INYO COUNTY/LOS ANGELES
STANDING COMMITTEE MEETING

October 15, 2020

AGENDA

INYO COUNTY/LOS ANGELES STANDING COMMITTEE

10:00 a.m.
October 15, 2020

Webex Webinar

The public will be offered the opportunity to comment on each agenda item prior to any action on the item by the Standing Committee or, in the absence of action, prior to the Committee moving to the next item on the agenda. The public will also be offered the opportunity to address the Committee on any matter within the Committee's jurisdiction prior to adjournment of the meeting.

NOTICE TO THE PUBLIC

In order to minimize the spread of the COVID-19 virus, Governor Newsom has issued Executive Orders that temporarily suspend certain requirements of the Brown Act. The Inyo County Water Department and Los Angeles Department of Water and Power offices are closed to the public, and the Standing Committee will conduct this meeting exclusively online. Inyo County and LADWP representatives will participate via videoconference accessible also to the public at: https://ladwp.webex.com/ladwp/j.php?MTID=m059259ee86854a3fb4f01c53de0fb28f

Individuals will be asked to provide their name and an email address in order to access the videoconference. Anyone who does not want to provide their email address may use ANY generic, non-functioning address such as: 123@123.com to gain access.

*Anyone wishing to make either a general public comment or a comment on a specific agenda item prior to the meeting, or as the item is being heard, may do so either in writing, or by utilizing the **"Raise hand" feature** when appropriate in the WebEx meeting (the meeting Chair will call on those who wish to speak). For individuals that dial into the WebEx and wish to make a public comment they may do so by pressing *3 to "**Raise Hand**". To lower your hand, press *3 once again. Written public comment, limited to **250 words or less**, may be emailed to: Francesca.Joven@ladwp.com . Your emailed comments may or may not be read aloud, but all comments will be made a part of the record. Please make sure to submit a separate email for each item that you wish to comment upon.*

1. **Action Item:** Approval of documentation of actions from the May 15, 2020 meeting.

2. Runoff and Operations update.

3. Status of Inyo-Los Angeles Water Agreement mitigation projects.

    a. Lower Owens River Project
    b. Blackrock Waterfowl Management Area
    c. McNally Ponds and Pasture Project
    d. Revegetation projects

4. Well 385 - Status Update
5. Schedule for future Standing Committee meetings.
6. Public Comment.
7. Adjourn.

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When it's time, join your Webex meeting here.

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Join meeting

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Standing Committee meeting protocols (Adopted May 11, 2011)

The Inyo/Los Angeles Long-Term Water Agreement (LTWA) define the Standing Committee in Section II:

As agreed by the parties, the Department representatives on the Standing Committee shall include at least one (1) member of the Los Angeles City Council, the Administrative Officer of the City of Los Angeles, two (2) members of the Board of Water and Power Commissioners, and three (3) staff members. The County representatives on the Standing Committee shall be at least one (1) member of the Inyo County Board of Supervisors, two (2) Inyo County Water Commissioners, and three (3) staff members.

The LTWA further provides that:

Regardless of the number of representatives from either party in attendance at a Standing Committee or Technical Group meeting, Inyo County shall have only one (1) vote, and Los Angeles shall have only one (1) vote.

The Standing Committee adopts the following protocol for future Standing Committee meetings.

1. In order for the Standing Committee to take action at a meeting, representation at the meeting will consist of at least four representatives of Los Angeles, including one member of the Los Angeles City Council or Water and Power Commission, and four representatives of Inyo County, including one member of the Board of Supervisors.

2. A Chairperson from the hosting entity will be designated for each meeting.

3. In the event that an action item is on the meeting agenda, Los Angeles and Inyo County shall each designate one member to cast the single vote allotted to their entity at the onset of the meeting. The Chairperson may be so designated. Agenda items that the Standing Committee intends to take action on will be so designated on the meeting agenda.

4. If representation at a Standing Committee meeting is not sufficient for the Standing Committee to act, the Standing Committee members present may agree to convene the meeting for the purpose of hearing informational items.

5. Meeting agendas shall include any item within the jurisdiction of the Standing Committee that has been proposed by either party.

6. The public shall be given the opportunity to comment on any agenda item prior to an action being taken. The public will be given the opportunity to comment on any non-agendized issue within the jurisdiction of the Standing Committee prior to the conclusion of each scheduled meeting. At the discretion of the Chairperson, reports from staff or reopening of public comment may be permitted during deliberations.

7. The Chairperson may limit each public comment to a reasonable time period. The hosting entity will be responsible for monitoring time during public comment.

8. Any actions taken by the Standing Committee shall be described in an action item summary memorandum that is then transmitted to the Standing Committee at its next meeting for review and approval. This summary memorandum shall also indicate the Standing Committee members present at the meeting where actions were taken.

9. Standing Committee meetings shall be voice recorded by the host entity and a copy of the recording shall be provided to the guest entity.

10. (Added February 24, 2012) The Standing Committee may also receive comments/questions in written form from members of the public. Either party may choose to respond, however, when responding to a public comment/question, whether verbally or in writing, any statements made by either party may represent the perspective of that party or the individual making the response, but not the Standing Committee as a whole (unless specifically agreed to as such by the Standing Committee). When either party responds in writing to public comment/question, that response will be concurrently provided to the other party.

INYO/LOS ANGELES STANDING COMMITTEE

Dedicated to the advancement of mutual cooperation

MEMORANDUM

Date: October 15, 2020

Subject: Documentation of Actions Taken by the Standing Committee at the May 15, 2020 Meeting.

