Lower Owens River Project
Work Plan, Budget, and Schedule

2024-2025 Fiscal Year

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

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The Inyo County Water Department and the Los Angeles Department of Water and Power jointly prepared this 2024-2025 Fiscal Year Lower Owens River Project Work plan. The Inyo County/Los Angeles Technical Group adopted this work plan on June 5, 2024. 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 2024-2025 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 the Long-Term Water Agreement (LTWA) Technical Group will develop and adopt an annual work plan for the LORP, which describes LORP work to be performed in the following fiscal year. This work plan identifies who will perform or oversee tasks, a schedule, and a budget. This work plan and budget were 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 plan will be submitted to the County and LADWP governing boards for approval. Each governing board must approve the plan before this work plan and budget can be implemented. The Work Plan, Budget, and Schedule are in effect from July 1, 2024 – June 30, 2025.

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 Final EIR, 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.

Section 2 outlines Adaptive Management activities identified to be conducted in the 2024-2025 fiscal year.

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.

LORP Operations & Maintenance, Monitoring, and Adaptive Management Budget

Table 1 summarizes the costs of operation, maintenance and monitoring for the fiscal year and specifies the costs incurred for standard operations, maintenance, and monitoring, as well as for Adaptive Management. A summary of these activities follows in Sections 1 and 2 below.

In 2024-2025 a total of 4 people days will be required to complete standard biologic monitoring tasks. Inyo County and LADWP will each contribute 2 days. Maintenance, Operations, and Hydrologic monitoring are tasks solely performed by LADWP, and are shared costs between Inyo County and LADWP. LADWP has allocated 80 days for Range Monitoring, which is a LADWP cost. Inyo County and LADWP will perform additional Adaptive Management tasks over 262 people days (Inyo County and LADWP each 131 days).

Based on this budget, total cost for the fiscal year is $729,851.54 with Inyo County contributing $80,000 and LADWP contributing $649,851.54. Inyo County's Post Implementation Credit will be decreased by $284,925.77. The credit deduction 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.

Table 1. LORP Work Plan Summary Budget, FY 2024-2025

Inyo County	Budgeted Staff Work Days	Value of Additional Staff Time, Materials, and Equipment	Payment/Credit
Biological Monitoring	2	$0.00	
Mosquito Abatement	-	$30,000.00	
Noxious Species Control	-	$50,000.00	
Adaptive Management	131	$0.00	
Inyo County Totals	**133**	**$80,000.00**	**($284,925.77)**
LADWP	**Budgeted Staff Work Days**	**Budgeted Value of Additional Staff Time, Materials, and Equipment**	
Hydrologic Monitoring	-	$69,660.00	
Biological Monitoring	2	$0.00	
Operations and Maintenance	-	$475,983.54	
Mosquito Abatement	-	$30,000.00	
Rodent Control	-	$18,000.00	
Adaptive Management	131	$56,208.00	
LADWP Totals	**133**	**$649,851.54**	
Combined Total	**266**	**$729,851.54**	
Inyo County Credit Adjustment (1/2 of the Difference in Expenditures between Inyo County and LADWP)		**($284,925.77)**	

