Lower Owens River Project Work Plan, Budget, and Schedule

2015-2016 Fiscal Year

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

2015-2016 Fiscal Year, Lower Owens River Project, Work Plan, Budget, and Schedule

The Inyo County Water Department and the Los Angeles Department of Water and Power jointly prepared this 2015-2016 Fiscal Year Lower Owens River Project Work plan. The Inyo County/Los Angeles Technical Group adopted this work plan on February 12, 2015. 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 2015-2016 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, 2015 – June 30, 2016.

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 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 2015-16 a total of 476 people days are required to complete these tasks. Inyo County and LADWP will each contribute 238 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 \$588,588. Inyo County's Post Implementation Credit will be decreased by \$71,648. 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. 2015-2016 Summary Budget

Inyo County	People Days	Staff Time, Materials, Services and Equipment	Payment/Credit
Biologic and Water Quality	238	\$ -	
Mosquito Abatement	-	\$30,000	
MOU Consultant	-	\$142,646	
Noxious Species Control	-	\$50,000	
Inyo County Totals	238	\$222,646	\$71,648
LADWP	People Days	Staff Time, Materials, Services and Equipment	
Hydrologic Monitoring	-	\$124,640	
Biologic and Water Quality	238	\$ -	
Operations and Maintenance	-	\$201,302	
Mosquito Abatement	-	\$30,000	
Rodent Control	-	\$10,000	
LADWP Totals	238	\$365,942	
Combined Total	476	\$588,588	
Inyo County Credit Adjustment (LA-Inyo)/2		\$71,648	

Footnote to Table 1. Post Implementation Credit and Trust Accounting

	CPI Adjustment	Credit/ Debit	Credit Balance
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	\$1,956,581
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)	\$1,924,244
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	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.		\$(45,068)	\$1,373,570
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%	\$19,230	\$1,392,800
County's share of the costs for the 2014-2015 work plan and budget, including adaptive management effective June 21, 2014.		\$78,483	\$1,314,317
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%	18,400	\$1,332,717
County's share of the costs for the 2015-2016 work plan and budget, including adaptive management effective June 21, 2014.		\$71,648	\$1,261,069

The County's balance in the Post Imp Credit Account held by LADWP as of February 10, 2015 is \$1,261,069. 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 February 9, 2015 is \$2,964,086.

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 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 2015-2016 costs for River corridor and BWMA facilities were \$143,201 and \$196,385 respectively, for an overall 2015-2016 operations and maintenance expenditure of \$339,586. This figure reduced by the combined CPI-adjusted baseline costs for the river corridor and BWMA facilities is \$201,302 (Table 2).