The Standing Committee's policy is to document any actions taken by the Committee in a memorandum at the subsequent meeting. Standing Committee members present at the May 15, 2020 video conference meeting hosted by Inyo County were: Inyo County; Supervisors Rick Pucci and Matt Kingsley, Water Commissioners Teri Red Owl and Randy Keller, County Administrative Officer Clint Quilter, County Counsel Marshall Rudolph, and Water Director Aaron Steinwand; and for Los Angeles: Board of Water & Power Commissioners Susana Reyes and Nicole Neeman Brady; Chief Operating Officer Martin Adams, Senior Assistant General Manager for Water Richard Harasick, Director of Water Operations Anselmo Collins, Aqueduct Manager Clarence Martin, and Deputy City Attorney David Edwards.

Actions taken at the May 15, 2020 meeting, in the order considered by the Committee:

Agenda Item #1 - Approval of documentation of actions from the May 6, 2019 meeting

The Standing Committee approved the May 15, 2020 memorandum entitled: *Documentation of Actions Taken by Standing Committee at the May 6, 2019 Meeting.*

Agenda Item #4b – Lower Owens River Project – Setting seasonal habitat flow

The Standing Committee approved the Technical Group's recommendation for the LORP seasonal habitat flow.

Agenda Item #4d – Lower Owens River Project-Establishment of Blackrock Waterfowl Management Area flooded acreage

The Standing Committee approved the Technical Group's recommendation for the establishment of Blackrock waterfowl management area flooded acreage.

INYO/LOS ANGELES STANDING COMMITTEE

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MEMORANDUM

To: Inyo/Los Angeles Standing Committee

From: Inyo County/LADWP Staff

Date: October 15, 2020

Subject: Agenda Item 3a: Lower Owens River Project

The Lower Owens River Project (LORP) is a large-scale river and habitat restoration project, encompassing 78,000 acres of City of Los Angeles owned lands in the Owens Valley. It is identified as mitigation for the Los Angeles Department of Water and Power (LADWP) in the *1991 Environmental Impact Report, Water from the Owens Valley to Supply the Second Aqueduct 1970-1990, 1990 Onward, Pursuant to a Long -Term Groundwater Management Plan* (1991 EIR) and *1997 Memorandum of Understanding* (MOU). The project is further described in the *2004 Lower Owens River Project Environmental Impact Report* (2004 LORP EIR). A primary goal of the LORP is the establishment of a healthy, functioning Lower Owens riverine-riparian ecosystem. Other goals call for the establishment of a healthy functioning ecosystem in other physical features of the LORP for the benefit of biodiversity and threatened and endangered species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities (1997 MOU).

The four primary elements of the LORP include: (1) rewatering and maintaining continuous flow in 62 miles of river channel that was previously diverted, (2) enhancing/maintaining 325 acres in the Delta Habitat Area for shorebirds, waterfowl, and other animals, (3) enhancing/maintaining the 1500 acre Blackrock Waterfowl Management Area as habitat for waterfowl populations, and (4) maintaining several off river lakes and ponds within the project area. Habitats are to be created and maintained through flow and land management to the extent feasible. The project also includes land management activities to enhance agriculture and recreation within the project area (1997 MOU).

The LORP was implemented in 2006 by LADWP and is presently managed jointly by LADWP and Inyo County (County). Nearing the end of the LORP's prescribed 15-year monitoring program, LADWP and the County conducted a comprehensive evaluation of the project in 2019 to assess its status with respect to the goals and requirements defined by the guiding legal documents. Through this evaluation, a series of adaptive management actions were identified and are being pursued. During the 2020-2021 fiscal year, LADWP and the County are working on the following adaptive management actions to further improve the project:

- **Implementation of a five-year interim flow regime in the Delta Habitat Area and related monitoring.** This interim flow regime was implemented in April 2020 and is intended to further improve habitat conditions for migratory waterfowl and shorebirds. As designed, it will maintain required minimum baseflows during the growing season and redistribute summer and winter pulse flows to fall and spring in order to maximize open water during migratory periods and promote a shift in the vegetation community to more desirable species. In fiscal year 2020-2021, LADWP and the County are conducting avian surveys and remote sensing analysis of vegetation to assess wildlife and vegetation response to the modified flow regime.
- **Development of a Blackrock Waterfowl Management Area Interim Management and Monitoring Plan (BWMA Plan).** LADWP and the County are working to develop a five-year interim plan to further improve habitat conditions in the BWMA that will incorporate a seasonal flooding regime of the waterfowl units rather than year round flooding required by the guiding documents. This plan is under development for possible implementation in 2021. (*More information on this under Agenda Item 3b.)*
- **Revision of Indicator Species & Avian Habitat Models.** The County and LADWP will conduct a focal species analysis to evaluate avian community response to restoration and develop a habitat relationship model using existing data to replace the current model for the LORP. The new model will be used for predictive habitat suitability mapping of Habitat Indicator Species in the LORP.
- **Conducting a tamarisk beetle study.** LADWP is conducting a study to track the spread of the tamarisk beetle (*Diorhabda carinulata*) and document its effectiveness in controlling saltcedar (*Tamarisk ramosissima)* in the LORP area.
- **Conducting a tree recruitment assessment.** The County will conduct a tree recruitment assessment to predict potential tree establishment locations for native riparian trees including black willow (*Salix gooddingii*), red willow (*Salix laevigata*), or Fremont cottonwood (*Populus fremontii*). The assessment will describe conditions which have permitted historic tree establishment during pre-project conditions on the LORP, conditions which have permitted the limited recruitment since project inception, and concurrent biological processes which may be inhibiting current germination and establishment.
- **Conducting migratory bird surveys on river.** LADWP and the County will conduct migratory bird surveys on the Lower Owens River to document use of the LORP as migration stopover habitat, which has not been captured to date by the project's monitoring protocols in the LORP Monitoring and Adaptive Management Plan.
- **Conducting a noxious species survey and treatment.** The County and LADWP will conduct a noxious weed survey and increase treatment efforts of perennial pepperweed (*Lepidium latifolium*) within the LORP during fiscal year 2020-2021.

