

**Lower Owens River Project**  
**Work Plan, Budget, and Schedule**  
2014-2015 Fiscal Year

Prepared by  
Inyo County Water Department  
& Los Angeles Department of Water and Power

# Lower Owens River Project Work Plan, Budget, and Schedule

## 2014-2015 Fiscal Year

The Inyo County Water Department and the Los Angeles Department of Water and Power jointly prepared this 2014-2015 Fiscal Year Lower Owens River Project Work plan. The Inyo County/Los Angeles Technical Group adopted this work plan on August 28, 2014. 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 2014-2015 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. This Work Plan, Budget, and Schedule is in force from July 1, 2014 – June 30, 2015.

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 1997 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 operations and maintenance, monitoring, mosquito abatement, noxious species control, saltcedar control, and reporting activities. 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.

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.

## Maintenance and Monitoring Budget

Table 1 summarizes the costs of operation, maintenance and monitoring for the fiscal year and specifies the costs incurred by Inyo County, Los Angeles, and the cost of the MOU consultant. A summary of these activities follows.

Efforts on biologic and water quality monitoring tasks are shared by Inyo and LADWP. In 2014-15 a total of 438 people days are required to complete these tasks. Inyo County and LADWP will each contribute 219 days. Maintenance, Operations, and Hydrologic monitoring are tasks solely performed by LADWP, and are without offsetting costs. LADWP has allocated 218 people days for Range Monitoring, which is a LADWP cost.

Based on this budget, total cost for the fiscal year is \$838,678. Inyo County’s Post Implementation Credit will be decreased by \$78,483. This figure is calculated by subtracting the dollars Inyo County will spend during the fiscal year from the amount spent by LADWP, and dividing this figure by two.

**Table 1. 2014-2015 Summary Budget**

<b>Inyo County</b>	<b>Staff Work Days</b>	<b>Value of Additional Staff Time, Materials, and Equipment</b>	<b>Payment/Credit</b>
Hydrologic Monitoring	–	\$ -	
Biologic and Water Quality	219	\$ -	
Operations and Maintenance	–	\$ -	
Mosquito Abatement		\$ 30,000	
MOU Consultant	–	\$ 260,856	
Adaptive Management		\$ -	
Noxious Species Control	–	\$ 50,000	
<b>Inyo County Totals</b>	<b>219</b>	<b>\$ 340,856</b>	<b>\$ (78,483)</b>
<b>LADWP</b>	<b>Staff Work Days</b>	<b>Value of Additional Staff Time, Materials, and Equipment</b>	<b>Payments</b>
Hydrologic Monitoring	–	\$ 180,570	
Biologic and Water Quality	219	\$ -	
Operations and Maintenance	–	\$ 197,336	
Mosquito Abatement	–	\$ 30,000	
Rodent Control		\$ 10,100	
MOU Consultant	–	\$ -	
Adaptive Management		\$ 79,816	
<b>LADWP Totals</b>	<b>219</b>	<b>\$ 497,822</b>	
<b>Combined Total</b>	<b>438</b>	<b>Combined Total</b>	<b>\$ 838,678</b>

## Section 1. Maintenance and Monitoring Tasks

### LORP Tasks

The maintenance and monitoring portion of this work plan consists of seven categories of tasks: operations and maintenance, hydrologic monitoring, biological/water quality monitoring, range monitoring, mosquito abatement, noxious species control, and saltcedar control.

### Operations and Maintenance

Maintenance activities consist of cleaning water measurement facilities, cleaning sediment and aquatic vegetation from ditches, mowing ditch margins, fence repair, and adjustments to flow control structures. Operation activities consist of setting and checking flows. Estimates of the level of effort necessary for maintenance are adjusted 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 2014-2015 costs for River corridor and BWMA facilities were \$138,918 and \$194,723 respectively, for an overall 2014-2015 operations and maintenance expenditure of \$333,640. This figure reduced by the combined CPI-adjusted baseline costs for the river corridor and BWMA facilities is \$197,336 (Table 2).

