

## **Draft 2026 Annual Report**

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**ABBREVIATIONS, DEFINITIONS, AND MEMBERSHIP TABLE**

1991 EIR	Environmental Impact Report regarding water from the Owens Valley to supply the second LAA from 1970-1990, and from 1990 onward pursuant to the Water Agreement
1997 MOU	1997 Memorandum of Understanding between the MOU Parties
ACEC	Area of Critical Environmental Concern
ACOE	United States Army Corp of Engineers
AF	Acre-feet
AFY	Acre feet per year
BLM	United States Bureau of Land Management
BWMA	Blackrock Waterfowl Management Area
CALFire	California Department of Forestry and Fire Protection
CalTrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife (formerly "...Fish and Game")
cfs	Cubic feet per second
City	City of Los Angeles
County	County of Inyo
E/M	Enhancement/Mitigation
Eastern Sierra Runoff	Runoff within Mono Basin, Long Valley, and Owens Valley
GBUAPCD	Great Basin Unified Air Pollution Control District
Green Book	Technical Appendix to Water Agreement and 1991 EIR
Hillside Decree	August 1940 Stipulation and Order in the case of Hillside Water Company, a corporation et al. vs. the City, a Municipal Corporation et al., which established provisions governing groundwater exports from the Bishop Cone.
HCP	Habitat Conservation Plan
ICWD	Inyo County Water Department
LAA	Los Angeles Aqueduct
Laws Type E transfer	Native revegetation projects of abandoned agriculture on City property, in the Laws area of Owens Valley
LADWP	City of Los Angeles Department of Water & Power
Long Valley	Area south of Mono Basin, from Owens River headwaters to Long Valley Dam, contained within Mono County
LORP	Lower Owens River Project
MAMP	Monitor and Adaptive Management Plan

Mono Basin	Mono Lake watershed area, contained within Mono County
Mono Basin Runoff	Runoff in Mono County that generally drains towards Mono Lake
MOU Parties	Los Angeles Department of Water and Power, Inyo County, California Department of Fish and Wildlife, California State Lands Commission, Sierra Club, Owens Valley Committee
MWD	Metropolitan Water District of Southern California
NRCS	U.S. Department of Agriculture - Natural Resources Conservation Service
Operations Plan	Annual Owens Valley Report
OVC	Owens Valley Committee
OVLMP	Owens Valley Land Management Plan
Owens River Basin Runoff	Runoff that generally drains to the Owens River within Long Valley and Owens Valley
Owens Valley	Area from Round Valley to Haiwee Reservoir, contained within Inyo County
Owens Valley Runoff	Runoff within Owens Valley and contained within Inyo County that generally drains towards the Owens River
Plan 2003	The Revegetation Plans for Lands Removed from Irrigation, Laws Parcels 90, 95, and 129 and Abandoned Agricultural Land Parcel 94
RY	Runoff year (April 1 to following March 31)
SC	Sierra Club
SLC	California State Lands Commission
SWRCB	California State Water Resources Control Board
2004 and 2010 Stip and Orders	August 2004 and March 2010 Amended Stipulations and Orders in Case No. S1CVCV01 29768
Standing Committee	Comprised of elected and appointed officials from the City and County
Technical Group	Comprised of County and City staff
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
Water Agreement	Agreement between the County of Inyo and the City of Los Angeles and its Department of Water and Power on a Long-Term Groundwater Management Plan for Owens Valley and Inyo County, administered by the Standing Committee and Technical Group
YBC	Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )

## EXECUTIVE SUMMARY

This report includes LADWP's proposed RY 2026-27 Operations Plan, an update on Owens Valley conditions, and the status of LADWP's environmental mitigation projects and other legal commitments under the Water Agreement, 1991 EIR, the Laws Type E Transfer, 1997 MOU, and the 2004 and 2010 Stip and Orders.

