# 2010-2011 Fiscal Year

## **Lower Owens River Project**

# Workplan and Budget

Prepared by Inyo County Water Department and Los Angeles Department of Water and Power February 8, 2010

This 2010-2011 Fiscal Year Lower Owens River Project Workplan was jointly prepared by staff of the Inyo County Water Department and the Los Angeles Department of Water and Power. This workplan was adopted by the Inyo County/Los Angeles Technical Group on February 8, 2010. The Technical Group recommends that the 2010-2011 Fiscal Year Lower Owens River Project Workplan be approved by the Inyo County Board of Supervisors and the City of Los Angeles Board of Water and Power Commissioners.

#### 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 describing 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. Before this work plan and budget can be implemented, it must be approved by each governing board. This document is the work plan for fiscal year July 2010 – June 2011.

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 workplan:

- 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 workplan covers maintenance, monitoring, mosquito abatement, weed management, salt cedar control, and operations. Section 2 of this workplan addresses adaptive management measures. Weed management and Saltcedar control activities are funded under separate agreements and not budgeted under in this work plan.

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

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 2009 – 2010, with adjustments as required by section II.D of the Funding Agreement. Section D 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. Section II.D.2 provides a 1996-1997 through 2005-2006 average baseline cost of \$56,863 for maintenance of river corridor facilities, and section II.D.6 provides a baseline cost of \$62,798 for maintenance of BWMA facilities, for the purpose of adjusting total operations and maintenance costs by subtracting baseline costs from total costs. Baseline costs were adjusted according to the April Los Angeles-Anaheim-Riverside Consumer Price Index for April 2007, April 2008, April 2009, and November 2009 for final baseline adjustments of \$60,819 and \$67,380. 2009-2010 costs for River corridor BWMA facilities were \$86,104 and \$148,705 respectively, for an overall 2009-2010 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 \$106,611.

<u>Hydrologic Monitoring</u>. 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 2009 – 2010. Hydrologic monitoring costs are \$158,916.

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 conducted by LADWP watershed resources staff, and analysis and reporting being conducted by hydrography staff.

<u>Biological/Water Quality Monitoring.</u> 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 provides for intensive monitoring in calendar year 2010, therefore, fiscal year 2010-2011 includes several additional monitoring tasks beyond last fiscal year's effort. Note that baseflow compliance, BWMA flooded extent, and Off-River Lakes and Ponds flooded extent are included above under Hydrologic Monitoring. Monitoring will be jointly conducted by Inyo and LA with the hours of each agency committed given in the attached table. Range trend work will be planned, budgeted, and conducted by LADWP and is not included in this work plan. Ecosystem Sciences Incorporated, the MOU Consultant, will be involved with the

seasonal habitat flow recommendation, seasonal habitat flooding extent, landscape vegetation mapping, indicator species habitat monitoring, fish habitat monitoring, site scale vegetation assessment, creel census', data analysis and reporting, and the annual report preparation including adaptive management recommendations.

<u>Range Monitoring</u>. Range monitoring is related to the tasks described in section 4.6 of the MAMP. Three types of monitoring will take place that are directly related to the management of livestock grazing: irrigated pasture condition scoring, utilization and range 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 and Range trend tracks the long-term effect of grazing and grazing management prescriptions on the grazing resource. Additionally, annual field inspections and evaluations will be conducted. Range monitoring will be conducted by LADWP and is not a shared cost, and therefore not budgeted in this work plan.

<u>Mosquito Abatement.</u> For the fiscal year 2010–2011, 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. This 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.

The budgeted amount of \$127,000 includes a contingency of \$67,000 in the event that supplementary aerial treatments are necessary. The use of this contingency requires concurrence by both the Inyo County Chief Administrative Officer and LADWP's Aqueduct Manager.

<u>Weed Control.</u> 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 98 separate sites, on LADWP lands, spread over an area of 29,755 gross acres that Agricultural Commissioner's Office manages. Of these sites, 12 are 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.