**Table 2. 2014-2015 Operations and Maintenance Budget**

Location/Activity	Labor type	Hours	Labor Rate	Total Labor	Equipment Type	Hours	Rate	Total Equip
<b>River</b>								
<b>Measuring Stations Mtc (4 Stations)</b>	Power Shovel Operator	80	\$ 46.50	\$ 3,720.00	Excavator	80	\$ 66.60	\$ 5,328.00
	Truck Driver	80	\$ 37.65	\$ 3,012.00	3 axel dump truck	80	\$ 25.92	\$ 2,073.60
	Operator	80	\$ 44.09	\$ 3,527.20	ASV Mower	80	\$ 43.74	\$ 3,499.20
	Building Repair Man	75	\$ 40.64	3048	3/4 ton 4x4 pick- up	75	\$ 9.07	\$ 680.25
<b>Subtotal</b>				<b>\$ 13,307.20</b>				<b>\$ 11,581.05</b>
<b>Spillgates and Ditches</b>								
<b>Intake Spillgate</b>								
Maintenance	Operator	40	\$ 44.09	\$ 1,763.60	Bull Dozer	40	\$ 40.00	\$ 1,600.00
	Truck Driver	54	\$ 37.65	\$ 2,033.10	3 axel dump truck	54	\$ 25.92	\$ 1,399.68
	MCH	75	\$ 35.86	\$ 2,689.50	3/4 ton 4x4 pick- up	75	\$ 9.07	\$ 680.25
Mowing	Operator	20	\$ 44.09	\$ 881.80	Mower	20	\$ 11.67	\$ 233.40
	MCH	75	\$ 35.86	\$ 2,689.50	3/4 ton 4x4 pick- up	75	\$ 9.07	\$ 680.25
Cleaning	Power Shovel Operator	80	\$ 46.50	\$ 3,720.00	Excavator	80	\$ 66.60	\$ 5,328.00
	Truck Driver	72	\$ 35.16	\$ 2,531.52	3 axel dump truck	72	\$ 25.92	\$ 1,866.24
	MCH	75	\$ 35.86	\$ 2,689.50	3/4 ton 4x4 pick- up	75	\$ 9.07	\$ 680.25
<b>Subtotal</b>		491		<b>\$ 18,998.52</b>				<b>\$ 12,468.07</b>
<b>Thibaut Spillgate and Ditch</b>								
Cleaning	Power Shovel Operator	36	\$ 46.50	\$ 1,674.00	Excavator	36	\$ 66.60	\$ 2,397.60
	Truck Driver	72	\$ 35.86	\$ 2,581.92	3 axel dump truck	72	\$ 25.92	\$ 1,866.24
<b>Subtotal</b>				<b>\$ 4,255.92</b>				<b>\$ 4,263.84</b>
<b>Independence Spillgate and Ditch</b>								
Cleaning	Power Shovel Operator	135	\$ 46.50	\$ 6,277.50	Excavator	135	\$ 66.60	\$ 8,991.00
	Truck Driver	270	\$ 37.65	\$ 10,165.50	3 axel dump truck	270	\$ 25.92	\$ 6,998.40
<b>Subtotal</b>				<b>\$ 16,443.00</b>				<b>\$ 15,989.40</b>