The Water Agreement provides that by April 20<sup>th</sup> each year, LADWP will prepare and submit to the Technical Group a proposed operations plan and pumping program for the 12-month period beginning on April 1st. Additionally, Section 11 of the 2004 Stip and Order requires that on or about May 1 of each year LADWP shall complete and release an annual report in conformance with Section III.H of the 1997 MOU. This report will describe environmental conditions in the Owens Valley and studies, projects, and activities conducted under the Water Agreement and the 1997 MOU.

This Operations Plan is intended to fulfill these requirements.

### 1. Owens Valley Operations Plan for RY 2026-27

Section 1 of this report contains LADWP's Annual Operations Plan for RY 2026-27. As mentioned above, pursuant to Water Agreement Section V.D:

*By April 20th of each year, the Department shall prepare and submit to the Inyo County Technical Group a proposed operations plan and pumping program for the twelve (12) month period beginning on April 1st.*

The Eastern Sierra experienced below average snowpack in winter preceding April 1, 2026. The forecasted Owens River Basin runoff is 322,300 AF or 79% of normal.

LADWP plans to export approximately 227,000 AF of water from the Eastern Sierra. Approximately 66,000 AF of export will come from the Owens Valley water supply. Uses in the Owens Valley on City-owned lands are planned to be 95,040 AF, of which 46,790 AF is intended for irrigation. Additional water uses will include dust mitigation on Owens Lake.

LADWP groundwater pumping in the Owens Valley is governed by the ON/OFF provisions of the Water Agreement. Accordingly, approximately 225,100 AF of water is available for groundwater pumping from Owens Valley wellfields, but LADWP's planned groundwater pumping ranges from 54,310 to 81,360 AF.

### 2. Conditions in the Owens Valley

The overall Eastern Sierra snowpack in watersheds contributing to the LAA is measured at 24% of normal as of April 1, 2026. Precipitation on the Owens Valley floor during the 2025-26 RY averaged 8.2 inches, which was 145% of the long-term average of 5.6 inches.

The groundwater levels in the Owens Valley decreased by an average of 0.39 feet during the 2025-26 runoff year.

The Lower Owens River was in full operational status meeting the minimum average flows required at all gauging stations. The Lower Owens River, the Delta, Blackrock Waterfowl Management Area, and other LORP uses were about 17,900 AF.

### 3. LADWP Environmental Mitigation Projects and Other Legal Commitments

Section 3 of this report provides information on all of LADWP's Mitigation Projects and other legal commitments required under the Water Agreement, 1991 EIR, the 1997 MOU, and related documents.

Tables 3.1 and 3.2 provide a quick reference guide to these commitments. For reference, the status of these projects is classified into the following categories:

1. **Complete:** Project has no additional commitments required (no water allotment or other financial or environmental mitigation; no continual monitoring and reporting),
2. **Ongoing as necessary/required:** These measures are only applied when necessary (monitoring and reporting for mitigation measures for new projects, construction, etc.),
3. **Implemented and ongoing:** The project is fully implemented and is currently meeting goals; however, there may be ongoing water or financial commitments or monitoring and reporting requirements,
4. **Fully implemented but not meeting goals:** The project is fully implemented but has not yet met prescribed goals or success criteria, and
5. **Not fully implemented:** *Project under development or under construction, but not fully implemented.*

Presently, of the 66 required environmental mitigation projects, LADWP reports:

- 9 are complete,
- 0 are ongoing as necessary or required,
- 51 are implemented and ongoing,
- 6 are fully implemented but not meeting goals,
- 0 are not fully implemented.

Of the 47 other commitments, LADWP reports:

- 19 are complete,
- 6 are ongoing as necessary or required,
- 20 are implemented and ongoing,
- 0 are fully implemented and not meeting goals, and
- 2 are not fully implemented.

More detailed information regarding each of these projects and other legal commitments is provided in Section 3. Further, comprehensive monitoring reports for the Additional Mitigation Projects Developed by the MOU *Ad Hoc* Group, the Laws Type E revegetation, the Owens Valley Land Management Plan and the Yellow Billed Cuckoo Habitat Enhancement Plans are also supplied in Section 3.