These adaptive management activities are in addition to the regular operations, maintenance, and monitoring required by the project. LADWP and the County continue to work together through joint management of this project.

INYO/LOS ANGELES STANDING COMMITTEE

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MEMORANDUM

To: Inyo/Los Angeles Standing Committee

From: Inyo County/LADWP staff

Date: October 15, 2020

Subject: Agenda Item 3b: Blackrock Waterfowl Management Area

The 1,500-acre Blackrock Waterfowl Management Area (BWMA) is one of the four physical features of the Lower Owens River Project (LORP), implemented by the Los Angeles Department of Water and Power (LADWP) and managed jointly by LADWP and Inyo County (County) post-implementation. The goal of the BWMA is to "*maintain this waterfowl habitat area to provide the opportunity for the establishment of resident and migratory waterfowl populations as described in the EIR and to provide habitat for native species. Diverse natural habitats will be created and maintained through flow and land management, to the extent feasible, consistent with the needs of the "habitat indicator species" for the Blackrock Waterfowl Habitat Area. These habitats will be as self-sustaining as possible*" (1997 MOU).

Section II.C.4 of the 1997 MOU defines that the BWMA will be managed in the following manner: *"Approximately 500 acres of the habitat area will be flooded at any given time in a year when the runoff to the Owens River Watershed is forecasted to be average or above. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the forecasted runoff in the watershed…"*

The LORP was implemented in 2006 and the acreage flooded in the BWMA has been set every year by the Standing Committee through a process defined in the LORP Post-Implementation Funding Agreement and the 1997 MOU. Since implementation, management of BWMA under this legal direction has created and maintained waterfowl habitat as intended, but has also resulted in considerable cattail and bulrush encroachment, reduced open water in the units, and a subsequent decline in habitat quality following the first year of flooding each waterfowl unit.

In 2019, LADWP and the County conducted a comprehensive evaluation of the LORP to assess its status with respect to the goals and requirements defined by the guiding legal documents. Through this evaluation, a series of adaptive management recommendations were identified and are being pursued. During the 2020-2021 fiscal year, LADWP and the County are developing a five-year BWMA Interim Adaptive Management and Monitoring Plan (BWMA Plan) to further improve habitat conditions.

The BWMA Plan will incorporate habitat management recommendations to transition from year-round flooding to seasonal flooding. This will increase the extent of open water and reduce the extent of cattail and bulrush in the BWMA, which is predicted to improve habitat quality for waterfowl and shorebirds. This concept was raised at the 2014 LORP River Summit, various LORP Annual Reports, and is generally supported by the MOU Parties.

The BWMA Plan will be drafted in fiscal year 2020-2021 by LADWP and the County for consideration by the MOU Parties. MOU Party concurrence will be required prior to implementation of the plan. A monitoring plan to coincide with the interim management plan will also be developed.

INYO/LOS ANGELES STANDING COMMITTEE

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MEMORANDUM

Date	October 15, 2020
To:	Inyo/Los Angeles Standing Committee
From:	Inyo County/LADWP staff
Subject:	Background regarding McNally Ponds and Pasture Enhancement/Mitigation (E/M) Project.

Recommendation

Staff recommends that the Technical Group prepare a report to the Standing Committee evaluating the McNally Ponds portion of the E/M project including possible improvements or alternatives to the project.

Background

The McNally Ponds and Native Pasture E/M Project (Project) was one 26 E/M Projects developed in the 1980s and included in the Long-Term Water Agreement's 1991 EIR. The project mitigates for significant adverse vegetation decreases and changes in Laws due to a combination of factors. The Project description was provided in the Laws/Poleta Area E/M Projects CEQA Initial Study:

> *Approximately 60 acres of ponds located south of the Lower McNally Canal and west of U.S. Highway 6, will be provided water annually during the waterfowl season September through January. Water will be diverted through existing ditches and headgates from the Lower McNally Canal*. (Section 17, T6S, R33E).
>
> *Approximately 300 acres of native pasture will be provided water from existing diversion from the Lower McNally Canal within Sections 16 and 35, T6S, R33E, and MDB&M during the growing season April through September*.

Figure 1 shows the Project components in the Laws wellfield, related production wells, and diversions relevant to the ponds and pasture located west of U.S. Highway 6. The current management and water supply for the pasture in the southeastern portion of the Laws wellfield meets the project goals and should continue. The ponds and pasture west of the highway often have not been supplied with water.