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<b>Locust Spillgate and Ditch</b>								
Cleaning	Power Shovel Operator	45	\$ 46.50	\$ 2,092.50	Excavator	45	\$ 66.60	\$ 2,997.00
	Operator	45	\$ 44.09	\$ 1,984.05	Backhoe and trailer	45	\$ 21.96	\$ 988.20
	Truck Driver	45	\$ 37.65	\$ 1,694.25	3 axel dump truck	45	\$ 25.92	\$ 1,166.40
	<b>Subtotal</b>			<b>\$ 5,770.80</b>				<b>\$ 5,151.60</b>
<b>Georges Ditch</b>								
Cleaning	Power Shovel Operator	45	\$ 46.50	\$ 2,092.50	Excavator	45	\$ 66.60	\$ 2,997.00
	Operator	45	\$ 44.09	\$ 1,984.05	Backhoe and trailer	45	\$ 21.96	\$ 988.20
	Truck Driver	45	\$ 35.86	\$ 1,613.70	3 axel dump trucks	45	\$ 25.92	\$ 1,166.40
	<b>Subtotal</b>			<b>\$ 5,690.25</b>				<b>\$ 5,151.60</b>
<b>Alabama Spillgate</b>								
Cleaning	Power Shovel Operator	54	\$ 46.50	\$ 2,511.05	Excavator	54	\$ 66.60	\$ 3,596.40
	Truck Driver	162	\$ 35.86	\$ 5,809.32	3 axel dump trucks	162	\$ 25.92	\$ 4,199.04
	<b>Subtotal</b>			<b>\$ 8,320.37</b>				<b>\$ 7,795.44</b>
<b>Delta Spillgate</b>								
Maintenance	Building Repair Man	27	\$ 40.64	\$ 1,097.28	3/4 ton 4x4 pick- up	27	\$ 9.07	\$ 244.89
	MCH	54	\$ 35.16	\$ 1,898.64	3/4 ton 4x4 pick- up	54	\$ 9.07	\$ 489.78
	<b>Subtotal</b>			<b>\$ 2,995.92</b>				<b>\$ 734.67</b>
	<b>River Sub-Total</b>			<b>\$75,781.98</b>				<b>\$63,135.67</b>
<b>Blackrock Waterfowl Management Area</b>								
<b>Blackrock Ditch</b>								
Mowing	Operator	225	\$ 43.23	\$ 9,726.75	Mower	225	\$ 11.67	\$ 2,625.75
	Truck Driver	450	\$ 35.16	\$ 15,822.00	2 - 3 axel dump trucks	450	\$ 25.92	\$ 11,664.00
Cleaning	Power Shovel Operator	260	\$ 45.58	\$ 11,850.80	Excavator	260	\$ 66.60	\$ 17,316.00
	Truck Driver	270	\$ 35.16	\$ 9,493.20	3 axel dump truck	270	\$ 25.92	\$ 6,998.40
	<b>Subtotal</b>			<b>\$ 46,892.75</b>				<b>\$ 38,604.15</b>
<b>Goose Lake to River Ditch</b>								
Cleaning	Operator	45	\$ 43.23	\$ 1,945.35	Backhoe and trailer	45	\$ 21.96	\$ 988.20
	Truck Driver	45	\$ 35.16	\$ 1,582.20	3 axel dump truck	45	\$ 25.92	\$ 1,166.40
	<b>Subtotal</b>			<b>\$ 3,527.55</b>				<b>\$ 2,154.60</b>
<b>Patrol &amp; Flow Changes</b>								
	A&R Keeper	2080	\$ 35.16	\$ 73,132.80	3/4 ton 4x4 pick- up	2080	\$ 9.07	\$ 18,865.60
<b>Fence Maintenance</b>								
	Building Repair Man	90	\$ 39.82	\$ 3,583.80	3/4 ton 4x4 pick- up	90	\$ 9.07	\$ 816.30
	MCH	180	\$ 35.16	\$ 6,328.80	3/4 ton 4x4 pick- up	90	\$ 9.07	\$ 816.30
				<b>\$ 9,912.60</b>				<b>\$ 1,632.60</b>
	<b>BWMA Sub-Total</b>			<b>\$133,465.70</b>				<b>\$61,256.95</b>
	<b>River Total</b>		<b>\$138,917.65</b>					
	<b>BWMA Total</b>		<b>\$194,722.65</b>					
Total O and M			<b>\$333,640</b>		CPI Adjusted O and M			<b>\$197,335.63</b>