**OWENS VALLEY OPERATIONS PLAN FOR RY 2026-27**

## 1.0 Owens Valley Operations Plan for RY 2026-27

This year's annual Operations Plan and pumping program is consistent with the management strategy of the Water Agreement between the County and the City dated October 18, 1991.

As stated in the Water Agreement:

*The overall goal of managing the water resources within Inyo County is to avoid certain described decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County.*

Consistent with the Water Agreement's overall goal, LADWP's operational plans strive for environmental protection while ensuring a reliable water supply. Groundwater pumping in the Owens Valley is managed in conformance with the provisions of the Water Agreement. The Water Agreement provides:

*By April 20th of each year, the Department shall prepare and submit to the Inyo County Technical Group a proposed operations plan and pumping program for the twelve (12) month period beginning on April 1st.*

### 1.1. Eastern Sierra Runoff Forecast

The Runoff Forecast for the Eastern Sierra, including the Owens River Basin and Mono Basin (Table 1.1) is based on snow surveys of key Eastern Sierra watersheds in Inyo and Mono counties. This forecast is used for planning aqueduct operations as it is a primary indicator of water supply.

Figure 1.1 summarizes Owens River Basin runoff and groundwater pumping by LADWP since the 1972 RY. This figure shows this year's forecasted runoff and planned pumping compared to the past runoff in the Owens Valley Basin.

**Table 1.1. Eastern Sierra Runoff Forecast for 2026-27 RY**

<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> <p><b>2026 EASTERN SIERRA RUNOFF FORECAST April 1, 2026</b></p> </div>					
<b>APRIL THROUGH SEPTEMBER RUNOFF</b>					
	<b>MOST PROBABLE VALUE</b>		<b>REASONABLE MAXIMUM</b>	<b>REASONABLE MINIMUM</b>	<b>LONG-TERM MEAN (1971 - 2020)</b>
	<b>(Acre-feet)</b>	<b>(% of Avg.)</b>	<b>(% of Avg.)</b>	<b>(% of Avg.)</b>	<b>(Acre-feet)</b>
<b>MONO BASIN:</b>	71,400	71%	84%	59%	100,307
<b>OWENS RIVER BASIN:</b>	217,100	73%	86%	59%	298,780
<b>APRIL THROUGH MARCH RUNOFF</b>					
	<b>MOST PROBABLE VALUE</b>		<b>REASONABLE MAXIMUM</b>	<b>REASONABLE MINIMUM</b>	<b>LONG-TERM MEAN (1971 - 2020)</b>
	<b>(Acre-feet)</b>	<b>(% of Avg.)</b>	<b>(% of Avg.)</b>	<b>(% of Avg.)</b>	<b>(Acre-feet)</b>
<b>MONO BASIN:</b>	84,300	71%	85%	58%	118,600
<b>OWENS RIVER BASIN:</b>	322,300	79%	92%	67%	406,308
<p>NOTE - Owens River Basin includes Long, Round, and Owens Valleys</p> <p>MOST PROBABLE - That runoff which is expected if median precipitation occurs after the forecast date.</p> <p>REASONABLE MAXIMUM - That runoff which is expected to occur if precipitation subsequent to the forecast is equal to the amount which is exceeded on the average once in 10 years.</p> <p>REASONABLE MINIMUM - That runoff which is expected to occur if precipitation subsequent to the forecast is equal to the amount which is exceeded on the average 9 out of 10 years.</p>					