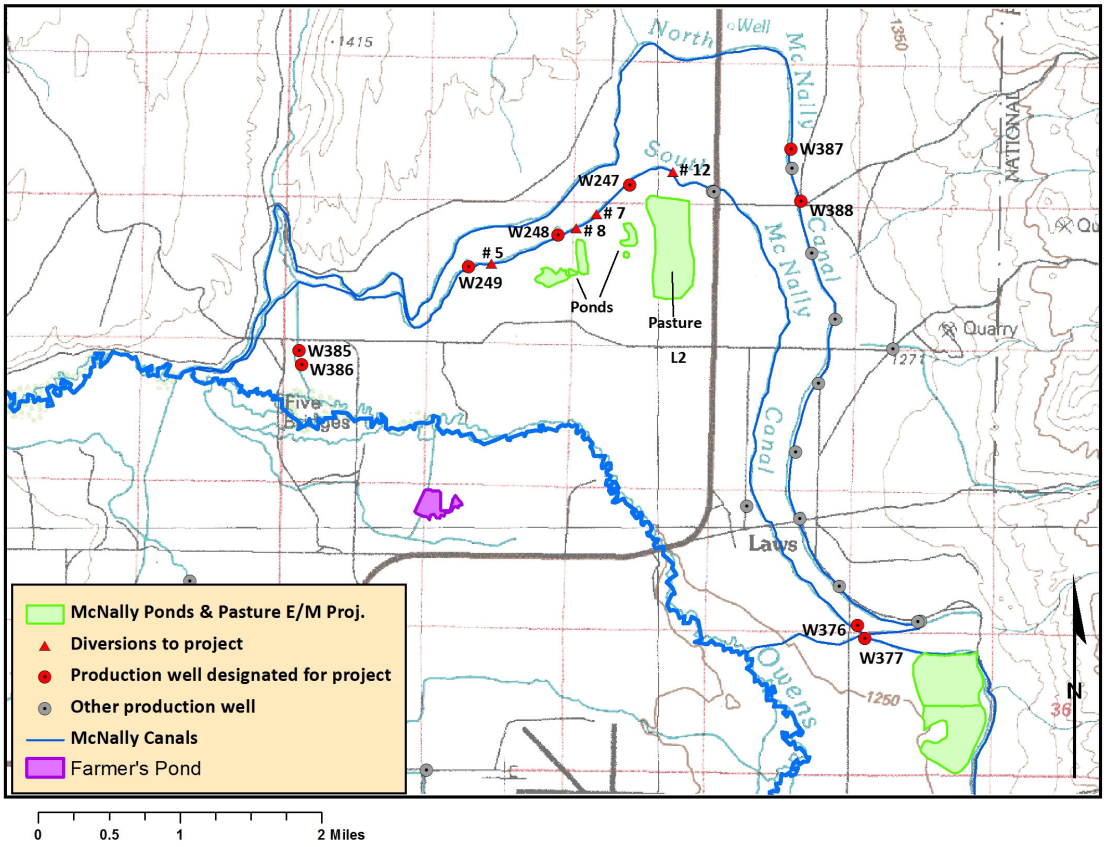

Figure 1. Major features of the Laws well field, including McNally Ponds and Pasture E/M Project, and production wells associated with the project and other irrigation in Laws.

The pasture west of U.S. 6 can be supplied in summer by well 247W or Owens River water diverted into the lower McNally canal. The ponds can be supplied by the Lower McNally canal or by wells 248W and 249W. Wells that can provide water directly to the project are linked to monitoring site Laws 1, which during drought conditions can enter Off-status according to Green Book procedures. In dry years, LADWP typically does not divert water into the McNally canals which have significant conveyance losses. The project has been supplied using water from the Owens River diverted into the Lower McNally Canal in some high runoff years, but the requirement for water delivery to the ponds in the fall typically occurs after most diversions for water spreading or aqueduct operations cease.

The primary challenges for the ponds and pasture west of the Highway 6 have been reliable water supply, low value of the created habitat, and pumping to supply the project in an area of Laws with vegetation concerns. The ponds have been partially or fully supplied with water in approximately 11 of the last 30 years. Although the ponds are used for hunting occasionally, the habitat value of the pond and associated vegetation is minimal. Given the low habitat value and lack of reliable water supply, the Standing Committee has often agreed to not supply the ponds or pasture in drought years in accordance with Section IV.A of the Water

Agreement or to reduce pumping near groundwater dependent vegetation in the Laws wellfield.

The pasture was supplied this summer with pumped water from well 247W, and currently the ponds are being supplied with pumped water from wells 248W and 249W. History has shown that the water supply for the Project is secure only until the next drought. It may be advantageous for the Technical Group to evaluate the project and potential alternatives before the Standing Committee is faced with pressing water supply decisions again as in 2012-2016.

In 2016, staff scouted for alternative locations that would provide better habitat and recreation value with fewer water supply difficulties. Two alternatives for seasonal waterfowl ponds were suggested. The first would use surface water from the Bishop Creek Canal to increase ponded acreage in basins located east of Farmer's pond. A second alternative would divert water from the Bishop Creek Canal in the vicinity of the C-Drain north of Riverside Road to seasonally flood an existing shallow spreading basin. Both locations have existing water conveyance and water retaining infrastructure and have been used by LADWP for water spreading. These alternative ponds are located within a few miles of the McNally Ponds and their setting and existing vegetation conditions suggest a greater potential for increased habitat value while remaining water neutral. These initial concepts have not been evaluated in detail by the Technical Group; however, review of existing data suggests that the project may be compatible with current surface water operations of the Bishop Creek canal and delivery ditches. An operational test would be required to assess if the alternatives are feasible.