### 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. Hydrologic monitoring costs are \$180,570 (Table 3).

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

**Table 3. 2014-2015 Hydrologic Monitoring Budget**

	Person days	Labor Costs	Equipment Cost	Predicted Cost July 1, 2014 through June 30, 2015
<b>HYDRO OPERATIONS</b>				
River Stations	80	\$ 34,400	\$ 3,200	\$ 37,600
Seasonal Habitat	20	\$ 8,600	\$ 800	\$ 9,400
Off River Lakes & Ponds	10	\$ 4,300	\$ 400	\$ 4,700
Flow to Delta	1	\$ 430	\$ 40	\$ 470
Blackrock Waterfowl	34	\$ 14,620	\$ 1,360	\$ 15,980
Reporting Compliance	52	\$ 22,360	\$ 2,080	\$ 24,440
<b>HYDRO MAINTENANCE</b>				
River Stations	40	\$ 17,200	\$ 1,600	\$ 18,800
Off River Lakes & Ponds	1	\$ 430	\$ 40	\$ 470
Flow to Delta	3	\$ 1,290	\$ 120	\$ 1,410
Blackrock Waterfowl	10	\$ 4,300	\$ 400	\$ 4,700
<b>ENGINEERING HYDRO SUPPORT</b>				
Reporting Compliance	108	\$ 48,600	\$ -	\$ 48,600
Vegetation Mapping	40	\$ 14,000	\$ -	\$ 14,000
			<b>Total Hydro Budget</b>	<b>\$ 180,570</b>

**Biological/Water Quality Monitoring**

Monitoring, analysis, reporting, and report preparation will be jointly conducted by Inyo and LA with the hours allocated by each agency given in the attached budget table (Table 4).

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). A portion of Landscape Vegetation Mapping and the Avian Census which are not scheduled to be conducted in the MAMP will be conducted during this fiscal year. This work will mainly entail image processing and computer generated mapping and spring avian censuses. Additional efforts for the groundtruthing maps and late summer and fall avian censuses will be budgeted in the 2015-2016 fiscal year work plan.

Inyo staff and LADWP staff will spend 219 people days each on LORP biological and water quality monitoring for a total of 438 people days. There will be no off-setting costs, since work will be shared equally.

**Table 4. 2014-2015 Biologic and Water Quality Monitoring Budget.**

Biologic and Water Quality	Organization/Class	Total	Inyo Days	LA Days
<b>River</b>				
Rapid Assessment Survey	LA/WRS	10		10
	IC/RESASST	65	65	
Water Quality	IC/Hydro	30	30	
	LA/WRS	15		15
Landscape Vegetation Mapping	LA/WRS	54		54
	IC/RESASST	2	2	
Avian Census	LA/WRS	18		18
	IC/RESASST	18	18	
Indicator Species Habitat	LA/WRS	18		18
Site Scale Vegetation Sampling	LA/WRS	0		0
	IC/RESASST	0	0	0
Analysis and Reporting	LA/WRS	50		50
	IC/LORP	50	50	
<b>Total People Days</b>		<b>330</b>	<b>165</b>	<b>165</b>
<b>Blackrock</b>				
Waterfowl Area Acreage	IC/RESASST	8	8	
Rapid Assessment Survey	IC/RESASST	4	4	
Landscape Vegetation Mapping	LA/WRS	14		14
Indicator Species Habitat	LA/WRS-B	4		4
Wetland Avian Census	LA/WRS	16		16
	IC/RESASST	16	16	
Data Analysis and Reporting	LA/WRS	5		5
	IC/RESASST	5	5	
<b>Total People Days</b>		<b>72</b>	<b>33</b>	<b>39</b>
<b>Delta</b>				
Rapid Assessment Survey	IC/RESASST	2	2	
Analysis and Reporting	IC/RESASST	2	2	
<b>Total People Days</b>		<b>4</b>	<b>4</b>	<b>0</b>
<b>Off-River Lakes and Ponds</b>				
Rapid Assessment Survey	IC/RESASST	1	1	
Analysis and Reporting	IC/RESASST	1	1	
<b>Total People Days</b>		<b>2</b>	<b>2</b>	<b>0</b>
<b>Annual Report Preparation</b>				
Report preparation	LA/WRS	15		15
	IC/LORP	15	15	
<b>Total People Days</b>		<b>30</b>	<b>15</b>	<b>15</b>
<b>Sum Total</b>		<b>438</b>	<b>219</b>	<b>219</b>