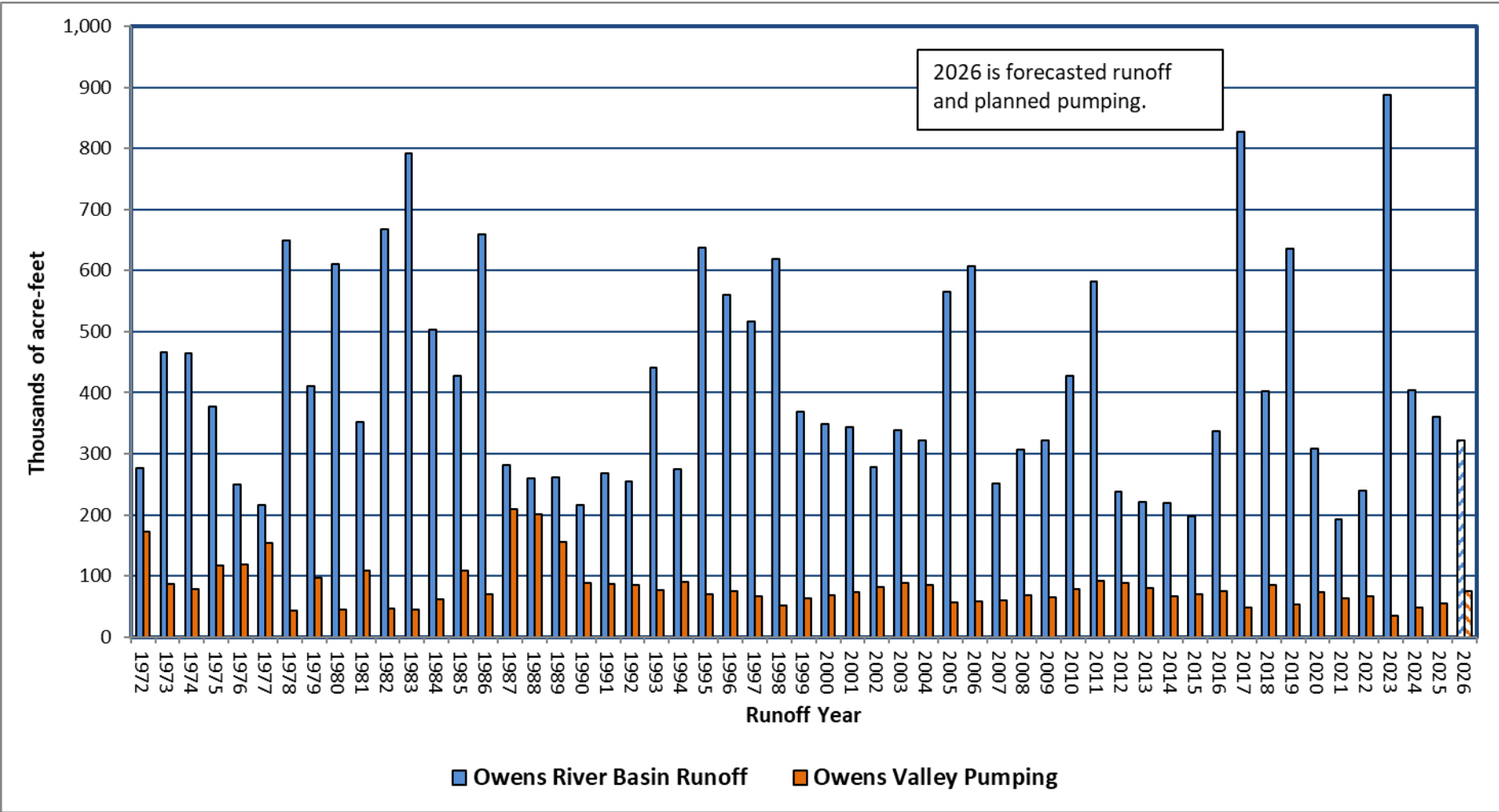


Figure 1.1. Owens River Basin Runoff and Groundwater Pumping

## 1.2. Owens Valley Groundwater Production

LADWP has prepared its Operations Plan based on the goals and principles of the Water Agreement. The Operations Plan is designed to avoid adverse environmental impacts while providing a reliable supply of water for in-valley uses and export to Los Angeles for municipal use.