Footnote to Table 1. Post Implementation Credit and Trust Accounting

Original Post Implementation Credit		2,253,033.00	2,253,033.00
Increase Post Imp Credit by 2.9% based on the July 2007 price Index	2.9%	65,337.96	2,318,370.96
County's obligation for July 11, 2007 to June 30, 2008 period		243,524.00	2,074,846.96
Increase the remaining balance of the Post Implementation Credit by 5.7% based upon the July 2008 price index	5.7%	118,266.28	2,193,113.23
County's obligation for 2008-2009 fiscal year		243,524.00	1,949,589.23
Reduce the remaining balance of the Post Implementation Credit by 1.3% based upon the April 2009 price index	-1.3%	25,344.66	1,924,244.57
County's share of the costs for the 2009-2010 work plan and budget, including adaptive management.		266,176.00	1,658,068.57
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%	31,503.30	1,689,571.88
County's share of the costs for the 2010-2011 work plan and budget, including adaptive management effective July 21, 2010.		317,805.00	1,371,766.88
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%	45,268.31	1,417,035.18
County's share of the costs for the 2011-2012 work plan and budget, including adaptive management effective July 21, 2011.		48,278.00	1,368,757.18
County's share of the costs for the Amended 2011-2012 work plan and budget, effective July 21, 2011.		57,687.00	1,311,070.18
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%	19,666.05	1,330,736.24
County's share of the costs for the 2012-2013 work plan and budget, including adaptive management effective July 23, 2012.		14,084.00	1,344,820.24
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%	12,103.38	1,356,923.62
County's share of the costs for the 2013-2014 work plan and budget, including adaptive management effective June 21, 2013.		41,979.00	1,398,902.62
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%	19,584.64	1,418,487.25
County's share of the costs for the 2014-2015 work plan and budget, including adaptive management effective June 21, 2014.		78,483.00	1,340,004.25
Increase the remaining balance of the Post Implementation Credit by 0.5% based upon the April 2015 consumer price index.	0.5%	6,700.02	1,346,704.28
County's share of the costs for the 2015-2016 work plan and budget, including adaptive management effective June 21, 2015.		73,755.00	1,272,949.28
Increase the remaining balance of the Post Implementation Credit by 2.0% based upon the April 2016 consumer price index.	2.0%	25,458.99	1,298,408.26
County's share of the costs for the 2016-2017 work plan and budget, including adaptive management effective June 21, 2016.		84,704.00	1,213,704.26
Increase the remaining balance of the Post Implementation Credit by 2.7% based upon the April 2017 consumer price index.	2.7%	32,770.02	1,246,474.28
County's share of the costs for the 2017-2018 work plan and budget, including adaptive management, effective October 31, 2018.		114,857.00	1,131,617.28
Increase the remaining balance of the Post Implementation Credit by 4.0% based upon the April 2018 consumer price index.	4.0%	45,264.69	1,176,881.97
County's share of the costs for the 2018-2019 work plan and budget, including adaptive management, effective October 31, 2019.		139,493.00	1,037,388.97

Increase the remaining balance of the Post Implementation Credit by 3.3% based upon the April 2019 consumer price index.	3.3%	34,233.84	1,071,622.80
County's share of the costs for the 2019-2020 work plan and budget, including adaptive management, effective October 31, 2020.		132,557.50	939,065.30
Increase the remaining balance of the Post Implementation Credit by 0.7% based upon the April 2020 consumer price index.	0.7%	6,573.46	945,638.76
County's share of the costs for the 2020-2021 work plan and budget, including adaptive management, effective October 31, 2021.		252,481.42	693,157.34
Increase the remaining balance of the Post Implementation Credit by 3.6% based upon the April 2021 consumer price index.	3.6%	24,953.66	718,111.01
County's share of the costs for the 2022-2023 work plan and budget, including adaptive management, effective October 31, 2022.		175,435.79	542,675.22
Increase the remaining balance of the Post Implementation Credit by 7.9% based upon the April 2022 consumer price index.	7.9%	42,871.34	585,546.56
County's share of the costs for the 2022-2023 work plan and budget, including adaptive management, effective October 31, 2023.		192,211.26	393,335.30
Increase the remaining balance of the Post Implementation Credit by 3.8% based upon the April 2023 consumer price index.	3.8%	14,946.74	408,282.04

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 March 7, 2024 was $2,103,480.70

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, adjustments to flow control structures, maintenance/replacement of existing structures, and necessary annual maintenance to spillgates, ditches, dikes, berms, ponds and other features in the BWMA. 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, and provides that costs for maintenance above the baseline costs for facilities in the river corridor and the Blackrock Waterfowl Management Area (BWMA) shall be shared.

Budgeted Operations and Maintenance costs and associated material costs for 2024-2025 are included in Table 2. The estimated costs for River corridor and BWMA facilities are $275,015.20 and $385,783.85 respectively, for an overall 2024-2025 operations and maintenance expenditure of $660,799.05. This figure reduced by the combined CPI-adjusted baseline costs for the river corridor and BWMA facilities is $475,983.54 (Table 2).