Table 2. 2015-2016 LORP Operation	s and Maintenance	Budget						
Location/Activity	Labor type	Hours	Labor Rate	Total Labor	Equipment Type	Hours	Rate	Total Equip
River	Labor type	Tiours	Labor Nate	TOTAL LABOR	Едиригент туре	Tiours	Nate	Total Equip
Measuring Stations Mtc (4 Stations)	Pow er Shovel Operator	80	\$ 46.50	\$ 3,720.00	Excavator	80	\$ 71.96	\$ 5,756.80
incusuring stations into (4 stations)	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 Mow er	80	\$ 43.74	\$ 2,073.60
	Building Repair Man	75	\$ 40.64	\$ 3,048.00	3/4 ton 4x4 pick- up	75	\$ 9.07	\$ 5,499.20
Subtotal	Duliding Repair Wall	73	\$ 40.64		3/4 ton 4x4 pick- up	7.5	\$ 9.07	\$ 12,009.85
Spillgates and Ditches				\$ 13,307.20				3 12,009.85
Intake Spillgate								
Maintenance	Operator	40	\$ 44.09	\$ 1,763.60	Bull Dozer	40	\$ 70.00	\$ 2,800.00
	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
Mow ing	Operator	20	\$ 44.09		Mow er	20	\$ 11.67	\$ 233.40
. 3	MCH	75	\$ 35.86	\$ 2,689.50	3/4 ton 4x4 pick- up	75	\$ 9.07	\$ 680.25
Cleaning	Pow er Shovel Operator	80	\$ 46.50	\$ 3,720.00	Excavator	80	\$ 71.96	\$ 5,756.80
Ü	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
Subtotal		491	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 18,998.52			7	\$ 14,096.87
Thibaut Spillgate and Ditch				,				,
Cleaning	Pow er Shovel Operator	36	\$ 46.50	\$ 1,674.00	Excavator	36	\$ 71.96	\$ 2,590.56
•	Truck Driver	72	\$ 35.86	\$ 2,581.92	3 axel dump truck	72	\$ 25.92	\$ 1,866.24
Subtotal				\$ 4,255.92	·		7	\$ 4,456.80
Independence Spillgate and Ditch				7 1,200.02				,,,,,,,,,,
Cleaning	Pow er Shovel Operator	135	\$ 46.50	\$ 6,277.50	Excavator	135	\$ 71.96	\$ 9,714.60
-	Truck Driver	270	\$ 37.65	\$ 10,165.50	3 axel dump truck	270	\$ 25.92	\$ 6,998.40
Subtotal				\$ 16,443.00	·			\$ 16,713.00
Locust Spillgate and Ditch				,				,
Cleaning	Pow er Shovel Operator	45	\$ 46.50	\$ 2,092.50	Excavator	45	\$ 71.96	\$ 3,238.20
	Operator	45	\$ 44.09	\$ 1,984.05	Backhoe and trailer	45	\$ 27.93	\$ 1,256.85
	Truck Driver	45	\$ 37.65	\$ 1,694.25	3 axel dump truck	45	\$ 25.92	\$ 1,166.40
Subtotal				\$ 5,770.80	·			\$ 5,661.45
Georges Ditch				,				
Cleaning	Pow er Shovel Operator	45	\$ 46.50	\$ 2,092.50	Excavator	45	\$ 71.96	\$ 3,238.20
	Operator	45	\$ 44.09	\$ 1,984.05	Backhoe and trailer	45	\$ 27.93	\$ 1,256.85
	Truck Driver	45	\$ 35.86	\$ 1,613.70	3 axel dump trucks	45	\$ 25.92	\$ 1,166.40
Subtotal				\$ 5,690.25				\$ 5,661.45
Alabama Spillgate								
Cleaning	Pow er Shovel Operator	54	\$ 46.50	\$ 2,511.05	Excavator	54	\$ 71.96	\$ 3,885.84
	Truck Driver	162			3 axel dump trucks	162	\$ 25.92	
Subtotal				\$ 8,320.37				\$ 8,084.88
Delta Spillgate								
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
Subtotal				\$ 2,995.92				\$ 734.67
River Sub-Total				\$75,781.98				\$67,418.97
Blackrock Waterfow I Management Area								
Blackrock Ditch								
Mow ing	Operator	225	\$ 43.23	\$ 9,726.75	Mow er	225	\$ 11.67	\$ 2,625.75
	Truck Driver	450	\$ 35.16		2 - 3 axel dump trucks	450	\$ 25.92	\$ 11,664.00
Cleaning	Pow er Shovel Operator	260	\$ 45.58	\$11,850.80		260	\$ 71.96	
	Truck Driver	270	\$ 35.16		3 axel dump truck	270	\$ 25.92	,
Subtotal			Ì	\$ 46,892.75		İ	İ	\$ 39,997.75

					_					
Goose Lake to River Ditch										
Cleaning	Operator	45	\$	43.23	\$	1,945.35	Backhoe and trailer	45	\$ 27.93	\$ 1,256.85
	Truck Driver	45	\$	35.16	\$	1,582.20	3 axel dump truck	45	\$ 25.92	\$ 1,166.40
Subtota	I				\$	3,527.55				\$ 2,423.25
Patrol & Flow Changes										
	A&R Keeper	2080	\$	35.16	\$ 7	73,132.80	3/4 ton 4x4 pick- up	2080	\$ 9.07	\$ 18,865.60
Fence Maintenance										
	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
						9,912.60				\$ 1,632.60
BWMA Sub-Tota	ı					33,465.70				\$62,919.20
River Tota	\$143,200.95									
BWMA Tota	\$196,384.90									
Total O and M	\$339,586						CPI Adjusted O and M			\$201,301.99
CPI Adjusted Operations and Maint	enance									
Basline Costs (described in Post -Imp)		Rive	er	BWMA						
	CPI adjustment	\$56,86	3.00	\$62,798	.00					
	2006-2007 4.5%	\$59,42	1.84	\$65,623	.91					
	2007-2008 3.1%	\$61,26	3.91	\$67,658	.25					
	2008-2009 -1.3%	\$60,46	7.48	\$66,778	.69					
	2009-2010 0.9%	\$61,01	1.69	\$67,379	.70					
	2010-2011 0.7%	\$61,43	8.77	\$67,851	.36					
	2011-2012 3.0%	\$63,28	1.93	\$69,886	.90					
	2012-2013 2.1 %	\$64,61	0.85	\$71,354	.53					
	2013-2014 0.4%	\$64,86	9.30	\$71,639	.94					
	2014-2015 1.3%	\$65,71	2.60	\$72,571	.26					

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 \$124,640 (Table 3).