The following excerpt from Section S.6 of the 1991 EIR describes the general thoughts regarding groundwater pumping and how pumping was contemplated under the Water Agreement:

*Compared to pre-1970 conditions, the project would increase the amount of groundwater and surface water exported from Owens Valley to Los Angeles. The increased amount of water exported would be obtained from an increase in groundwater pumping, from surface water that has been made available by a reduction in the number of irrigated acres owned by Los Angeles and from surface water that formerly did not enter the aqueduct system... However, for the purposes of analysis in this EIR, the average amount of pumping under the Agreement is projected to be 110,000 AFY.*

Under the terms of the Water Agreement, the allowable amount of groundwater pumping from each Owens Valley wellfield is based on the ON/OFF status of monitoring sites located within each wellfield and the capacity of the wells linked to those sites (see Water Agreement Sections V.B and V.C). Table 1.2 lists the ON/OFF status of the monitoring sites within the Owens Valley. The Water Agreement or Technical Group has designated certain town supply wells, irrigation supply wells, fish hatchery supply wells, E/M project supply wells, and other wells determined to not significantly impact areas with groundwater-dependent vegetation as exempt from the ON/OFF provisions of the Water Agreement. These exempt wells may be pumped for their intended purpose.

Table 1.3 lists a breakdown of the available annual pumping capacity and planned groundwater pumping by wellfield. Table 1.3 also shows the vegetation monitoring sites in ON status, the wells associated with the ON status monitoring sites, and the exempt wells in each wellfield. Accordingly, approximately 225,100 AF of water is available for groundwater pumping from Owens Valley wellfields under the terms of the Water Agreement. LADWP plans to pump between 54,310 AF and 81,360 AF of groundwater, which is between 24 percent and 36 percent of the amount allowed under the terms of the Water Agreement. This range of pumping will provide LADWP with the needed operational flexibility to supply water for in-valley uses and export to the City, depending on the hydrologic conditions during the year.

Working independently and with the Inyo/Los Angeles Technical Group, LADWP will monitor Owens Valley runoff and environmental conditions to assess if further changes to the planned pumping are needed for the second half of the 2026-27 RY. LADWP's groundwater management approach during this nearly normal runoff condition is to allow for maintaining the nearly full groundwater system, which is more environmentally conservative than pumping plans advocated by the Standing Committee in the early 1990s.

Figure 1.2 compares the amount of Owens Valley groundwater pumping allowed under the provisions of the Water Agreement and the actual groundwater pumping by LADWP for each RY since 1992 (available pumping was not calculated prior to 1992). LADWP's planned pumping for the 2026-27 RY is comparable to the pumping in recent years. LADWP is committed to managing water resources in Owens Valley in a conservative, responsible, and environmentally sustainable manner.

In addition to complying with the ON/OFF provisions and the environmental protection goals of the Water Agreement, LADWP's pumping program for the current RY complies with the groundwater mining provisions of the Green Book. Table 1.4 shows the latest update of the mining calculations based on the procedures described in Section IV.C of the Green Book. As shown in this table, none of the wellfields in the Owens Valley will be in deficit by the end of the current RY.

Table 1.5 lists Owens Valley wells exempted under the Water Agreement or by approval of the Technical Group from linkage to the ON/OFF provisions of the Water Agreement. This table includes a list of wells by well number, the general location of the exempt well, and the reason the well is exempt. The Technical Group revised and approved this table at their May 6, 2016, meeting.

Table 1.6 details the planned month-to-month groundwater pumping for the 2026-27 RY for each wellfield. Pumping for town water systems, fish hatcheries, and E/M projects is included in the pumping distribution. Owens Valley groundwater production for the 2026-27 RY is consistent with the provisions of the Water Agreement. While Table 1.6 provides the planned monthly pumping volumes from each wellfield, the actual pumping amounts could vary due to the uncertainty inherent in runoff conditions, operational needs, and safety concerns of the LAA system, which could result in changes in the operation of surface and groundwater facilities throughout Eastern Sierra. Any pumping for operational tests will be in addition to the planned pumping for the 2026-27 RY. Planned pumping may also be increased to provide freeze protection for the LAA.