<u>Saltcedar Control.</u> The County Water Department's saltcedar control program will concentrate on the tributaries to the Lower Owens River channel. The purpose of working on the LORP is to reduce the likelihood of the creeks and streams spreading saltcedar throughout the Owens River re-watered channel. The current focus is to reduce the chance of infestation by treating areas in the river drainage basin. One permanent, one shared employee and six seasonal field assistants are expected to work on the control program during the treatment season (December-March). 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

The attached spreadsheets provide the budgets for hydrologic monitoring, biologic/water quality monitoring, maintenance, and mosquito abatement. The following table summarizes the costs of monitoring for the fiscal year July 1, 2010 through June 30, 2011 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 262 total people days necessary to complete the proposed biological and water quality monitoring, of which LADWP has 80 more people days allocated than Inyo County at a cost of \$32,000. There is no offset of County for the Maintenance, Operations, or Hydrologic monitoring to be performed by LADWP. Additionally, LADWP has allocated 267 people days for Range Monitoring which is not a shared monitoring cost. Based on this budget, Inyo is required to compensate Los Angeles \$317,805 for the differential in expenditures for Biologic and Water Quality, Maintenance, Operations, and Hydrologic monitoring. This value is calculated by subtracting the dollars Inyo County will spend during the fiscal year from the amount spent by LADWP.

Inyo County	Staff Work Days	Value of Additional	Payments
		Staff Time,	
		Materials, and	
		Equipment	
Hydrologic Monitoring	0	0	
Bio and Water Quality	91	0	
Operations and Maintenance	0	0	
Mosquito Abatement		\$63,500	
Inyo County Totals	91	\$63,500	\$317,805
LADWP			
Hydrologic Monitoring		\$158,916	
Biologic and Water Quality	171	\$32,000	
Operations and Maintenance		\$106,611	
Mosquito Abatement		\$63,500	
ESI Costs		\$338,084	
LADWP Totals	171	\$699,111	

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

#### Section 2. Adaptive Management Measures

Calendar year 2010 is a year of intensive monitoring on the LORP. As described above in Biological and Water Quality, the LORP Monitoring and Adaptive Management Plan provides additional monitoring to assess progress of the project toward meeting goals. LADWP and Inyo County will be collecting the extensive set of data that will measure the effectiveness of project management toward achieving project goals.

Modification of flow management and flooded area measurement in the BWMA. This adaptive management measure was initiated during 2009 and is ongoing. The 1997 MOU calls for "Approximately 500 acres of the habitat area will be flooded at any given time in a year when the runoff to the Owens River watershed is forecast to be average or above average. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the forecasted runoff in the watershed." The relationship between Owens Valley runoff to flooded acreage is further described in Ecosystem Sciences August 2002 LORP Plan and Section 2.5.5 of the 2004 LORP EIR. Regulation of water delivery to maintain a set flooded acreage has proven difficult and the resulting relation between water supplied and flooded acreage has been erratic. Recognizing that the relationship between the amount of flooded acreage and water release to the habitat area is poorly known and will continue to be so, at least, until an adequate data base is developed, maintaining the required flooded acreage is being conducted according to a schedule fixing constant water delivery rates over fixed seasonal time periods. The purpose of this adaptive management measure is to develop an efficient method of monitoring and managing the Blackrock Waterfowl Management Area (BWMA), while still providing the desired benefits to wetlands and waterfowl. This adaptive management

measure will continue in order to generate the necessary data set to revise management of the water supply to the BWMA. The adaptive management measure has been undertaken as an experiment to:

- 1. Determine the relationship between flooded acreage and water supplied for each BWMA unit, and to determine how that relationship changes seasonally.
- 2. Develop an efficient method of evaluating flooded acreage.
- 3. Develop a long-term protocol for managing the BWMA.

Seasonal water delivery flow rates are being set for each habitat area based on water use per acre flooded ratios developed from existing data. Using the available flooded acreage and water supplied data, an acre-foot per acre ratio of water used to acres flooded is used to set flow rates. Flow are set at the beginning of a season and held at that rate for the season. The length of each season is defined. At the midpoint and end of each seasonal time period the perimeter of the flooded acreage will be mapped to delineate the extent of flooding for the corresponding flow. This data will be used to establish ratios for future seasonal flows.

The flooded acreage and flows are based on the current runoff year's forecast at the beginning of seasonal time period. Flooded acreage is evaluated using GPS at the start/end of each season, and at each season's mid-point. Remote sensing has been investigated as a method for evaluating flooded acreage, using the GPS flooded perimeters for ground-truth and calibration. Accuracy of flow measurements will be assessed as data accumulate.