Table 2. LORP Operations and Maintenance Budget- 2024-2025 Fiscal Year								
Labor					Equipment			
Location/Activity	**Labor type**	**Hours**	**Labor Rate**	**Total Labor**	**Equipment/Materials**	**Hours**	**Rate**	**Total Equip**
River								
Measuring Station Maintenance								
Cleaning	Building Repairman	10	$52.66	$526.60	3 axle dump truck	30	$94.12	$2,823.60
	MCH	50	$46.48	$2,324.00	3/4 ton 4x4 pick-up	100	$41.96	$4,196.00
	Equipment Operator	10	$57.13	$571.30	Excavator	30	$132.61	$3,978.30
	Power Shovel Operator	30	$60.24	$1,807.20	Mower	10	$48.93	$489.30
	Truck Driver	30	$48.77	$1,463.10				
Subtotal		**130**		**$6,692.20**		**170**		**$11,487.20**
Intake Spillgate								
Maintenance	Building Repairman	40	$52.66	$2,106.40	3 axle dump truck	40	$94.12	$3,764.80
	MCH	340	$46.48	$15,803.20	3/4 ton 4x4 pick-up	620	$41.96	$26,015.20
	Equipment Operator	100	$57.13	$5,713.00	Bull Dozer	80	$92.51	$7,400.80
	Power Shovel Operator	40	$60.24	$2,409.60	Excavator	40	$132.61	$5,304.40
	Truck Driver	40	$48.77	$1,950.80	Mower	20	$48.93	$978.60
Subtotal		**560**		**$27,983.00**		**800**		**$43,463.80**
Thibaut Spillgate and Ditch								
Cleaning	MCH	120	$46.48	$5,577.60	3 axle dump truck	40	$94.12	$3,764.80
	Equipment Operator	80	$57.13	$4,570.40	3/4 ton 4x4 pick-up	160	$41.96	$6,713.60
	Power Shovel Operator	40	$60.24	$2,409.60	Backhoe and trailer	40	$56.29	$2,251.60
	Truck Driver	40	$48.77	$1,950.80	Excavator	40	$132.61	$5,304.40
					Loader	40	$110.68	$4,427.20
Subtotal		**280**		**$14,508.40**		**320**		**$22,461.60**
Independence Spillgate and Ditch								
Cleaning/Mowing	Power Shovel Operator	40	$60.24	$2,409.60	3/4 ton 4x4 pick-up	160	$41.96	$6,713.60
	MCH	160	$46.48	$7,436.80	Excavator	40	$132.61	$5,304.40
	Equipment Operator	80	$57.13	$4,570.40	Loader	40	$110.68	$4,427.20
	Truck Driver	10	$48.77	$487.70	Mower	40	$48.93	$1,957.20
					Low bed/side dump	10	$104.99	$1,049.90
					Water truck	20	$54.23	$1,084.60
Subtotal		**290**		**$14,904.50**		**310**		**$20,536.90**
Locust Spillgate and Ditch								
Cleaning	MCH	100	$46.48	$4,648.00	3 axle dump truck	40	$94.12	$3,764.80
	Equipment Operator	80	$57.13	$4,570.40	3/4 ton 4x4 pick-up	200	$41.96	$8,392.00
	Power Shovel Operator	20	$60.24	$1,204.80	Backhoe and trailer	80	$56.29	$4,503.20
	Truck Driver	40	$48.77	$1,950.80	Excavator	20	$132.61	$2,652.20
Subtotal		**240**		**$12,374.00**		**340**		**$19,312.20**
Georges Ditch								
Cleaning/Mowing	MCH	120	$46.48	$5,577.60	3/4 ton 4x4 pick-up	240	$13.60	$3,264.00
	Equipment Operator	80	$57.13	$4,570.40	Backhoe and trailer	30	$56.29	$1,688.70
	Power Shovel Operator	40	$60.24	$2,409.60	Excavator	40	$132.61	$5,304.40
					Loader	20	$110.68	$2,213.60
					Mower	30	$48.93	$1,467.90
Subtotal		**240**		**$12,557.60**		**360**		**$13,938.60**
Alabama Spillgate								
Cleaning	Equipment Operator	40	$57.13	$2,285.20	3 axle dump truck	180	$94.12	$16,941.60
	Power Shovel Operator	60	$60.24	$3,614.40	3/4 ton 4x4 pick-up	100	$41.96	$4,196.00
	Truck Driver	180	$48.77	$8,778.60	Bull Dozer	40	$92.51	$3,700.40
					Excavator	60	$132.61	$7,956.60
Subtotal		280		**$14,678.20**		380		**$32,794.60**
Labor					Equipment			
Location/Activity	**Labor type**	**Hours**	**Labor Rate**	**Total Labor**	**Equipment/Materials**	**Hours**	**Rate**	**Total Equip**
Delta Spillgate								
	Building Repairman	40	$52.66	$2,106.40	3/4 ton 4x4 pick-up	40	$41.96	$1,678.40
	MCH	40	$46.48	$1,859.20	3/4 ton 4x4 pick-up	40	$41.96	$1,678.40
Subtotal		**80**		**$3,965.60**		**80**		**$3,356.80**
River Subtotal				**$107,663.50**				**$167,351.70**