The following is a discussion of the planned pumping program by wellfield. Figures 1.3 and 1.5, followed by figures 1.6 through 1.10 show locations of LADWP's Owens Valley pumping wells by wellfield. These figures show the location of production wells, selected monitoring wells, and vegetation monitoring sites in each area.

**Table 1.2. Soil/Vegetation Water Balance Calculations for April 2026 According to Section III of the Green Book**

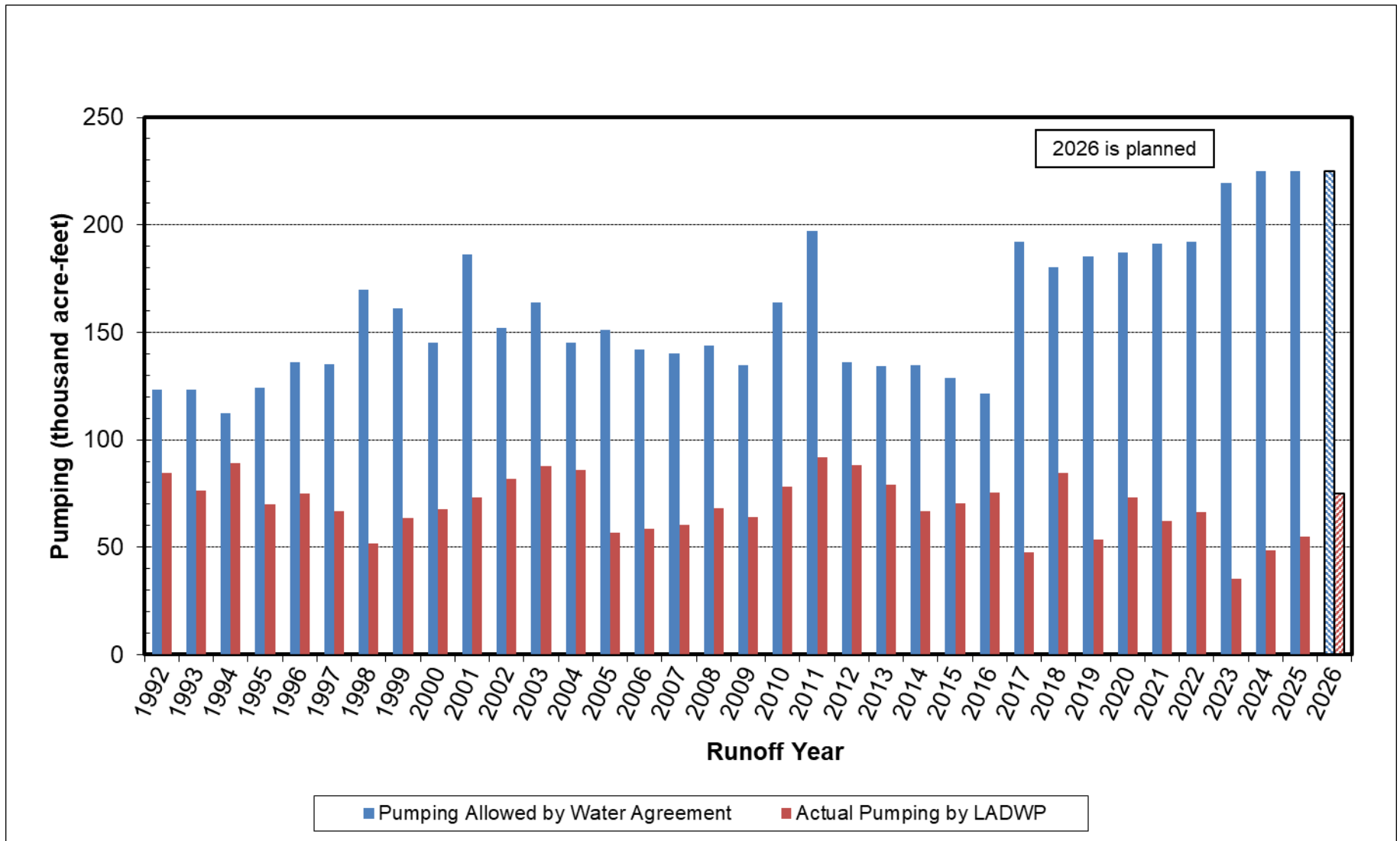
Site	October 1, 2025 Actual Soil AWC	50% Annual Precipitation	Projected Soil AWC	October 1, 2025 Vegetation Water Requirement	October 1, 2025 Required Soil AWC For Turn-On	October 1, 2025 On/Off Status	April 1, 2026 Soil AWC	April 1, 2026 Required Soil AWC For Turn-On	April 1, 2026 On/Off Status
LW 1	39.9	7.9	47.8	11.3	NA	ON	78.6	NA	ON
LW 2	47.2	7.9	55.1	3.5	NA	ON	46.8	NA	ON