Category	Inyo costs	LA costs	MOU Consultant	Total
Hydrologic monitoring	\$0	\$158,916	\$0	\$158,916
Biologic and Water Qual.	\$0	\$34,000	\$338,084	\$372,084
Maintenance	\$0	\$106,611	\$0	\$106,611
Mosquito Abatement	\$63,500	\$63,500	\$0	\$127,000
Adaptive Management	\$0	\$0	\$0	\$0
Total	\$63,500	\$363,027	\$338,084	\$764,611

Ecosystem Sciences Tasks					
Ecosystem Sciences Inc.	Field Time (days)	Daily rate	Cost		
Habitat Flow Flooding extent		•			
Principal	17	1032	\$17,544.00		
Administration	0.5	512	\$256.00		
Expenses			\$2,500.00		
Indicator Species Habitat					
Principal	2	1032	\$2,064.00		
Associates	5	680	\$3,400.00		
Administration	0.25	512	\$128.00		
Expenses			\$500.00		
Fish Habitat					
Principal	4	1032	\$4,128.00		
Associate	12	680	\$8,160.00		
Administration	0.25	512	\$128.00		
Expenses			\$1,500.00		
Landscape Vegetation Mapping					
Principal	2	1032	\$2,064.00		
Associate	20	680	\$13,600.00		
Administration	1	512	\$512.00		
Expenses			\$750.00		
Site Scale Vegetation Assessment					
Principal	5	1032	\$5,160.00		
Associate	200	680	\$136,000.00		
Administration	5	512	\$2,560.00		
Expenses			\$750.00		
Creel Census					
Principal	8	1032	\$8,256.00		
Administration	0.25	512	\$128.00		
Expenses			\$500.00		
Honoraria			\$4,800.00		
Analysis and Reporting		1000	<b>*</b> ~~ ~~ ~~ ~~		
Principal	30	1032	\$30,960.00		
Associate	60	680	\$40,800.00		
Administration	5	512	\$2,560.00		
Expenses			\$500.00		
Meetings and Project Management			<b>A</b> 44 000		
Principal	40	1032	\$41,280.00		
Administration	8	512	\$4,096.00		
Expenses			\$2,500.00		
Iotal			\$338,084.00		

Biologic and V	Vater Quality I	Moni	toring	
Biologic and Water Quality	Organization/Class	Davs	Invo Davs	LA Davs
River				
Rapid Assessment Survey	LA/WRS-B	9		
	LAWRS-C	31		
		18		
		10	27	40
Casaanal Llahitat Flaur		9	21	40
Seasonal Habitat Flow	LA/WRS-B	10		25
	LA/WRS-C	15	45	45
Habitat Flow Flooding extent	LA/WRS-B	10	15	15
	LA/WRS-C	5		
	IC/WM	15		
Habitat Flow Water Quality	IC/HYDROL	15	15	0
Landscape Veg Mapping	IC/VEGSCI	5	5	10
	LA/WRS-B	5		
	LA/GIS	5		
Creel Census	LA/WRS-C	15		15
Analysis and Reporting		- 15	0	20
Analysis and Reputting		9	9	20
<u> </u>		5		
<b>-</b>	10/012	4		40-
I otal Days			71	125
Blackrock				
Indicator Species Habitat	LA/WRS-B	4		4
	IC/VEGSCI	4	4	
Waterfowl Area Acreage	LA/WRS-B	8		8
	LA/WRS-C	8		8
Data Analysis and Reporting	LA/WRS-B	4	4	6
	LA/WRS-C	2		
		2		
Total Dave		2	Q	26
Dolta			0	20
Denia Accessment Curvey		4	0	2
Rapiu Assessment Survey	LAVWKO-B	1	0	2
	IC/RESASSI	1		
Indicator Species Habitat	LA/WRS-B	1	1	1
	IC/VEGSCI	1		
Analysis and Reporting	LA/WRS-B	2	1	2
	IC/LORP	1		
Total Davs			2	5
Off-River Lakes and Ponds				
Analysis and Reporting	LA/WRS-B	1	1	1
		1	1	
Tatal David		1	4	4
I otal Days			1	1
Annual Report Preparation				
Report preparation	LA/WRS-B	15	15	15
	IC/LORP	15		
Total Days			10	15
			91	171
		_		

