

**Lower Owens River Project**  
**Work Plan, Budget, and Schedule**  
2016-2017 Fiscal Year

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

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

## 2016-2017 Fiscal Year

The Inyo County Water Department and the Los Angeles Department of Water and Power jointly prepared this 2016-2017 Fiscal Year Lower Owens River Project Work plan. The Inyo County/Los Angeles Technical Group adopted this work plan on March 16, 2016. 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 2016-2017 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 Work Plan, Budget, and Schedule is in force from July 1, 2016 – June 30, 2017.

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. An adaptive management measure to conduct a small scale pole-planting experiment is also included 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.

## **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 2016-2017 a total of 190 people days are required to complete these tasks. Inyo County and LADWP will each contribute 95 days. Maintenance, Operations, and Hydrologic monitoring are tasks solely performed by LADWP, and are without offsetting costs. LADWP has allocated 186 people days for Range Monitoring, which is a LADWP cost.

Based on this budget, total cost for the fiscal year is \$527,731, with Inyo County contributing \$189,830, and LADWP \$337,901. Inyo County's Post Implementation Credit will be decreased by \$74,036. This figure is calculated by subtracting the dollars LADWP will spend during the fiscal year from the amount spent by Inyo County, and dividing this figure by two.

<b>Table 1. 2016-2017 LORP Work Plan Summary Budget</b>			
<b>Inyo County</b>	<b>Staff Work Days</b>	<b>Value of Additional Staff Time, Materials, and Equipment</b>	<b>Payment/Credit</b>
Biologic and Water Quality	112	\$0	
Mosquito Abatement	-	\$30,000	
MOU Consultant	-	\$99,830	
Noxious Species Control	-	\$50,000	
Adaptive Management		\$10,000	
<b>Inyo County Totals</b>	<b>112</b>	<b>\$189,830</b>	<b>(\$74,036)</b>
<b>LADWP</b>	<b>Budgeted Staff Work Days</b>	<b>Budgeted Value of Additional Staff Time, Materials, and Equipment</b>	
Hydrologic Monitoring	-	\$112,748	
Biologic and Water Quality	112	\$0	
Operations and Maintenance	-	\$175,153	
Mosquito Abatement	-	\$30,000	
Rodent Control	-	\$10,000	
Adaptive Management		\$10,000	
LADWP Totals	<b>112</b>	<b>\$337,901</b>	
<b>Combined Total</b>	<b>224</b>	<b>\$527,731</b>	
Inyo County Credit Adjustment (1/2 of the Difference in Expenditures between Inyo County and LADWP)		<b>(\$74,036)</b>	

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

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	\$1,344,820
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%	\$12,103	\$1,356,924
County's share of the costs for the 2013-2014 work plan and budget, including adaptive management effective June 21, 2013.		\$41,979	\$1,398,903
Increase the remaining balance of the Post Implementation Credit by 1.4% based upon the April 2014 price index effective July 10, 2014.	1.4%	\$19,585	\$1,418,487
County's share of the costs for the 2014-2015 work plan and budget, including adaptive management effective June 21, 2014.		\$78,483	\$1,340,004
Increase the remaining balance of the Post Implementation Credit by 0.5% based upon the April 2015 consumer price index.	0.5%	\$6,700	\$1,346,704
County's share of the costs for the 2015-2016 work plan and budget, including adaptive management effective June 21, 2014.		\$71,648	\$1,275,056

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 LORP Trust Account Balance as of January 6, 2016 was \$2,807,203.50.

## Section 1. Maintenance and Monitoring Tasks

### LORP Tasks

The maintenance and monitoring portion of this work plan consists of four categories of tasks: operations and maintenance, hydrologic monitoring, biological monitoring, and range monitoring.

### Operations and 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. Operation activities consist of setting and checking flows and ensuring that necessary flows reach the river to maintain mandated base and seasonal habitat 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 2016-2017 costs for River corridor and BWMA facilities were \$129,122.40 and \$186,526.63 respectively, for an overall 2016-2017 operations and maintenance expenditure of \$315,649.03. This figure reduced by the combined CPI-adjusted baseline costs for the river corridor and BWMA facilities is \$175,152.63 (Table 2).