LW 3	24.4	7.9	32.3	9.7	NA	ON	34.9	NA	ON
BP 1	36.0	7.9	43.9	14.8	NA	ON	33.0	NA	ON
BP 2	7.9	NA	NA	15.0	28.4	OFF (7/98)	14.1	28.4	OFF (7/98)
BP 3	99.6	7.6	107.2	8.9	NA	ON	111.1	NA	ON
BP 4	84.0	8.2	92.2	5.6	NA	ON	90.5	NA	ON
TA 3	15.3	7.3	22.6	14.5	NA	ON	28.2	NA	On
TA 4	21.7	7.3	29.0	9.2	NA	ON	36.0	NA	ON
TA 5	19.7	8.2	27.9	6.0	NA	ON	27.3	NA	ON
TA 6	44.4	7.3	51.7	11.0	NA	ON	62.2	NA	ON
TS 1	18.3	7.3	25.6	20.6	NA	ON	25.5	NA	ON
TS 2	25.1	7.3	32.4	6.8	NA	ON	34.8	NA	ON
TS 3	23.4	7.3	30.7	13.1	NA	ON	38.2	NA	ON
TS 4	39.6	7.3	46.9	29.8	NA	ON	56.4	NA	ON
IO 1	24.4	6.5	30.9	31.8	31.8	OFF (10/25)	34.5	NA	ON
IO 2	4.1	6.5	10.6	4.3	NA	ON	7.3	NA	ON
SS 1	42.2	6.5	48.7	19.5	NA	ON	48.7	NA	ON
SS 2	3.4	NA	NA	6.8	25.6	OFF (7/11)	4.7	25.6	OFF (7/11)
SS 3	33.4	6.5	39.9	18.7	NA	ON	43.8	NA	ON
SS 4	9.6	6.6	16.2	5.4	NA	ON	9.9	NA	ON
BG 2	37.0	6.6	43.6	9.8	NA	ON	36.8	NA	ON

