0	$1,312
Engineering	$409	11	$4,499	$0	$4,499
DELTA					
Flow Monitoring					
Hydro	$328	5	$1,640	$200	$1,840
Data analysis					
Hydro	$328	1	$328	$0	$328
Reporting					
Hydro	$328	1	$328	$0	$328
Engineering	$409	4	$1,636	$0	$1,636

Total Hydro Budget **$173,802**

Table 3. Biologic and Water Quality Monitoring Budget.

Biologic and Water Quality	Organization/Class	Days	Inyo Days	LA Days
River				
Rapid Assessment Survey	LA/WRS-B	10		10
	LA/WRS-C	0		
	IC/RESASST	52	52	
	IC/LORP	9	9	
Seasonal Habitat Flow	LA/WRS-B	10		25
	LA/WRS-C	15		
Habitat Flow Flooding extent	LA/WRS-B	10		15
	LA/WRS-C	5		
Analysis and Reporting	LA/WRS-B	9		20
	IC/LORP	5	5	
	IC/GIS	13	13	
Total Days		**138**	**79**	**70**
Blackrock				
Waterfowl Area Acreage	LA/WRS-B	8		8
	LA/WRS-C	8		8
	IC/RESASST	8	8	
	IC/LORP	8	8	
Rapid Assessment Survey	LA/WRS-C	4		4
Indicator Species Surveys	LA/WRS-B	8	4	4
Data Analysis and Reporting	LA/WRS-B	6		6
Total Days		**50**	**20**	**30**
Delta				
Rapid Assessment Survey	LA/WRS-B	1		1
Analysis and Reporting	LA/WRS-B	2		2
Total Days		**3**	**0**	**3**
Off-River Lakes and Ponds				
Rapid Assessment Survey	LA/WRS-C	1		1
Analysis and Reporting	LA/WRS-B	1		1
Total Days		**2**	**0**	**2**
Annual Report Preparation				
Report preparation	LA/WRS-B	15	15	15
	IC/LORP	15		
Total Days		30	**15**	**15**
		234	114	120

Additional LADWP days
6
Daily Rate
348
Equipment
52
LADWP Expense
$2,400.00
IC Liability
$1,200.00

Table 4. Ecosystem Sciences Budget.

Labor Estimate	**FY 2011-2012**		
Monitoring of Seasonal Habitat Flow	**Hours**	**Rate**	**Cost**
Principals	102	$132	$13,464
Associates	24	$87	$2,088
Administration	8	$66	$528
Subtotal			**$16,080**
Flood Extent Evaluation			
Principals	48	$132	$6,336
Associates	64	$87	$5,568
Administration	12	$66	$792
Subtotal			**$12,696**
Rapid Assessment			
Principals	80	$132	$10,560
Associates	48	$87	$4,176
Administration	8	$66	$528
Subtotal			**$15,264**
Annual Report			
Principals	160	$132	$21,120
Associates	440	$87	$38,280
Administration	40	$66	$2,640
Subtotal			**$62,040**
Adaptive Management Recommendations			
Principals	120	$132	$15,840
Associates	72	$87	$6,264
Administration	12	$66	$792
Subtotal			**$22,896**
Project Management and Meetings			
Principals	220	$132	$29,040
Associates	56	$87	$4,872
Administration	56	$66	$3,696
Subtotal			**$37,608**
Total Labor			
Principals	770	$132	$101,640
Associates	704	$87	$61,248
Administration	136	$66	$8,976
Subtotal			**$166,584**
EXPENSES			
Travel (Mileage 1500/trip @ $0.52-$0.56/mi)	10	$780	$7,800
Lodging	30	$125	$3,750
Per Diem	30	$75	$2,250
Subtotal			**$13,800**
ANNUAL TOTAL			**$180,384**

Table 5. Range Monitoring	
Task	**People Days**
Utilization	45
Irrigated Pasture Condition	1
Woody Recruitment	32
Analysis and Reporting	30
Total	**108**

Reference for Tables 1 and 6

Energy prices jumped 7.5 percent over the year, strongly influenced by a 10.8 percent increase in gasoline prices. From a year ago, electricity prices were up 2.6 percent, but natural gas service prices moved down 0.6 percent.

All items less food and energy

The index for all items less food and energy decreased 0.1 percent from a month ago. Among the index components, decreases were recorded for apparel (-2.0 percent), recreation (-0.4 percent), and shelter (-0.2 percent.) By contrast, higher prices were recorded for education and communication (1.1 percent), other goods and services (0.8 percent), and medical care (0.1 percent).

Over the year, the index for all items less food and energy advanced 0.5 percent. Prices increased for education and communication (5.1 percent), other goods and services (4.1 percent), medical care (2.7 percent), and shelter (0.4 percent). In contrast, lower prices were recorded for recreation (-5.7 percent) and apparel (-2.9 percent).

Table A. Los Angeles-Riverside-Orange County CPI-U monthly and annual percent changes (not seasonally adjusted)

	2005		2006		2007		2008		2009		2010	
Month	Monthly	Annual	Monthly	Annual	Monthly	Annual	Monthly	Annual	Monthly	Annual	Monthly	Annual
January	0.1	3.7	1.0	5.4	0.9	3.2	0.7	3.9	0.5	-0.1	0.4	1.8
February	1.0	3.8	0.7	5.1	1.0	3.5	0.2	3.1	0.3	0.0	0.0	1.4
March	0.9	4.0	0.5	4.7	0.8	3.8	1.0	3.3	0.0	-1.0	0.4	1.9
April	1.0	4.8	1.0	4.7	0.6	3.5	0.5	3.1	0.1	-1.3	0.2	1.9
May	0.2	4.2	0.9	5.4	0.3	2.9	0.9	3.7	0.4	-1.8	0.2	1.8
June	-0.4	3.6	-0.6	5.2	-0.6	2.9	1.1	5.4	0.6	-2.2	-0.2	0.9
July	0.3	4.1	0.1	5.0	0.1	2.9	0.4	5.7	0.0	-2.6	0.1	0.9
August	0.8	5.2	0.2	4.3	-0.1	2.6	-0.6	5.1	0.2	-1.7	0.2	0.8
September	1.3	5.8	0.5	3.4	0.2	2.3	-0.5	4.5	0.3	-1.0	-0.1	-0.4
October	0.5	5.4	-0.7	2.2	0.5	3.5	-0.6	3.4	0.0	-0.4	0.3	0.7
November	-0.6	4.4	-0.1	2.7	0.6	4.2	-1.7	1.0	-0.4	0.9	-0.4	0.7
December	-0.8	4.5	-0.2	3.3	-0.3	4.2	-1.2	0.1	-0.3	1.8	0.3	1.3

CPI-W

In December, the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) was 219.619, up 0.4 percent. The CPI-W increased 1.6 percent over the year.

The January 2011 Consumer Price Index for Los Angeles-Riverside-Orange County is scheduled to be released on February 17th, 2011, at 10:00 a.m. (PST).

Technical Note