Table 3. 2015-2016 Hydrologic Monitoring Budget

	Person days	Labor Costs Equipment Cost		Budgeted Cost July 1, 2015 through June 30, 2016	5
-			HYDRO OPERATIONS		
River Stations	36	\$ 15,480	\$ 1	440 \$ 16,9	920
Seasonal Habitat	20	\$ 8,600	\$	800 \$ 9,4	400
Off River Lakes & Ponds	7	\$ 3,010	\$	280 \$ 3,2	290
Flow to Delta	1	\$ 430	\$	40 \$ 4	470
Blackrock Waterfowl	16	\$ 6,880	\$	640 \$ 7,5	520
Reporting Compliance	24	\$ 10,320	\$	960 \$ 11,2	280
-		l T	HYDRO MAINTENANCE		
River Stations	14	\$ 6,020	\$	560 \$ 6,5	580
Off River Lakes & Ponds	5	\$ 2,150	\$	200 \$ 2,3	350
Flow to Delta	1	\$ 430	\$	40 \$ 4	470
Blackrock Waterfowl	8	\$ 3,440	\$	320 \$ 3,7	760
-		ı			
Reporting Compliance	108	\$ 48,600	\$ -	\$ 48,6	600
Vegetation Mapping	40	\$ 14,000	\$ -	\$ 14,0	000

Total Hydro Budget

\$124,640

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). The number of hours dedicated to water quality monitoring is higher than previous years to reflect the initiation of year-round water quality monitoring. A Rapid Assessment of the river, off-river ponds, and wetlands, will be supplemented by a study looking at the persistence of woody recruitment recorded in all years. Landscape Vegetation Mapping and Avian Census work that was not completed in the first half of the 2015 calendar year (2014-2015 fiscal year) will continue into this fiscal year. Mapping work entails image processing, computer generated mapping, and ground-truthing for map accuracy. Additionally, avian censuses than began in spring 2015 will continue through late summer and fall 2015.

Flooded extent monitoring 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.

Inyo staff and LADWP staff will spend 238 people days each on LORP biological and water quality monitoring for a total of 476 people days. There will be no off-setting costs, since work will be shared equally.

Table 4. Biological and Water Quality Monitoring Budget, FY 2015-2016

Biological and Water Quality	Organization/Class	Days	Inyo Days	LA Days
River				
Rapid Assessment Survey	LA/WRS	02		20
	IC/RES ASST	92	72	
Water Quality	LA/WRS	25		15
ndicator Species Habitat Monitoring andscape Vegetation Mapping vian Census	IC/LORP	25	10	
Indicator Species Habitat Monitoring	LA/WRS	18		18
Landscape Vegetation Mapping	LA/WRS	100		54
	IC/RES ASST	108	54	
Avian Census	LA/WRS	26		18
	IC/LORP	30	18	
Creel Census	LA/WRS			0
	IC/LORP	108 54 54 36 18 6 6 B 58		
Analysis and Reporting	LA/WRS-B	го		27
	IC/LORP	36	31	
Total Person Days on Task		343	191	152
Blackrock				
Waterfowl Area Acreage	LA/WRS-B	32		16
	IC/LORP	32	16	
Rapid Assessment Survey	LA/WRS	6		6

Indicator Species Habitat Monitoring	LA/WRS	4		4
Landscape Vegetation Mapping	LA/WRS	11		11
Wetland Avian Census	LA/WRS	22		16
	IC/LORP	32	16	0
Analysis and Reporting	LA/WRS-B	6		6
Total Person Days on Task		90	32	59
Delta				
Rapid Assessment Survey	LA/WRS	2		2
Analysis and Reporting	LA/WRS	2		2
Total Person Days on Task		4	0	4
Off-River Lakes and Ponds				
Rapid Assessment Survey	LA/WRS	2		2
Creel Census	IC/LORP	1	2	
Landscape Vegetation Mapping	LA/WRS	5		5
Analysis and Reporting	LA/WRS	1		1
Total Person Days on Task		10	2	8
Annual Report Preparation				
Report preparation	LA/WRS-B	30		15
	IC/LORP	30	15	
Total Person Days on Task		30	15	15
	B&WQ Totals	476	238	238

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).

Table 5. Range Monitoring (LADWP only)

Task	People Days
Utilization	45
Irrigated Pasture Condition	1
Range Trend	110
Streamside Monitoring/Woody Recruitment	32
Analysis and Reporting	30
Total	218

Mosquito Abatement

For fiscal year 2015-2016, 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 2015-2016, 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 2014 and the 2015 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.