### **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 2014-2015, 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.

### **Noxious Species Control**

The Inyo/Mono Counties Agricultural Commissioner's Office conducts operations to control and eradicate several different invasive weed species within the LORP boundaries. 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.

For fiscal year 2014-2015 Inyo County will be responsible for treating weeds in the LORP. The budget for noxious weed control is \$50,000.

### **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 saltcedar program will be to locate all river sites where tamarisk seedlings and resprouts were identified in the 2011 and the 2012 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.

Saltcedar Control staff includes one permanent employee, one shared employee, and six seasonal field assistants that work on the saltcedar control program during the treatment season, October through April. California Department of Forestry (CDF) work crews, if available, will assist in efforts to treat slash. 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.



**Footnote to Table 1. Post Implementation Credit and Trust Accounting**

	CPI adjustment	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	2.9%	\$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	5.7%	\$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	-1.3%	(\$25,345)	\$1,924,245
County's share of the costs for the 2009-2010 work plan and budget, including adaptive management.		\$266,176	\$1,658,069
Increase the remaining balance of the Post Implementation Credit by 1.9% based upon the April 2010 price index effective July 10, 2010	1.9%	\$31,503	\$1,689,572
County's share of the costs for the 2010-2011 work plan and budget, including adaptive management effective July 21, 2010.		\$317,805	\$1,371,767
Increase the remaining balance of the Post Implementation Credit by 3.3% based upon the April 2011 price index effective July 10, 2011.	3.3%	\$45,268	\$1,417,035
County's share of the costs for the 2011-2012 work plan and budget, including adaptive management effective July 21, 2011.		\$48,278	\$1,368,757
County's share of the costs for the Amended 2011-2012 work plan and budget, effective July 21, 2011.		\$57,687	\$1,311,070
Increase the remaining balance of the Post Implementation Credit by 1.5% based upon the April 2012 price index effective July 10, 2012.	1.5%	\$19,666	\$1,330,736
County's share of the costs for the 2012-2013 work plan and budget, including adaptive management effective July 23, 2012.		\$14,084	\$1,316,652
Increase the remaining balance of the Post Implementation Credit by 0.9% based upon the April 2013 price index effective July 10, 2013.	0.9%	\$11,850	\$1,328,502
County's share of the costs for the 2013-2014 work plan and budget, including adaptive management effective June 21, 2013.		\$41,979	\$1,286,523
Increase the remaining balance of the Post Implementation Credit by 1.7% based upon the April 2014 price index effective July 10, 2014.	1.7%	\$21,871	\$1,308,394
County's share of the costs for the 2014-2015 work plan and budget, including adaptive management effective June 21, 2014.		\$78,483	\$1,229,911

The County's balance in the Post Imp Credit Account held by LADWP as of August 27, 2014 is \$1,308,394. The annual CPI adjustment will take place prior to deduction of a credit for County's annual share of the LORP post-implementation costs (PIA 8.4). The Trust Account Balance as of August 25, 2014 is \$3,237,181.