Labor					Equipment			
Location/Activity	Labor type	Hours	Labor Rate	Total Labor	Equipment Type	Hours	Rate	Total Equip
<b>River</b>								
Measuring Station Maintenance	Power Shovel Operator	40	\$50.61	\$2,024.40	Excavator	40	\$71.96	\$2,878.40
	Truck Driver	40	\$45.30	\$1,812.00	3 axle dump truck	40	\$25.92	\$1,036.80
	Operator	40	\$48.89	\$1,955.60	Mower	40	\$43.74	\$1,749.60
	Building Repairman	40	\$45.07	\$1,802.80	3/4 ton 4x4 pick- up	120	\$9.07	\$1,088.40
	MCH	80	\$39.77	\$3,181.60				
<b>Subtotal</b>				<b>\$10,776.40</b>				<b>\$6,753.20</b>
<b>Intake Spillgate</b>								
Maintenance	Power Shovel Operator	40	\$50.61	\$2,024.40	Bull Dozer	20	\$40.00	\$800.00
	Operator	40	\$48.89	\$1,955.60	Backhoe and trailer	40	\$27.93	\$1,117.20
	Building Repairman	40	\$45.07	\$1,802.80	3/4 ton 4x4 pick- up	100	\$9.07	\$907.00
	MCH	80	\$39.77	\$3,181.60				
Mowing	Operator	20	\$48.89	\$977.80	Mower	20	\$11.67	\$233.40
	MCH	40	\$39.77	\$1,590.80	3/4 ton 4x4 pick- up	40	\$9.07	\$362.80
Cleaning	Power Shovel Operator	40	\$46.50	\$1,860.00	Excavator	40	\$71.96	\$2,878.40
	Truck Driver	40	\$45.30	\$1,812.00	3 axle dump truck	40	\$25.92	\$1,036.80
	MCH	80	\$39.77	\$3,181.60	3/4 ton 4x4 pick- up	80	\$9.07	\$725.60
<b>Subtotal</b>				<b>\$18,386.60</b>				<b>\$8,061.20</b>
<b>Thibaut Spillgate and Ditch</b>								
Cleaning	Power Shovel Operator	60	\$50.61	\$3,036.60	Excavator	60	\$71.96	\$4,317.60
	Operator	80	\$48.89	\$3,911.20	Backhoe and trailer	40	\$27.93	\$1,117.20
	Truck Driver	80	\$45.30	\$3,624.00	Loader	40	\$5.68	\$227.20
	MCH	80	\$39.77	\$3,181.60	3 axel dump truck	40	\$25.92	\$1,036.80
					3/4 ton 4x4 pick- up	40	\$9.07	\$362.80
<b>Subtotal</b>				<b>\$13,753.40</b>				<b>\$7,061.60</b>
<b>Independence Spillgate and Ditch</b>								
Cleaning	Power Shovel Operator	80	\$50.61	\$4,048.80	Excavator	80	\$71.96	\$5,756.80
	Operator	40	\$48.89	\$1,955.60	Loader	40	\$5.68	\$227.20
	Truck Driver	120	\$45.30	\$5,436.00	3 axle dump truck	80	\$25.92	\$2,073.60
	MCH	80	\$39.77	\$3,181.60	Side dump	40	\$24.56	\$982.40
					3/4 ton 4x4 pick- up	80	\$9.07	\$725.60
<b>Subtotal</b>				<b>\$14,622.00</b>				<b>\$9,765.60</b>