Table 2. LORP Operations and Maintenance Budget- 2024-2025 Fiscal Year (continued)

Labor					Equipment			
Location/Activity	**Labor type**	**Hours**	**Labor Rate**	**Total Labor**	**Equipment/Materials**	**Hours**	**Rate**	**Total Equip**
Blackrock Waterfowl Management Area								
Blackrock Ditch								
Maintenance	MCH	260	$46.48	$12,084.80	3 axle dump truck	120	$94.12	$11,294.40
	Equipment Operator	120	$57.13	$6,855.60	3/4 ton 4x4 pick-up	400	$41.96	$16,784.00
	Power Shovel Operator	140	$60.24	$8,433.60	Excavator	140	$132.61	$18,565.40
	Truck Driver	180	$48.77	$8,778.60	Loader	40	$110.68	$4,427.20
	`				Mower	80	$48.93	$3,914.40
					Low bed/side dump	60	$94.12	$5,647.20
					Water truck	60	$54.23	$3,253.80
Subtotal		**700**		**$36,152.60**		**900**		**$63,886.40**
Thibaut Pond Maintenance								
Maintenance	MCH	20	$46.48	$929.60	3/4 ton 4x4 pick-up	40	$41.96	$1,678.40
	Power Shovel Operator	20	$60.24	$1,204.80	Low bed/side dump	6	$94.12	$564.72
	Truck Driver	6	$48.77	$292.62	Quadtrac/excavator	20	$48.93	$978.60
					Water truck	6	$54.23	$325.38
Subtotal		**46**		**$2,427.02**		**72**		**$3,547.10**
Patrol & Flow Changes (River and BWMA)								
A&R data	A&R Keeper (1.5 FTE)	3089	$48.61	$150,156.29	3/4 ton 4x4 pick-up	3089	$41.96	$129,614.44
Subtotal				**$150,156.29**				**$129,614.44**
BWMA Subtotal				**$188,735.91**				**$197,047.94**

TOTALS	
River Total	**$275,015.20**
BWMA Total	**$385,783.85**
Total O and M	**$660,799.05**
CPI Adjusted O & M	**$475,983.54**

Baseline Costs (described in Post -Imp)		River	BWMA	Total CPI adjustment
CPI adjustment		$56,863.00	$62,798.00	$119,661.00
2006-2007	4.5%	$59,421.84	$65,623.91	$125,045.75
2007-2008	3.1%	$61,263.91	$67,658.25	$128,922.16
2008-2009	-1.3%	$60,467.48	$66,778.69	$127,246.17
2009-2010	0.9%	$61,011.69	$67,379.70	$128,391.39
2010-2011	0.7%	$61,438.77	$67,851.36	$129,290.13
2011-2012	3.0%	$63,281.93	$69,886.90	$133,168.83
2012-2013	2.1 %	$64,610.85	$71,354.53	$135,965.38
2013-2014	0.4%	$64,869.30	$71,639.94	$136,509.24
2014-2015	1.3%	$65,712.60	$72,571.26	$138,283.86
2015-2016	1.6%	$66,764.00	$73,732.40	$140,496.40
2016-2017	1.8%	$67,965.75	$75,059.59	$143,025.34
2017-2018	3.6%	$70,412.52	$77,761.73	$148,174.25
2018-2019	3.6%	$72,947.37	$80,561.15	$153,508.52
2019-2020	3.2%	$75,281.69	$83,139.11	$158,420.80
2020-2021	1.0%	$76,034.50	$83,970.50	$160,005.00
2021-2022	6.0%	$80,596.57	$89,008.73	$169,605.30
2022-2023	6.0%	$85,432.37	$94,349.26	$179,781.62
2023-2024	2.8%	$87,824.47	$96,991.04	$184,815.51

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. Budgeted hydrologic monitoring costs for the 2024-2025 fiscal year are $69,660.00 (Table 3).