INYO/LOS ANGELES STANDING COMMITTEE

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MEMORANDUM

To: Inyo/Los Angeles Standing Committee

From: Inyo County/LADWP Staff

Date: October 15, 2020

Subject: Agenda Item 3d: Revegetation

LADWP is responsible for revegetating approximately 1,100 acres in the Owens Valley as a result of impacts caused from groundwater pumping and abandoned agriculture tied to the City's past water gathering activities. Mitigation of these areas is identified in the *1991 Environmental Impact Report, Water from the Owens Valley to Supply the Second Aqueduct 1970-1990, 1990 Onward, Pursuant to a Long -Term Groundwater Management Plan* (1991 EIR) and the *2003 Irrigation Project in the Laws Area* (Laws Type E Transfer). Goals and success criteria for sites identified in the 1991 EIR are further described in the *1999 Revegetation Plan for Impacts Identified in the LADWP, Inyo County EIR for Groundwater Management* (1999 Revegetation Plan). Goals and success criteria for the Laws Type E Transfer parcels are described in the *Revegetation Plans for Lands Removed from Irrigation Laws Parcels 90, 95, and 129 and Abandoned Agricultural Land Parcel 118* (2003 Laws Revegetation Plan). The 1999 Revegetation Plan acknowledges that its dryland revegetation goals are expected to take 15-20 years to achieve, especially if activities are ongoing.

Under the 1991 EIR and Laws Type E Transfer, there are 20 revegetation projects in the Laws, Bishop, Big Pine, Tinemaha, Blackrock, and Independence areas. To date, LADWP has fully implemented and made progress on all of these projects. Of these,

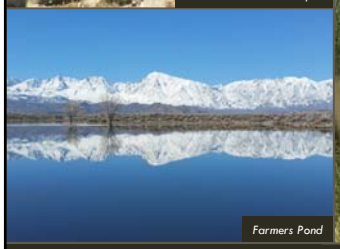
- 7 projects have met both percent cover and species richness requirements
- 6 have met either percent cover requirements *or* species richness requirements (*but not yet both*)
- 7 are fully implemented but have not yet met goals.

Given timelines described in the Laws Type E Transfer, LADWP has prioritized revegetation efforts at those parcels (approximately 250 acres plus a native seed farm) and has made considerable progress at those sites. To meet revegetation goals, LADWP operates two commercial greenhouses and produces up to 36,000 native plants annually. LADWP Watershed Resources and Construction staff (with assistance from Calfire) implement two large scale planting efforts annually (each spring and fall) to meet mitigation goals. Conditions for growing native plants are particularly harsh in areas like Laws, and these projects have been met with many challenges. Presently, the sites are equipped with buried drip irrigation to assist in plant establishment and plants are

surrounded by biodegradable cages to protect them from wind shear and rodent herbivory.

LADWP has also implemented all revegetation methods identified in the 1999 Revegetation Plan to promote natural reestablishment in the areas required under the 1991 EIR. These methods included eliminating disturbances, seeding and using containerized plants, preparing the seedbed prior to seeding, amending the soil, application of mulch, and using protective cages. Additional strategies that have been employed by LADWP include use of the Landlife Cocoon Planting System (reservoir for individual plants), use of hay bales and sand fences for wind protection, application of fertilizer to planting sites, and alternative methods of irrigation. LADWP has plans to inject a portion of the LAW118 parcel with drip irrigation and plant at that site in 2021.

LADWP has put forth extensive effort to meet these mitigation goals yet some sites are still a work in progress. LADWP remains committed to reaching revegetation goals required under the 1991 EIR and Laws Type E Transfer.



LADWP OWENS VALLEY MITIGATION PROJECTS AND OTHER LEGAL COMMITMENTS

Lori Dermody, LADWP
Larry Freilich, ICWD

HISTORY

LADWP is responsible for environmental mitigation and other commitments tied to the City of Los Angeles' past and present water gathering activities from Inyo County. These are outlined in:

- 1991 Environmental Impact Report
- Inyo/Los Angeles Water Agreement
- 1997 Memorandum of Understanding
- Related Stipulations and Orders

From these guiding documents, LADWP has 113 environmental mitigation and other legal commitments:

- 64 "on the ground" projects
- 49 other legal commitments

LADWP ENVIRONMENTAL MITIGATION PROJECTS

- Recreation Projects
- Community-Based Projects
- Spring/Wildlife Enhancement Projects
- Native Revegetation and Other Regreening Projects
- Lower Owens River Project

RECREATION PROJECTS

Lone Pine Riparian Park

Saunders Pond

Rawson Pond #2

Millpond

COMMUNITY-BASED PROJECTS

Lone Pine Sports Complex

Independence Wood Lot

Independence Roadside Rest Area

Eastern California Museum

SPRING/WILDLIFE ENHANCEMENT PROJECTS

Little Blackrock Springs

Homestead Project

Well 349 pond

Warren Lake

NATIVE REVEGETATION PROJECTS

Bishop Area Revegetation Project

Five Bridges Mitigation Area

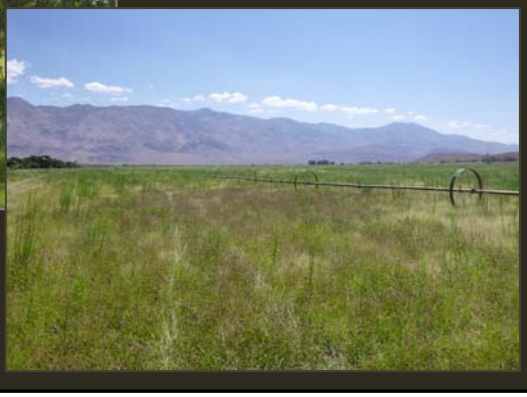
LADWP Greenhouse

LAW094 Revegetation Parcel

OTHER REGREENING PROJECTS

Shepherd Creek Alfalfa Field

Lone Pine East Side Regreening



Tule Elk Field

LOWER OWENS RIVER PROJECT

Blackrock Waterfowl Management Area

Under the guiding documents, LADWP has 49 Other Legal Commitments including:

- Various Plans and Related Activities
  - Owens Valley Land Management Plan
  - Habitat Conservation Plan
  - Yellow Billed Cuckoo Habitat Enhancement Plan
- Release of City-Owned Lands
- Various Studies
- Funding
  - Water Systems
  - General Financial Assistance
  - Park Rehabilitation, Development, and Maintenance
  - Water and Environmental Activities
  - Salt Cedar

OTHER LEGAL COMMITMENTS

STATUS OF LADWP MITIGATION PROJECTS AND OTHER LEGAL COMMITMENTS

LADWP MITIGATION PROJECT STATUS

1991 EIR Mitigation	1991 EIR Environmental Projects	1991 EIR E/M Project	Revised Project	1997 MOU	LADWP MITIGATION PROJECT COMMITMENTS	Completed	Implemented as Required [2]	Implemented and Ongoing [3]	Fully Implemented Not Met Goals [4]	Not Fully Implemented [5]
				X	Aberdeen Ditch Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X[7]		
X	X				Big and Little Seely Springs (1 acre pond near Well W349; EIR Impact 10-14, EIR Table 5-2)			X		
X			X		Big Pine Area Revegetation Project (160 acres; EIR Impact 10-19)				X	
X			X		Big Pine Area Revegetation Project (20 acres; EIR Impact 10-19)				X	
X					Big Pine Ditch System (EIR Impact 10-19)			X		
X		X	X		Big Pine Northeast Regreening (30 acres; EIR Impact 10-11, EIR Table 5-3)			X		
X			X		Bishop Area Revegetation Project (124 acres; EIR Impact 10-16)				X	
X			X		Blackrock 16E Revegetation Project (EIR Impact 10-11)	X[7]				
X	X				Blackrock Hatchery (EIR Impact 10-14)			X		
X	X				Buckley Ponds (EIR Impact 10-5 and 11-1, EIR Table 5-2)			X		
X	X				Calvert Slough (EIR Impact 10-5, EIR Table 5-2)			X		
X	X			X	Diaz Lake (EIR Table 5-2, Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X		
X		X			Eastern California Museum (EIR Tables 4-3 and 5-3)			X		
X	X				Farmers Pond (EIR Impact 10-5, 10-18, 11-1, EIR Table 5-2)			X		
X	X				Fish Springs Hatchery (EIR Impact 10-14)			X		
X			X		Five Bridges Area Revegetation Project (300 acres; EIR Impact 10-12)	LA			IC	
				X	Freeman Creek Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X[7]		
X				X	Hines Spring (1 to 2 acres, EIR Impact 10-14), implemented as the Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3)			X		
X			X		Hines Spring South (EIR Impact 10-11)				X	
				X	Hines Spring Well 355 Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X[7]		
				X	Homestead Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X		
X			X		Independence 105 (EIR Impact 10-13)	X[7]				
X			X		Independence 123 (EIR Impact 10-13)	X[7]				
X			X		Independence 131 (EIR Impact 10-13)			X		
X		X			Independence Ditch System (EIR Table 4-3)			X		
X		X			Independence East Side Regreening Project (23 acres; EIR Impact 10-11, EIR Table 5-3)			X		
X		X			Independence Pasturelands and Native Pasturelands (610 acres; EIR Impact 12-1, EIR Tables 4-3 and 5-3)			X		
X		X			Independence Roadside Rest Area (0.5 acres; EIR Tables 4-3 and 5-3)			X		
X		X			Independence Springfield (286 acres; EIR Impact 12-1, EIR Tables 4-3 and 5-3)			X		
X		X			Independence Woodlot (20 acres; EIR Impact 10-11, EIR Table 4-3)			X		
X	X	X			Klondike Lake Aquatic Habitat (160 acres; EIR Impact 10-5 and 11-1, EIR Tables 4-3, 5-2, and 5-3)			X		
					Klondike SSHA (Big Pine Ditch System MND)			X[7]		
			X		LAWS 118 (19 acre portion) (Laws Type E Transfer MND)				X	
			X		LAWS 129 (Laws Type E Transfer MND)				X	
			X		LAWS 27 (Native Seed Farm) (Laws Type E Transfer MND)				X	
			X		LAWS 90 (Laws Type E Transfer MND)				X	
			X		LAWS 94 (Laws Type E Transfer MND)				X	
			X		LAWS 95 (Laws Type E Transfer MND)				X	
X			X		Laws Area Revegetation Project (140 acres; EIR Impact 10-18)				X	
X		X			Laws Historical Museum Pasturelands (21+15 acres; EIR Impact 10-18, EIR Table 5-3)			X		
X		X			Laws/Poleta Native Pasture (216 acres; EIR Impact 10-16, EIR Tables 4-3 and 5-3)			X		
X	X				Little Blackrock Springs (EIR Impact 10-14, EIR Table 5-2)			X		
X		X			Lone Pine East Side Regreening (11 acres; EIR Impact 10-16, EIR Table 5-3)			X		
X		X			Lone Pine-North Lone Pine Clean Up (EIR Table 4-3)	X				
X		X			Lone Pine Riparian Park (320 acres, EIR Tables 4-3 and 5-3)			X		
X		X			Lone Pine Sports Complex (EIR Table 5-3)	X				
X		X			Lone Pine West Side Regreening (8 acres; EIR Impact 10-16, EIR Tables 4-3 and 5-3)			X		
X		X			Lone Pine Woodlot (12 acres; EIR Impact 10-11, EIR Table 4-3)			X		
X	X	X		X	LORP Project (60 miles, perhaps more than 1,000 acres)/ Lower Owens Rewatering Project)			LA	IC[6]	
X		X			McNally Ponds and Native Pasturelands (300 acres pasture, 60 acres ponds; EIR Impact 10-5 and 10-18, EIR Tables 4-3, 5-3)			X[7]		
X	X	X			Millpond Recreation Area (EIR Impact 10-5, EIR Table 5-2 and 5-3)			X		
				X	North of Mazourka Canyon Road Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X		
X					Reinhackle Spring (EIR Impact 10-14)			X		
X		X			Richards Fields (160 acres; EIR Impact 10-16, EIR Table 4-3)			X		
X	X				Saunders Pond (EIR Impact 10-5, EIR Table 5-2)			X		
X		X			Shepherd Creek Alfalfa Field (198 acres; EIR Impact 10-11, EIR Tables 4-3 and 5-3)			X		
X		X			Shepherd Creek Potential (60 acres; EIR Impact 10-11, EIR Table 5-3)	X				
X					Steward Ranch (EIR Impact 9-14)	X				
X			X		Tinemaha 54 Revegetation Project (EIR Impact 10-11)				X	
X		X			Tree Planting along Roadways (EIR Table 4-3)			X		
X	X				Tule Elk Field (EIR Table 5-2)			X		
X		X			Van Norman Fields (170 acres; EIR Impact 10-16, EIR Table 4-3)			X		
				X	Warren Lake Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X		
				X	Well 368 Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			X		