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<b>Locust Spillgate and Ditch</b>								
Cleaning	Power Shovel Operator	40	\$50.61	\$2,024.40	Excavator	40	\$71.96	\$2,878.40
	Operator	80	\$48.89	\$3,911.20	Backhoe and trailer	80	\$27.93	\$2,234.40
	Truck Driver	40	\$45.30	\$1,812.00	3 axle dump truck	40	\$25.92	\$1,036.80
<b>Subtotal</b>				<b>\$7,747.60</b>				<b>\$6,149.60</b>
<b>Georges Ditch</b>								
Cleaning	Power Shovel Operator	40	\$50.61	\$2,024.40	Excavator	40	\$71.96	\$2,878.40
	Operator	100	\$48.89	\$4,889.00	Backhoe and trailer	60	\$27.93	\$1,675.80
	Truck Driver	80	\$45.30	\$3,624.00	Loader	40	\$5.68	\$227.20
					3 axle dump truck	40	\$25.92	\$1,036.80
					Side dump	40	\$24.56	\$982.40
<b>Subtotal</b>				<b>\$10,537.40</b>				<b>\$6,800.60</b>
<b>Alabama Spillgate</b>								
Cleaning	Power Shovel Operator	20	\$50.61	\$1,012.20	Excavator	20	\$71.96	\$1,439.20
	Truck Driver	30	\$45.30	\$1,359.00	3 axle dump truck	30	\$25.92	\$777.60
<b>Subtotal</b>				<b>\$2,371.20</b>				<b>\$2,216.80</b>
<b>Delta Spillgate</b>								
	Building Repairman	40	\$45.07	\$1,802.80	3/4 ton 4x4 pick- up	40	\$9.07	\$362.80
	MCH	40	\$39.77	\$1,590.80	3/4 ton 4x4 pick- up	40	\$9.07	\$362.80
<b>Subtotal</b>				<b>\$3,393.60</b>				<b>\$725.60</b>
<b>River Subtotal</b>				<b>\$81,588.20</b>				<b>\$47,534.20</b>
<b>Blackrock Waterfowl Management Area</b>								
<b>Blackrock Ditch</b>								
Mowing	Operator	80	\$48.89	\$3,911.20	Mower	80	\$11.67	\$233.40
	Truck Driver	40	\$45.30	\$1,812.00	3 axle dump truck	40	\$25.92	\$518.40
	MCH	40	\$39.77	\$1,590.80	3/4 ton 4x4 pick- up	40	\$9.07	\$518.40
Cleaning	Power Shovel Operator	80	\$50.61	\$4,048.80	Excavator	80	\$71.96	\$5,328.00
	Operator	40	\$48.89	\$1,955.60	Loader	40	\$5.68	\$227.20
	Truck Driver	80	\$45.30	\$3,624.00	3 axle dump truck	80	\$25.92	\$2,073.60
	MCH	80	\$39.77	\$3,181.60	Side dump	40	\$24.56	\$982.40
<b>Subtotal</b>				<b>\$20,124.00</b>				<b>\$9,881.40</b>
<b>Patrol &amp; Flow Changes (River and BWMA)</b>								
	A&R Keeper (1.5 FTE)	3089	\$36.80	\$113,675.20	3/4 ton 4x4 pick- up	3089	\$9.07	\$28,017.23
<b>Subtotal</b>				<b>\$113,675.20</b>				<b>\$28,017.23</b>
<b>Fence Maintenance (River and BWMA)</b>								
	Operator	80	\$48.89	\$3,911.20	Skid Steer/Mower	80	\$9.07	\$725.60
	Building Repairman	80	\$45.07	\$3,605.60	3/4 ton 4x4 pick- up	200	\$9.07	\$1,814.00
	MCH	120	\$39.77	\$4,772.40				
<b>Subtotal</b>				<b>\$12,289.20</b>				<b>\$2,539.60</b>
<b>BWMA Subtotal</b>				<b>\$146,088.40</b>				<b>\$40,438.23</b>
<b>TOTALS</b>								
<b>River Total</b>				<b>\$129,122.40</b>				
<b>BWMA Total</b>				<b>\$186,526.63</b>				
<b>Total O and M</b>				<b>\$315,649.03</b>				
<b>CPI Adjusted O and M</b>				<b>\$175,152.63</b>				
<b>Baseline Costs (described in Post-Imp)</b>								
			River	BWMA				
	CPI adjustment		\$56,863.00	\$62,798.00				
	2006-2007 4.5%		\$59,421.84	\$65,623.91				
	2007-2008 3.1%		\$61,263.91	\$67,658.25				
	2008-2009 -1.3%		\$60,467.48	\$66,778.69				
	2009-2010 0.9%		\$61,011.69	\$67,379.70				
	2010-2011 0.7%		\$61,438.77	\$67,851.36				
	2011-2012 3.0%		\$63,281.93	\$69,886.90				
	2012-2013 2.1%		\$64,610.85	\$71,354.53				
	2013-2014 0.4%		\$64,869.30	\$71,639.94				
	2014-2015 1.3%		\$65,712.60	\$72,571.26				
	2015-2016 1.6%		\$66,764.00	\$73,732.40				