	Person days	Labor Costs	Equipment Cost	Total Predicted Cost July 1, 2024 through June 30, 2025
	HYDRO OPERATIONS AND MAINTENANCE			
River Stations	25	$ 13,750.00	$ 5,800.00	$ 19,550.00
Seasonal Habitat	6	$ 3,300.00	$ 240.00	$ 3,540.00
Off River Lakes & Ponds	8	$ 4,400.00	$ 320.00	$ 4,720.00
Flow to Delta	4	$ 2,200.00	$ 3,160.00	$ 5,360.00
Blackrock Waterfowl	6	$ 3,300.00	$ 3,240.00	$ 6,540.00
Reporting Compliance	5	$ 2,750.00	$ 200.00	$ 2,950.00
	ENGINEERING			
Reporting Compliance	60	$ 27,000.00	$ -	$ 27,000.00
			Total Hydro Budget	**$ 69,660.00**

Biological Monitoring

Biological monitoring, analysis, reporting, and report preparation will be jointly conducted by Inyo and LADWP as to comply with LORP Final EIR and MOU requirements (Table 4). Inyo County staff will monitor the flooded extent of the BWMA. The flooded extent will be primarily determined by using remote sensing of high-resolution satellite imagery with ground truthing to determine accuracy. Inyo staff will be responsible for the entirety of the work and commit a total of 4 person days. There will be no off-setting costs.

Table 4. Biological Monitoring Budget, FY 2024-2025

Biological Monitoring	Days	Inyo Days	LA Days
Blackrock Waterfowl Management Area			
Waterfowl Area Wetted Acreage	4	4	0
Total Person Days on Project	**4**	**4**	**0**

Range Monitoring

Range monitoring is related to the tasks described in the LORP Final EIR. Three types of monitoring will take place that are directly related to the management of livestock grazing: irrigated pasture condition scoring, utilization monitoring, and range trend monitoring. Range monitoring will be conducted by LADWP and is not a shared cost, and therefore is not budgeted for in this work plan (Table 5).

Table 5. Range Monitoring (LADWP only), FY 2024-2025

Task	Person Days
Utilization	35
Irrigated Pasture Condition	5
Range Trend	30
Analysis and Reporting	10
Total	**80**

Mosquito Abatement

For fiscal year 2024-2025, 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 and Mono Counties Agricultural Commissioner's Office conducts operations to control and eradicate several invasive weed species within the LORP boundaries. These invasive weed species include: perennial pepperweed (*Lepidium latifolium*), Russian knapweed (*Acroptilon repens*), Canada thistle (*Cirsium arvense*), yellow star thistle (*Centaurea solstitialis*), spotted knapweed (*Centaurea maculosa*), hairy whitetop (*Carderia pubescens*), and heart podded hoary cress (*Carderia draba*). These populations are managed using integrated pest management methods, including mechanical, chemical, and biological controls.

For fiscal year 2024-2025, Inyo County will be responsible for treating weeds in the LORP. The budget for noxious weed control is $50,000. An increase in perennial pepperweed in the LORP in recent years will require additional funding and efforts to contain the existing population and prevent spread. Additional funding for Inyo County will be sought from outside sources.

Additional weed treatment and surveillance by LADWP and ICWD is described in Section 2. Adaptive Management.

Saltcedar Control

Due to lack of enhanced funding, Inyo County's saltcedar control program has been scaled back. The effort will focus on surveying and treatment of saltcedar resprouts along the Owens River in the LORP. Inyo County's LORP saltcedar control activities are funded through the Inyo/Los Angeles Water Agreement. LADWP and Inyo County programs will work cooperatively to treat saltcedar, which may include areas in the LORP as resources are available.

Adaptive management

Inyo County and LADWP have identified adaptive management and monitoring tasks to complete in the 2024-2025 fiscal year. Refer to Section 2 for more information.