LADWP OTHER LEGAL COMMITMENTS

Water Agreement	91 EIR	91 EIR E/M Project	Revegetation Project Other Agreement	97 MOU	LADWP OTHER LEGAL COMMITMENTS	Completed [1]	Ongoing as Necessary and Required [2]	Implemented and Ongoing [3]	Fully Implemented But Not Meeting Goals [4]	Not Fully Implemented [5]
				X	Aerial Photo Analysis (MOU Section III.E)	X				
				X	Annual Report on the Owens Valley (MOU Section III.H)			X		
			X		Blackrock 94 Burns (2014 Stipulation)			X		
X					Cooperative Studies (Water Agreement Section IX)			X		
X					Dispute Resolution (Water Agreement Section XXVI)		X			
				X	Dispute Resolution and Litigation (MOU Section VI)		X			
X					Enhancement/ Mitigation Projects (Water Agreement Section X)			X		
X					Exchange of Information and Access (Water Agreement Section XVII)			X		
X					Financial Assistance- Big Pine Ditch System (Agreement Section XIV.E)			X		
X					Financial Assistance- General Financial Assistance to the County (Water Agreement Section XIV.D)			X		
X					Financial Assistance- Park & Environmental Assistance to City of Bishop (Water Agreement Section XIV.F)			X		
X					Financial Assistance- Park Rehabilitation, Development, & Maintenance (Water Agreement Section XIV.B)			X		
X					Financial Assistance- Salt Cedar Control (Water Agreement Section XIV.A)			X		
X					Financial Assistance- Water and Environmental Activities (Water Agreement Section XIV)			X		
				X	Financial Provisions (MOU Section IX)	X				
				X	Fish Slough (MOU Section IV)			X		
X					Groundwater Management (Water Agreement Section II)			X		
X					Groundwater Pumping on the Bishop Cone (Water Agreement Section VII)			X		
X					Groundwater Recharge Facilities (Water Agreement Section VIII)		X			
				X	Habitat Conservation Plan (MOU Section III.B)	X				
X					Haiwee Reservoir (Water Agreement Section XIII)	LA				IC
				X	Inventory of Plants and Animals at Spring and Seeps (outside LORP Planning Area) (MOU Section III.C)	X				
	X				Laws Area Potential Mitigation-Consideration by Standing Committee (640 acres; EIR Impact 10-18)		X			
X					Legislative Coordination (Water Agreement Section XVI)			X		
				X	LORP Agency Consultation and Public Involvement (MOU Section II.D)	X				
				X	LORP EIR (MOU Section II.F)	X				
				X	LORP Implementation (MOU Section II.H)	X				
				X	LORP Monitoring and Adaptive Management Plan (MOU Section II.E)			X		
				X	LORP Permits Approvals and Licenses (MOU Section II.I)	X				
				X	LORP Plan (MOU Section II.A)	X				
				X	LORP Planning Area- Inventory of Plants and Animals at Spring and Seeps (MOU Section III.A.2)	X				
				X	LORP Pumpback System (MOU Section II.G)	X				
				X	Lower Owens Off River Lakes and Ponds (MOU Section II.C.3)			X		
X					Lower Owens River (financial commitment) (Water Agreement Section XII)			X		
				X	Lower Owens River Delta Habitat Area (MOU Section II.C.2)			X		
				X	Lower Owens River Project 1500-Acre Blackrock Waterfowl HHabitat Area (MOU II.C.4)			X		
				X	Lower Owens River Riverine- Riparian System (MOU Section II.C.1)			X		
				X	Mitigation Plans for Impacts Identified in the 1991 EIR and the Water Agreement (MOU III.F)					X
X					New Wells & Production Capacity (Water Agreement Section VI)					X
X					Owens River Recreational Use Plan (Water Agreement XV.B)					X[6]
				X	Owens Valley Land Management Plans (MOU Section III.B)			X		
X					Release of City Owned Lands - Lands for Public Purposes (Water Agreement Section XV.D)		X			
X					Release of City Owned Lands- Bishop (Water Agreement Section XV.B)	X				
X					Release of City Owned Lands- Inyo County (Water Agreement Section XV.A)	X				
X					Release of City-owned lands- Additional Sales (Water Agreement Section XV.C)	X				
				X	Technical Group Meetings (MOU Section III.G)		X			
X					Town Water Systems (Water Agreement Section XI)	X				
				X	Type E Vegetation Inventory (MOU Section III.D)	X				
				X	Yellow-billed Cuckoo Habitat (MOU Section III.A.1)			X[7]		