## B. Schedule

**Table 7. Schedule of Monitoring, Maintenance and Reporting Activities for FY 2014-2015**

Period	Monitoring
July 8, 2014- Jul 15, 2014	Blackrock Waterfowl Management Area (BWMA) Flooded Extent
August 1 - Aug 15, 2014	Rapid Assessment Survey (RAS)
August 15 - Aug 22, 2014	BWMA Flooded Extent
September 1 - Sept 9, 2014	RAS Consultation with MOU Parties
September 1- Sept 30, 2014	Delta Pulse Flow
September 15 - Sept 22, 2014	BWMA Flooded Extent
October 1 - Oct 28, 2014	LADWP/Inyo Prepare Draft LORP Report
October 1 - Oct 28, 2014	Fiscal Year 2010-2011 Work Plan and Budget Reconciliation
October 15 - Oct 24, 2014	BWMA Flooded Extent
October 31, 2014	Draft LORP Report transmitted to MOU Consultant
October 31, 2014	Transmittal of LORP Accounting Report to Governing Boards
November 1 - Nov 30, 2014	MOU Consultant review Draft LORP Report and Develop Recommendations
November 1 - Dec 31, 2014	Delta Pulse Flow
December 1, 2014	MOU Consultant transmit Adaptive Management Recommendations to Inyo/LA
December 3-Dec 7 2014	Meet with MOU Consultant to Develop Adaptive Management Recommendations for Management
December 6, 2014	Draft Report transmitted to MOU Parties
December 1 - Dec 30, 2014	BWMA Avian Survey
December 20, 2014	Public Meeting for Draft LORP Report
December 1, 2014 - Jan 30, 2015	Fiscal Year 2014-2015 Work Plan and Budget Development
January 15 – January 20, 2015	BWMA Flooded Extent
February 1 - Feb 3, 2015	Technical Group Meeting to Adopt LORP Annual Report and 2014-2015 Fiscal Year Work Plan and Budget
February 3 – Mar31, 2015	Transmittal of LORP Work Plan, Budget, and Schedule to governing boards for approval
March 1 - May 31, 2015	Delta Pulse Flow
April 2 - May 15, 2015	BWMA Avian Survey
April 15 - April 20, 2015	BWMA Flooded Extent
May 8 - May 13, 2015	BWMA Flooded Extent
May 31 - June 5, 2015	BWMA Flooded Extent
May 15 - June 15, 2015	Seasonal Habitat Flow
June 1 - July 31, 2015	Delta Pulse Flow
June 1 -June 29, 2015	BWMA Avian Survey

**Table 6. 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:**

Seasonal Habitat Flow	FY 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	50	\$143	\$7150
Associates	24	\$96	\$2304
Administration	8	\$71	\$568
<b>Subtotal</b>			<b>\$10,022</b>

**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 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	80	\$143	\$11440
Associates	40	\$96	\$3840
Administration	3	\$71	\$213
<b>Subtotal</b>			<b>\$15,493</b>

**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 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	20	\$143	\$2860
Associates	60	\$96	\$5760
Administration	3	\$71	\$213
<b>Subtotal</b>			<b>\$8,833</b>

**TASK 4 -----**

**Creel Census**

The creel census tracks the development and health of the fishery as the LORP is implemented. Creel census data help to inform decision making for the fishery and water quality adaptive management areas. Adaptive management recommendations focus on establishing a healthy warm water fishery to

meet MOU goals. ES will assist in the census and evaluating the results for the annual report. To assist with the Creel Census, ES will have to prepare for field observations, travel, and attend meetings with the Scientific Team to discuss the progress towards meeting the LORP objectives.

**Deliverables:**

Written evaluation to be included in the LORP Annual Report discussing Creel Census evaluation and progress towards meeting LORP objectives and any necessary adaptive management actions. Make payment of \$50 to each angler who returns a completed census form; the total for the angler compensation is not to exceed \$1200.