Hydrologic Monitoring						
2010-2011	Person days	Labor Cost	Equipment Cost	Total Cost		
RIVER Base Flow Compliance Manitoring						
Base Flow Compliance Monitoring	86.13	\$27 281 30	\$3 115 20	\$30 726 50		
Hydrographer "A"	0.13	\$179.50 \$179.59	\$21.60	\$201.19		
Senior Hydrographer	22.2	\$8,070,78	\$888.00	\$8 958 78		
Seasonal Habitat Flow Monitoring		φ0,010.10	<b>\$000.00</b>	\$0,000.10		
Hydrographer "B"	20	\$6,334.91	\$800.00	\$7,134.91		
Hydrographer "A"	4	\$1,330.27	\$160.00	\$1,490.27		
Senior Hydrographer	9	\$3,271.94	\$360.00	\$3,631.94		
Data analysis						
Hydrographer "B"	9.57	\$3,031.26	\$0.00	\$3,031.26		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	11.445	\$4,160.82	\$0.00	\$4,160.82		
Reporting						
Hydrographer "B"	6.3	\$1,995.50	\$252.00	\$2,247.50		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	11.445	\$4,160.82	\$0.00	\$4,160.82		
CE Associate 1	75.45	\$26,435.02	\$0.00 \$0.00	\$26,435.02		
CE Associate 3	34.5	\$15,587.07	\$0.00	\$15,587.07		
River Station Maintenance	0.4	¢0.660.66	¢226.00	¢0,006,66		
Hydrographer B	8.4	\$∠,000.00 ¢0.00	\$336.00 \$0.00	\$2,990.00 ¢0.00		
Senior Hydrographer	0	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		
	0	φ <b>0.</b> 00	φ0.00	φ0.00		
Data analysis						
Hydrographer "B"	1	\$316 75	\$40.00	\$356.75		
Hydrographer "A"	0	\$0.00 \$0.00	0.00 \$0.00	\$0.00		
Senior Hydrographer	10 1625	\$3 694 56	\$0.00	\$3 694 56		
CE Associate 3	8 3125	\$3 755 58	\$0.00	\$3 755 58		
Senior Draftsman	11.375	\$4,170.05	\$0.00	\$4,170.05		
Reporting		¢ 1,11 0100	<b>\$</b> 0.00	\$ 1,11 0.00		
Hydrographer "B"	0	\$0.00	\$0.00	\$0.00		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	6.7625	\$2,458.50	\$0.00	\$2,458.50		
CE Associate 1	38.8625	\$13,616.05	\$0.00	\$13,616.05		
CE Associate 3	8.3125	\$3,755.58	\$0.00	\$3,755.58		
Blackrock Area Station Maintenance						
Hydrographer "B"	2.55	\$807.70	\$102.00	\$909.70		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	0	\$0.00	\$0.00	\$0.00		
OFF RIVER LAKES AND PONDS						
Lake Level Monitoring						
Hydrographer "B"	7.5	\$2,375.59	\$300.00	\$2,675.59		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	0.63	\$229.04	\$25.20	\$254.24		
Data analysis		<b>*</b> • ••	<b>^</b> ~~~~~	<b>A</b> A AA		
Hydrographer "B"	0	\$0.00	\$0.00	\$0.00		
Hydrographer A	0	\$U.UU	\$0.00	\$0.00		
Poporting	2.895	\$1,052.47	<b>Φ</b> 0.00	\$1,052.47		
Reporting	0	¢0.00	¢0.00	¢0.00		
Hydrographer "A"	0	დი იი	ቅሀ.ሀሀ ¢ስ ስስ	ቅሀ.ሀሀ ድስ ስስ		
Senior Hydrographer	U 1 Q/F	φ0.00 ¢670.75	0.00 ¢0.00	Φ0.00 ¢670 75		
CE Associate 1	1.040	ወ/ ሀ./ ጋ \$4 ዓበፍ 11	ው.00 ቁር በብ	ው/ ሀ./ ጋ \$4 ዓበፍ 11		
CE Associate 3	2 875	\$1 750 79	\$0.00 \$0.00	\$1 750 72		
DELTA	5.075	ψ1,730.72	ψ0.00	φ1,750.72		
Flow Monitoring						
Hvdrographer "B"	1	\$316 75	\$40.00	\$356 75		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	1	\$363.55	\$40.00	\$403.55		
Data analysis		<i>+</i>	÷	+		
Hydrographer "B"	0	\$0.00	\$0.00	\$0.00		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	0	\$0.00	\$0.00	\$0.00		
Reporting						
Hydrographer "B"	0	\$0.00	\$0.00	\$0.00		
Hydrographer "A"	0	\$0.00	\$0.00	\$0.00		
Senior Hydrographer	1	\$363.55	\$0.00	\$363.55		
CE Associate 1	4	\$1,401.46	\$0.00	\$1,401.46		
CE Associate 3	4.875	\$2,202.52	\$0.00	\$2,202.52		