Schedule

Table 6. Schedule of Monitoring and Reporting Activities for FY 2024-2025

Period	Monitoring
July 1-August 30, 2024	Rapid Assessment of the River
September 1 – December 2, 2024	LADWP/Inyo Prepare Draft LORP Report
September 15, 2024 - March 1, 2025	Start and end dates for flow releases to BWMA
October 1 - October 31, 2024	Fiscal Year 2022-2023 Work Plan and Budget Reconciliation
Thursday, October 31, 2024	Transmittal of LORP Accounting Report to Governing Boards
November 4-8, 2024	Measure BWMA Flooded Extent
Monday, December 2, 2024	Draft Report transmitted to MOU Parties
Wednesday, January 8, 2025	Public Meeting for Draft LORP Report
Wednesday, January 15, 2025	Technical Group Meeting to Adopt LORP Annual Report
March 3-8, 2025	Measure BWMA Flooded Extent
March 1 – April 30, 2025	Fiscal Year 2025-2026 Work Plan and Budget Development
May 1 – May 31, 2025	Transmittal of LORP Work Plan, Budget, and Schedule to governing boards for approval
April 1 - June 30, 2025	Noxious Species Treatment
May 2 - June 15, 2025	Seasonal Habitat Flow

Section 2. Adaptive Management

Implementation costs of both the Interim BWMA Plan and adaptive management for the river are provided below. These costs are to be shared equally between LADWP and Inyo County.

Adaptive Management with Additional Costs

Implementation of the Interim BWMA Management and Monitoring Plan
LADWP and Inyo County have implemented the first two years of the five-year Interim BWMA Management and Monitoring Plan (Interim Plan) in 2021 and 2022. The Interim Plan was suspended in FY 2023-2024 because of high runoff and the need for associated water spreading. The third year of the plan will resume in FY 2024-2025 and will include repairing and improving a berm along the Winterton unit as to better control flooding. Additionally, mowing will occur in the west Winterton unit (which has been inactive the last 2 years), in preparation for flooding in late fall. This work will be conducted by LADWP and is budgeted at $56,208.00 (Table 7). Costs will be shared equally by LADWP and Inyo County.

Table 7. BWMA Adaptive Management Costs

BWMA ADAPTIVE MANAGEMENT COST 2024-2025								
Labor					Equipment			
Location/Activity	Labor type	Hours	Labor Rate	Total Labor	Equipment Type	Hours	Rate	Total Equip
Winterton Berm Repair								
	MCH	80	$46.48	$3,718.40	3 axle dump truck	80	$94.12	$7,529.60
	Power Shovel Operator	80	$60.24	$4,819.20	3/4 ton 4x4 pick- up	160	$41.96	$6,713.60
	Truck Driver	80	$48.77	$3,901.60	Excavator	80	$132.61	$10,608.80
Subtotal				$12,439.20				$24,852.00
Winterton West 50% Mowing								
Cleaning	MCH	80	$46.48	$3,718.40	3/4 ton 4x4 pick- up	160	$41.96	$6,713.60
	Operator	80	$57.13	$4,570.40	Mower	80	$48.93	$3,914.40
Subtotal				$8,288.80				$10,628.00

TOTALS	
Winterton Berm Repair Total	$37,291.20
Winterton West 50% Mowing Total	$18,916.80
Proposed Project Total	$56,208.00

Adaptive Management without Additional Costs

1. Monitoring Associated with the Interim BWMA Plan
As stated in the Interim BWMA Plan, LADWP and the County will conduct additional monitoring concurrent with its implementation on flooded extent, water depths, as well as both avian and vegetation monitoring to note response to the new flooding regime. To be monitored:

1. Flooded extent will continue to be measured both to confirm compliance with the Interim Plan and to help describe the effectiveness of seasonal filling and drawdown. Remote sensing with field verification will be used to determine the area associated with the flooding. Estimates of

flooded acreage derived from remote sensing will occur monthly and maps of the wetted area will be generated for November 1, 2024 and March 1, 2025. Water releases will be monitored and reported annually. Staff time commitment for flooded extent monitoring in BWMA is outlined in Table 4, as this task is required under the LORP Final EIR. Inyo County will be responsible for the entirety of this task and will take 4 person days to complete.

2. Avian monitoring will be conducted to evaluate the use of BWMA by the habitat indicator species during implementation of the 5-year interim program. Eight seasonal surveys will be conducted September-April in each active unit during implementation of the Interim Plan. It is estimated that it will take a total of 40 person days to complete this task and will be evenly divided between Inyo County and LADWP.