**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 for the 2016-2017 fiscal year are \$112,748 (Table 3).

**Table 3. 2016-2017 Hydrologic Monitoring Budget**

	Person days	Labor costs	Equipment Cost	Total Predicted Cost July 1, 2016 through June 30, 2017
<b>HYDRO OPERATIONS</b>				
River Stations	36	\$15,790	\$1,440	\$17,230
Seasonal Habitat	20	\$8,772	\$800	\$9,572
Off River Lakes & Ponds	7	\$3,070	\$280	\$3,350
Flow to Delta	1	\$439	\$40	\$479
Blackrock Waterfowl	16	\$7,018	\$640	\$7,658
Reporting Compliance (collecting/downloading data)	24	\$10,526	\$960	\$11,486
<b>HYDRO MAINTENANCE</b>				
River Stations	14	\$6,140	\$560	\$6,700
Off River Lakes & Ponds	5	\$2,193	\$200	\$2,393
Flow to Delta	1	\$439	\$40	\$479
Blackrock Waterfowl	8	\$3,509	\$320	\$3,829
Reporting Compliance (creating reports)	108	\$49,572	\$ -	\$49,572
<b>Total Hydro Budget</b>				<b>\$112,748</b>

**Biological/Water Quality Monitoring**

Monitoring, analysis, reporting, and report preparation will be jointly conducted by Inyo and LADWP 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). For 2016, this table shows rapid assessment monitoring for the river, Blackrock, the Delta, and Off River Lakes and Ponds. Additionally, landscape vegetation mapping of the Delta Habitat Area will occur and flooded extent monitoring will be conducted if there is a seasonal habitat flow during the 2016-2017 fiscal year. As with the river and Blackrock vegetation mapping conducted in 2015-2016, mapping work entails image processing, computer generated mapping, and ground-truthing for map accuracy.



Flooded extent monitoring of the Blackrock Waterfowl Management Area will continue to be jointly conducted by LADWP and Inyo County staffs, with analysis and reporting being conducted by LADWP 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.

Inyo staff and LADWP staff will spend 112 people days each on LORP biological and water quality monitoring for a total of 224 people days. There will be no off-setting costs since work will be shared equally.