River Measuring Stations Maintenance (4 Stations)	Labor type Power Shovel Operator Truck Driver/MCH Operator Building Roppin Map	Hours	Labor Rate 153.12	Total Labor Equiipment Type	Hours F	Rate	Total Equipment
River Measuring Stations Maintenance (4 Stations)	Power Shovel Operator Truck Driver/MCH Operator Building Deposit Mon		153.12				
Measuring Stations Maintenance (4 Stations)	Truck Driver/MCH Operator		153.12	44447 0 Manuar	050.0	75 70	4400.04
	Operator Building Repoir Man			11417.8 Mower	203.2	/5./6	4196.24
	Building Bonoir Mon			Gradall			
	BUILDING BEDAU MAD			Backhoe and trailer			
Spillgates and Ditches	Duliding Ropan Man			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
Lesser Orillands and Ditch	2 - Truck Driver/MCH	270	33.14	8947.8 2 - 3 axel dump trucks	270	15.38	4152.6
Locust Spiligate and Ditch	Denne Oliver I Oriver I or	45	40.00	10.10.05 One dall	15	05.04	4450.0
Cleaning (5 days per year)	Power Shovel Operator	45	43.29	1948.05 Gradali	45	25.64	1153.8
	Operator	45	40.74	1833.3 Backride and trailer	45	14.00	659.7
Goorges Ditch	1 - Truck Driver/MCH	45	33.14	1491.3 1 - 3 axei dump trucks	45	15.38	692.1
Cleaning (5 days per year)	Power Shovel Operator	45	42 20	1948 05 Gradall	45	25.64	1152.9
Cleaning (5 days per year)	Operator	4J 45	43.29	1833 3 Backhoe and trailer	45	20.04	659.7
	1 - Truck Driver/MCH	45	33 14	1491 3 1 - 3 avel dump trucks	45	15 38	692.1
Alabama Spilloate			55.14		45	10.00	032.1
Cleaning (6 days per year)	Power Shovel Operator	54	43 29	2337 66 Gradall	54	25.64	1384 56
croaning (o dayo por your)	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-Tota	al			\$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
	Deildie e Description		07.50	0077 7 0/4 (as 4) 4 sisters			540.0
rence (10 days per year)	Building Repair Man	90	37.53	5377.7 3/4 ton 4x4 pick- up	90	5.//	519.3
LORD Operations Sub Tate		180	33.14	\$118 522 3/4 ION 4X4 PICK- UP	90	5.//	519.3 ¢20.402
LORF Operations Sub-10ta	al \$86.104.20			\$110,JZZ			<b>\$30,183</b>
River Tota	φου, 104.30 \$1/19 705						
Total O and M	\$234 809			CPL Adjusted O and M			\$106.611.17
Basline Costs (described in Post -Imp)	\$254,003	River	Delta	or majusted o and m			wi00,011.17
F)	CPI adjustment	\$56,683.00	\$62,798.00				

2006-2007	4.5%	\$59,233.74	\$65,623.91
2007-2008	3.1%	\$61,069.98	\$67,658.25
2008-2009	-1.3%	\$60,276.07	\$66,778.69
2009-2010	0.9%	\$60,818.56	\$67,379.70

Range Monitoring					
Task	People Days				
Utilization	45				
Irrigated Pasture Condition	7				
Range Trend	160				
Annual Field Inspections (see 2-59 of EIR)	20				
Field Evaluations (see 2-59 of EIR)	5				
Analysis and Reporting	30				
Total	267				