**Budget:**

Creel Census	FY 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	65	\$143	\$9295
Associates	15	\$96	\$1440
Administration	12	\$71	\$852
Angler Honorarium			\$1,200
<b>Subtotal</b>			<b>\$12,787</b>

**TASK 5 -----**

**Contingency Monitoring**

When approved by LADWP and Inyo County, to be used for labor and expenses related to investigation of unforeseen events occurring in the LORP.

**Deliverables:**

As mutually agreed by both parties.

**Budget:**

Contingency	FY 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	57	\$143	\$8151
Associates	15	\$96	\$1440
Administration	6	\$71	\$426
<b>Subtotal</b>			<b>\$10,017</b>

**TASK 6 -----**

**Annual Report Evaluation & Adaptive Management Recommendations**

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, reevaluating or re-estimating and verifying conclusions.

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 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.

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

**Budget:**

Annual Report	FY 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	485	\$143	\$69355
Associates	285	\$96	\$27360
Administration	47	\$71	\$3337
<b>Subtotal</b>			<b>\$100,052</b>

**TASK 7-----**

**Project Management and Meetings**

The MOU consultant will meet with LADWP and ICWD to review progress or discuss issues either in person, or via teleconference. The MOU consultant will manage project assignments, schedules and budgets, conduct team meetings, administer the contract and work load, provide progress reports to ICWD as needed, budget assessment and invoice each month. This task requires the MOU consultants to prepare for meetings, travel, and attend meetings with the Scientific Team and MOU Parties to discuss progress towards meeting the LORP objectives.

**Budget:**

Project Management and Meetings	FY 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	300	\$143	\$42900
Associates	250	\$96	\$24000
Administration	114	\$71	\$8094
<b>Subtotal</b>			<b>\$74,994</b>

**TASK 8-----**

**River Summit**

All MOU Parties as well as other LORP stakeholders will be invited to a river summit in the summer of 2014 to discussion existing conditions, progress toward initial goals and objectives, and necessary changes to the LORP. The MOU Consultants will prepare for this summit, act as moderators, and make final recommendations for adoption by the attendees.

**Budget:**

River Summit	FY 2014-2015		
	Hours	Rate	Cost
<b>Labor Estimate:</b>			
Principals	106	\$143	\$15158
Associates	6	\$96	\$576
Administration	4	\$71	\$284
<b>Subtotal</b>			<b>\$16,018</b>

**EXPENSES-----**

**Budget:**

Expenses	FY 2014-2015		
		Rate	Cost
Travel (Mileage 1500/trip @ 0.56/mi)	6	\$840	\$5,040
Lodging	38	\$125	\$4,750
Per Diem	38	\$75	\$2,850
<b>Subtotal</b>			<b>\$12,640</b>
<b>FY 2014-2015 TOTAL</b>			<b>\$260,856</b>

## Section 2. Adaptive Management Measures

The Winterton and Waggoner units of the Blackrock Waterfowl Management Area will be burned to remove emergent vegetation and weeds in order to prepare the area to receive water (Table 8).

If adaptive measures are identified that require implementation in the 2014-2015 fiscal year, or if ongoing negotiations related to the LORP Pump Station make it feasible to implement alternative flow scenarios during the fiscal year, an amended budget will be prepared to address necessary costs.

**Table 8. Adaptive Management**

BWMA Winterton Burn	Labor type	Hours	Labor Rate	Total Labor	Equipment Type	Hours	Rate	Total Equip
	Operator	220	\$ 44.09	\$ 9,699.80	Mower	220	\$ 11.67	\$ 2,567.40
	Operator	300	\$ 43.23	\$ 12,969.00	Water Truck	300	\$ 29.17	\$ 8,751.00
	MCH-10	1020	\$ 35.86	\$ 36,577.20	3/4 ton 4x4 pick- up	1020	\$ 9.07	\$ 9,251.40
<b>Subtotal</b>				\$ 59,246.00				\$ 20,569.80
							<b>Total</b>	<b>\$ 79,815.80</b>