B. Schedule

$\begin{tabular}{ll} Table 6. Proposed Schedule of Monitoring, Maintenance and Reporting Activities for FY 2015-2016 \end{tabular}$

Period	Monitoring
July 1 - October 31, 2015	BWMA Avian Survey
July 8 - July 16, 2015	Blackrock Waterfowl Management Area (BWMA) Flooded Extent
August 3 - August 15, 2015	Rapid Assessment Survey (RAS)
August 17 - August 24, 2015	BWMA Flooded Extent
September 1 - September 9, 2015	RAS Consultation with MOU Parties
September 1- September 30, 2015	Delta Pulse Flow
September 14 - September 22, 2015	BWMA Flooded Extent
October 1 - October 28, 2015	LADWP/Inyo Prepare Draft LORP Report
October 1 - October 28, 2015	Fiscal Year 2014-2015 Work Plan and Budget Reconciliation
October 15 - October 24, 2015	BWMA Flooded Extent
October 31, 2015	Draft LORP Report transmitted to MOU Consultant
October 31, 2015	Transmittal of LORP Accounting Report to Governing Boards
November 1 - November 30, 2015	MOU Consultant review Draft LORP Report and Develop Recommendations
November 1 - December 31, 2015	Delta Pulse Flow
December 1, 2015	MOU Consultant transmit Adaptive Management Recommendations to Inyo/LA
December 7 - December 11, 2015	Meet with MOU Consultant to Develop Adaptive Management Recommendations for Management
December 18, 2015	Draft Report transmitted to MOU Parties
January 6, 2016	Public Meeting for Draft LORP Report
December 1, 2015 – January 31, 2016	Fiscal Year 2016-2017 Work Plan and Budget Development
January 15 – January 20, 2016	BWMA Flooded Extent
February 1 - February 3, 2016	Technical Group Meeting to Adopt LORP Annual Report and 2016-2017 Fiscal Year Work Plan and Budget
February 3 – March 31, 2016	Transmittal of LORP Work Plan, Budget, and Schedule to governing boards for approval
March 1 - May 31, 2016	Delta Pulse Flow
April 15 - April 20, 2016	BWMA Flooded Extent
May 8 - May 13, 2016	BWMA Flooded Extent
May 31 - June 5, 2016	BWMA Flooded Extent
May 15 - June 15, 2016	Seasonal Habitat Flow
June 1 - July 31, 2016	Delta Pulse Flow

MOU Consultants Work Plan 2015-16 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. By agreement, in those years when the runoff forecast is less than 50% of normal, there is no seasonal habitat flow.

Deliverables:

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

Budget:

Principal (Hill)	8	\$148	\$1,184
Principal (Platts)	8	\$148	\$1,184
Administration	2	\$72	\$144
Subtotal			\$2,512

TASK 2 ------

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:

Written consultation with MOU Parties following completion of the RAS. This report will be included in the LORP Annual Report.

Budget:

Principal (Hill)	6	\$148	\$888
Principal (Platts)	4	\$148	\$592
Senior Associates	30	\$100	\$3,000
Administration	3	\$72	\$216
Subtotal			\$4,480

TASK 3 ------

Creel Census

The creel census tracks the development and health of the fishery and serves to indicate fishing quality. The MOU Consultants will evaluate census results in their adaptive management recommendations. Ecosystem Sciences assumes the responsibility of paying honorariums to anglers participating in the census.

Deliverables:

Written evaluation to be included in the LORP Annual Report discussing Creel Census results reported by the County and City 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.

Budget:

Principal (Hill)			
Principal (Platts)			
Administration			
Honorarium			

4	\$148	\$592
22	\$148	\$3,256
12	\$72	\$864
		\$1,400
		\$6,112

TASK 4-----

Landscape Vegetation Mapping

Landscape scale vegetation mapping provides a measure of the types of riverine-riparian vegetation that has developed and is critical to evaluating other ecological conditions on a large scale. Finer scale mapping provides more definitive measure of habitat parameters; however, this loss of resolution can be accounted for somewhat if the landscape scale mapping employs an adequate number of vegetation types. The MOU Consultants will review preliminary mapping work.

Deliverables:

Written comments on the preliminary mapping. The MOU Consultants will evaluate the results of the landscape mapping to formulate adaptive management recommendations for the annual report.

Budget:

Principal (Hill)	
Senior Associates	
Administration	

8	\$148	\$1,184
34	\$100	\$3,400
2	\$72	\$144
		\$4,728

TASK 5------

Subtotal

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, revaluating 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:

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:

Administration	50	\$72	\$3,600
Senior Associates	190	\$100	\$19,000
Principal (Platts)	210	\$148	\$31,080
Principal (Hill)	210	\$148	\$31,080

TASK 6-----

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 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.

Budget:

Principal (Hill)	70	\$148	\$10,360
Principal (Platts)	39	\$148	\$5,772
Senior Associates	148	\$100	\$14,800
Administration	46	\$72	\$3,312
Subtotal			\$34,244

EXPENSES------

Budget:

Expenses Subtotal			\$ 5,810
Per Diem	14	\$85	\$1,190
Lodging	14	\$150	\$2,100
Travel (Mileage 1500/trip @ \$0.56/mi)	3	\$840	\$2,520

Total MOU Consultants Budget: \$142,646

Section 2. Adaptive Management Measures

No ada	ptive managemen	t recommendations	require additional	budget cons	iderations this	tiscal	/ear.