INYO/LOS ANGELES STANDING COMMITTEE

Dedicated to the advancement of mutual cooperation

MEMORANDUM

To:	Inyo/Los Angeles Standing Committee
From:	Inyo County/ LADWP Staff
Date:	October 15, 2020
Subject:	Item 4: Well W385 Status Update

Background:

Wells W385 and W386 were drilled in March 1987 in an active gravel mining operation. As originally designed, these wells were screened from 50-550 feet below ground surface (bgs) in both shallow and deep aquifers zone. Approximately 8,800 acre-feet (AF) of pumping from wells W385 and W386 occurred between 1987 and 1989. Groundwater levels in the surrounding shallow aquifer were lowered and, as a result, approximately 300 acres of groundwater-dependent vegetation, now known as the Five Bridges Area, was impacted by operation of these wells. Therefore, LADWP stopped operating these wells and mitigation measures related to these impacts were included in the 1991 FEIR.

In 1993 a series of shallow monitoring wells were installed in the Five Bridges area and a 62-day pumping test of W385 and W386 was conducted from November 1993 to January 1994. Both wells were pumped simultaneously with a combined pumping rate of 16.3 cubic-feet-per-second (cfs) and a total of 2,095 AF was pumped. Water levels were monitored in both shallow and deep monitoring wells located on the north and south sides of the Owens River. Pumping W385 and W386 immediately affected groundwater levels in all monitoring wells on both sides of the Owens River, confirming the significant effect of pumping in the original impact area. Inyo and Los Angeles agreed in 1999 to permanently shut off the two production wells.

LADWP modified W385 and W386 in 2014 (see Appendix A of LADWP's "*Owens Valley Well Modification Project, January 2015"*) by injecting cement grout into the upper

screened sections and sealing both wells to depths greater than 300 feet bgs. After sealing the shallow portion of the screen, a 24-hour pumping test was conducted at each of these wells. Results indicated a substantial reduction in the pumping capacity of these wells (from 10.1 cfs to 3.7 cfs in W385 and from 6.2 cfs to 2.8 cfs in W386).

Operational Test of W385:

To evaluate potential impacts of operating modified W385, ICWD and LADWP conducted a 64-day pumping test from December 16, 2019 to February 18, 2020. A total of 463 AF was pumped from W385 at an average rate of 3.7 cfs. Groundwater level drawdown "trigger levels" were set to protect groundwater-dependent vegetation and a non-LADWP domestic well from potential, but unanticipated, pumping impacts during the test. If groundwater levels dropped below a given trigger level, pumping would cease. Trigger Levels were set in six monitoring wells in early December 2019 by ICWD, LADWP and CDFW staff. None of these trigger levels were exceeded during the test, and the pumping test complied with the relevant regulatory strictures.

Data was collected before and after the test using manual and continuous recorders and was summarized in the *"Production Well W385 in Laws Wellfield Two-Month Pumping Test, April 2020"* which was presented at the Technical Group in May 2020. This fall, LADWP and ICWD have each written an additional report with more thorough analysis of the W385 data. These reports will be available on LADWP and ICWD web pages. Staffs agree in general terms that the reduction in pumping amount and the deeper screen interval reduced the drawdown associated with pumping W385. Additional findings include:

- The water-table remained within the 6.5-foot (2-meter) rooting zone throughout the test in shallow monitoring wells located adjacent to phreatophytic meadow vegetation at the Five Bridges Mitigation Site and in Fish Slough.
- Less than one-foot of drawdown was observed in the shallow aquifer north of the Owens River during the 2019/20 test. Little or no drawdown was observed in the shallow aquifer south of the Owens River in the Five Bridges Mitigation Site, or in Fish Slough.
- Drawdown in the deep aquifer zone was observed both north and south of W385, including at the mouth of Fish Slough. No drawdown was observed at wells located 1.8 miles to the west, and results were inconclusive in wells located to the east. Groundwater levels in the deeper aquifer zones approached steady state within

approximately one to two weeks of pumping with over 90% recovery within few days.

- Results indicate that there is “leaky” or partial vertical confinement between the deeper and shallow aquifer zones in the vicinity of W385.
- Vegetation data collected during summer 2020 is still being analyzed.
- LADWP spread the same volume of water that was pumped during the test on the Five Bridges Area, south of Owens River during the 2020 irrigation season.