**Table 4. Biological and Water Quality Monitoring Budget, FY 2016-2017**

Biological and Water Quality	Organization/Class	Days	Inyo Days	LA Days
<b>River</b>				
Seasonal Habitat Flow Flooded Extent	LA/WRS	25		25
Rapid Assessment Survey	IC/RES ASST	52	52	
Analysis and Reporting	LA/WRS	6		6
	IC/RES ASST	20	20	
Water Quality Monitoring -SHF	LA/WRS	10	10	
	IC/RES ASST	10		10
<b>Total Person Days on Task</b>		<b>123</b>	<b>82</b>	<b>41</b>
<b>Blackrock</b>				
Waterfowl Area Acreage	LA/WRS	8		8
	IC/RES ASST	8	8	
Blackrock Avian Surveys	LA/WRS	7		7
	IC/RES ASST	7	7	
Rapid Assessment Survey	LA/WRS	4		4
Analysis and Reporting	LA/WRS	6		6
<b>Total Person Days on Task</b>		<b>40</b>	<b>15</b>	<b>25</b>
<b>Delta</b>				
Rapid Assessment Survey	LA/WRS	1		1
Landscape Vegetation Mapping	LA/WRS	20		20
Analysis and Reporting	LA/WRS	8		8
<b>Total Person Days on Task</b>		<b>29</b>	<b>0</b>	<b>29</b>
<b>Off-River Lakes and Ponds</b>				
Rapid Assessment Survey	LA/WRS	1		1
Analysis and Reporting	LA/WRS	1		1
<b>Total Person Days on Task</b>		<b>2</b>	<b>0</b>	<b>2</b>
<b>Annual Report Preparation</b>				
Report preparation	LA/WRS	15		15
	IC/LORP	15	15	
<b>Total Person Days on Task</b>		<b>30</b>	<b>15</b>	<b>15</b>
	<b>B&amp;WQ Totals</b>	<b>224</b>	<b>112</b>	<b>112</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. Range monitoring will be conducted by LADWP and is not a shared cost, and therefore not budgeted for in this work plan (Table 5).

**Table 5. Range Monitoring (LADWP only)**

Task	People Days
Utilization	45
Irrigated Pasture Condition	1
Range Trend	110
Analysis and Reporting	30
<b>Total</b>	<b>186</b>

**Mosquito Abatement**

For fiscal year 2016-2017, 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 2016-2017, 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 2015 and the 2016 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.

## Schedule

**Table 6. Proposed Schedule of Monitoring and Reporting Activities for FY 2016-2017**

Period	Monitoring
July 8 - July 16, 2016	Blackrock Waterfowl Management Area (BWMA) Flooded Extent
August 1 - August 12, 2016	Rapid Assessment Survey (RAS)
September 1 - September 9, 2016	RAS Consultation with MOU Parties
September 1- September 30, 2016	Delta Pulse Flow
September 14 - September 22, 2016	BWMA Flooded Extent
October 1 - October 30, 2016	LADWP/Inyo Prepare Draft LORP Report
October 1 - October 30, 2016	Fiscal Year 2015-2016 Work Plan and Budget Reconciliation
October 31, 2016	Draft LORP Report transmitted to MOU Consultant
October 31, 2016	Transmittal of LORP Accounting Report to Governing Boards
November 1 - November 30, 2016	MOU Consultant review Draft LORP Report and Develop Recommendations
November 1 - December 31, 2016	Delta Pulse Flow
December 1, 2016	MOU Consultant transmit Adaptive Management Recommendations to Inyo/LA
December 7 - December 11, 2016	Meet with MOU Consultant to Develop Adaptive Management Recommendations for Management
December 18, 2016	Draft Report transmitted to MOU Parties
January 6, 2017	Public Meeting for Draft LORP Report
December 1, 2016 – January 31, 2017	Fiscal Year 2016-2017 Work Plan and Budget Development
January 15 – January 20, 2017	BWMA Flooded Extent
February 1 - February 5, 2017	Technical Group Meeting to Adopt LORP Annual Report and 2016-2017 Fiscal Year Work Plan and Budget
February 3 – March 31, 2017	Transmittal of LORP Work Plan, Budget, and Schedule to governing boards for approval
March 1 - May 31, 2017	Delta Pulse Flow
May 8 - May 13, 2017	BWMA Flooded Extent
April 15 - July 15, 2017	Seasonal Habitat Flow Water Quality Monitoring
May 15 - June 15, 2017	Seasonal Habitat Flow
June 1 - July 31, 2017	Delta Pulse Flow

## **Section 2. Adaptive Management**

A pilot project to assess the feasibility and effectiveness of intervening to actively develop stands of tree willow and cottonwood in the River-riparian corridor will be conducted. A contractor will be hired to plant cut willow and cottonwood poles to establish small tree groves. The Scientific Team will choose sites most likely to support this type of propagation. If successful, additional funding will be sought to enlarge the effort. Up to \$20,000 will be allocated for this work in FY 2016-2017, to be equally shared by Inyo County and LADWP.