3. Vegetation monitoring of the BWMA units will characterize species composition and abundance as to quantify available forage for water birds. Monitoring, analysis, and reporting will be conducted solely by LADWP and take 16 person days.

The estimated time that monitoring and reporting associated with the Interim Plan will require a total of 60 person days in the 2024-2025 fiscal year, with Inyo contributing 24 days and LADWP 36 days.

2. Noxious species treatment

Additional noxious weed treatment will continue in 2024-2025 along the LORP and BWMA. The LADWP will perform all the work at 60 person days.

3. Tree recruitment assessment

The environmental conditions that have permitted riparian tree establishment on the LORP will be evaluated. In order to correctly predict appropriate tree recruitment locations for native riparian trees including black willow (*Salix gooddingii*), red willow (*Salix laevigata*), or Fremont cottonwood (*Populus fremontii*), we must first understand: 1) conditions which have permitted tree establishment during pre-project conditions on the LORP, 2) conditions which have permitted the limited recruitment since project inception, and 3) concurrent biological processes which may be inhibiting current germination and establishment. First, it is possible, by aging mature trees, to correlate the year of establishment with environmental, hydrologic, and physical conditions that existed at that time; methods are described in the Type D Monitoring Plan (Appendix 1, ICWD 2021). Second, we can learn from post-project recruitment events, recorded via the Rapid Assessment Survey, by revisiting a sample of these sites and assessing conditions such as: landform, surface water elevation, soil substrate, soil salinity, and the presence and extent of biotic competition. Finally, the effects of plant competition on germination and establishment can be explored via vegetation removal on the wetted channel edge or wetted floodplain exposing bare and saturated soils and surveying for recruitment following the SHF. Item three can only occur during a near normal runoff year (100%) with an adequate SHF. During the 2024-2025 period, these activities will involve 35 field days dedicated to sampling, data collection, analysis, and reporting, all to be conducted by Inyo County.

4. Rapid Assessment Survey

Rapid assessments along the river will focus on two main areas of interest: mapping new noxious weed populations and mapping locations of woody recruitment that may have established in 2023 along the high water line delineated from satellite imagery acquired during seed fly in June 2023. Perennial pepperweed will be mapped downstream from known populations, and these data are shared in real time with LADWP and County weed management personnel through a shared GIS. Inyo County will perform the whole of this work with 60 person days.

5. Aerial photo analysis of river

An overflight of the Lower Owens was performed in February 2024 to capture high-resolution aerial imagery before leaf-out. The objective of this study is to understand where the 2023 flooding deposited sediment in the floodplain, which could act as tree recruitment surfaces. LADWP staff will segment and classify the imagery using three classes: sediment, sedimented tules, and open water. The result/deliverable of the analysis will be a map (classified polygon feature class) showing sediment deposits. This can be used in future years to investigate these areas for tree establishment. It will take a total of 35 person days, with LADWP performing all the work.

6. Water Quality Monitoring

Inyo County will monitor water quality along the river. Measurements will include temperature, dissolved oxygen, pH, and specific conductance and will be collected monthly except during the seasonal habitat flow, where measurements will be collected bi-weekly. County staff will summarize findings and generate a report. Inyo County will be responsible for the entirety of this work, which will take 12 person days.

Table 8 shows a total of 262 people-days budgeted for 6 adaptive management tasks, with Inyo County contributing 131 person-days and Los Angeles contributing 131 days.

Table 8. Adaptive Management Monitoring 2024-2025

Task #	Biological Monitoring	Days	Inyo Days	LA Days
1	BWMA Interim Management and Monitoring Plan - Monitoring and Reporting	60	24	36
2	Noxious species treatment	60	0	60
3	Tree recruitment assessment	35	35	0
4	Rapid Assessment of river	60	60	0
5	Aerial photo analysis of river	35	0	35
6	Water quality monitoring	12	12	0
	Total Person Days	**262**	**131**	**131**

References

Inyo County Water Department 2021. Type D Riparian Vegetation Monitoring Annual Status Report 2020. Accessed at: https://www.inyowater.org/wp-content/uploads/2021/08/TypeD_AnnualReport_2020_08242021_FINAL.pdf