## MOU Consultants Work Plan 2016-17 Budget for LORP MAMP Tasks

### TASK 1-----

#### Seasonal Habitat Flow

The LORP Monitoring and Adaptive Management Plan requires the MOU Consultants to recommend the annual seasonal habitat flow level to the Technical Committee based on the April runoff forecast as described in the FEIR and Ecosystem Management Plan.

Deliverables:

Conduct review of nomograph and provide written recommendation for the Seasonal Habitat Flow based on the April runoff forecast.

**Budget: \$2,194**

### TASK 2-----

#### Flood 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 (SHF). 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 in high flow years to estimate the extent of flooding on river landforms. This task is approved contingent upon runoff estimates that allow for a SHF that is equal to or greater than seasonal intake flows required meet MOU river flow requirements.

Deliverables:

Flooded extent results are compared to results from other tasks to analyze effectiveness in meeting LORP goals. Field time associated with monitoring the flooded extent is accounted for under this task so that the MOU Consultants can observe conditions during the seasonal habitat flow.

**Budget: \$10,944**

### TASK 3-----

#### Rapid Assessment Evaluation

The MOU Consultants inform the MOU parties as required by the LORP Monitoring and Adaptive Management Plan. The MOU Consultants evaluate results for trends that influence monitoring and adaptive management recommendations for subsequent years.

Deliverables:

Review of RAS results and written consultation with MOU Parties following completion of the RAS. This report will be included in the LORP Annual Report.

**Budget: \$3,640**

**TASK 4-----**

**Contingency**

Environmental issues concerning the LORP are dynamic. Unforeseen issues can arise that are not covered by a particular task. Responses to these challenges may require independent outside review. LADWP and ICWD can utilize the MOU Consultants to develop and implement adaptive management, and monitor management actions in these cases. MOU Consultants may be required to attend meetings, review proposed management actions, or make recommendations on issues associated with implementation, monitoring, and adaptive management.

In this fiscal year, funds are set aside under Contingency to allow the review and evaluation of plans that may be generated with regard to management of the Blackrock Waterfowl Management Area or Delta Habitat Area, as well as potential modifications to the avian monitoring program and/or associated habitat modeling.

**Budget: \$17,288**

**TASK 5-----**

**Annual Report Evaluation & Adaptive Management Recommendations**

At the end of October, LADWP and ICWD will forward the draft annual report to the MOU Consultants. The MOU Consultants 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 Consultants will present the recommendations to the Technical Committee, the MOU parties, decision makers, and the public as required.

**Deliverables:**

Review of LORP Annual Report Chapters authored by LAWDP and Inyo County based on monitoring efforts conducted that year. The MOU Consultant will provide a written description of necessary Adaptive Management Recommendations including a discussion of how these recommendations will improve conditions within the LORP. The focus of this deliverable will be on the recommendations themselves and will include references to information provided by the monitoring being conducted by Inyo County and LADWP. The deliverables will come in the form of a simple MS Word Document that does not contain specialized features or protections on the document. AMR must be delivered to Inyo and LADWP by no later than the first Monday in December.

**Budget: \$38,632**

**TASK 6-----**

**Meetings and Project Management**

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 workload, and provide progress reports to ICWD as needed, budget assessment and invoice each month and work items that may not be identified in other tasks delineations.

In addition, 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.

The MOU Consultants will be called upon to prepare for and participate in the public meeting to review the draft LORP 2016-2017 Annual Report, and present and discuss rationale for their adaptive management recommendations.

***Budget: \$20,832***

**EXPENSES-----**

Necessary Expenses include mileage for travel, lodging, and per diem for the MOU Consultants to conduct two trips during the 2016-2017 fiscal year.

***Budget: \$6,300***

**Total Budget \$99,830**