**Table 1.3. Annual Pumping Capacity According to Monitoring Sites with ON Status and Planned Pumping for 2026-27 RY**

Wellfield	Vegetation Monitoring Site	Associated Production Wells	Available Capacity (AF/year)	Planned Pumping (AF)
<b>Laws</b>	L1	398, 247, 248, 249	12,670	
	L2	239, 243, 244, 426	10,430	
	L3	240, 241, 399, 376, 377	9,990	
	L5*	245, 387, 388	9,770	
	Exempt	236, 354, 422, 413	1,520	
		<b>Wellfield Pumpage</b>		<b>44,380</b>
<b>Bishop**</b>	All wells	140, 371, 406, 407, 408, 410, 411, 412	18,310	
		<b>Wellfield Pumpage</b>	<b>18,310</b>	<b>10,900</b>
<b>Big Pine</b>	BP1	378, 379, 389, 352	10,430	
	BP3	222, 223, 232	4,850	
	BP4	331	7,530	
	Exempt	218, 219, 330, 332, 352, 375, 415	27,700	
		<b>Wellfield Pumpage</b>	<b>50,510</b>	<b>14,400-21,600</b>
<b>Taboose Aberdeen</b>	TA3	106, 110, 111, 114	11,005	
	TA4	342, 347	19,400	
	TA5	349	12,240	
	TA6	109, 370	5,720	
	Exempt	118, 355	2,560	
		<b>Wellfield Pumpage</b>	<b>50,925</b>	<b>5,400-10,200</b>
<b>Thibaut Sawmill</b>	TS1	159	1,014	
	TS2	155	800	
	TS3	103, 104, 382	2,970	
	TS4	380, 381	4,350	
	Exempt	351, 356	8,000	
		<b>Wellfield Pumpage</b>	<b>17,134</b>	<b>6,000-9,600</b>
<b>Indep. - Oak</b>	IO1	391, 400	5,285	
	IO2	63	2,317	
	Exempt	59, 60, 65, 357, 383EM, 384EM, 401, W423, W427	12,200	
		<b>Wellfield Pumpage</b>	<b>19,802</b>	<b>6,000-10,800</b>
<b>Symmes Shepherd</b>	SS1	069, 392, 393	7,385	
	SS3	092, 396	5,647	
	SS4	075, 345	6,009	
	Exempt	402EM/428EM	1,200	
		<b>Wellfield Pumpage</b>	<b>20,241</b>	<b>3,600-5,400</b>
<b>Bairs</b>	BG2	76, 343, 348, 403	1,810	
<b>Georges</b>	Exempt	343	1,020	
		<b>Wellfield Pumpage</b>	<b>2,830</b>	<b>600-1,500</b>
<b>Lone Pine</b>	Exempt	344, 346, 425	990	
		<b>Wellfield Pumpage</b>	<b>990</b>	<b>960</b>
<b>Total Owens Valley</b>			<b>225,122</b>	<b>54,310-81,360</b>

\* Monitoring site has yet to be located.

\*\* Pumping is subject to the Hillside Decree



**Figure 1.2. Owens Valley Pumping – Provided by Water Agreement and Actual Since Inyo/Los Angeles Water Agreement**

**Table 1.4. Summary of Recharge and Pumping for Water Year 2007 - 2025 and Estimated Pumping Limit for Apr-Sep 2026 in Acre-Feet**

Water Year	OWENS VALLEY Runoff Percent (c)	LAWS		BISHOP		BIG PINE		TABOOSE-THIBAUT		IND-SYM-BAIRS		LONE PINE		OWENS VALLEY	
		Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping	Recharge	Pumping
2007	64%	10,947	7,840	34,470	10,516	19,757	20,525	25,855	14,578	27,624	10,674	10,454	1,100	129,108	65,233
2008	68%	10,855	7,939	35,850	10,228	20,432	20,243	28,619	18,542	27,759	9,219	11,563	858	135,078	67,029
2009	73%	11,049	6,233	37,416	12,123	21,555	22,891	29,385	14,751	29,359	9,603	12,147	775	140,912	66,376
2010	93%	11,154	6,333	41,987	10,509	26,566	22,514	35,541	20,239	36,863	13,031	14,252	626	166,362	73,252
2011	134%	17,375	7,188	52,182	9,889	35,539	27,089	47,562	21,933	50,619	14,527	19,057	998	222,333	81,624
2012	72%	11,058	9,514	37,315	11,134	21,297	27,220	28,369	26,156	28,905	16,570	11,538	1,048	138,482	91,642
2013	62%	10,644	6,642	34,811	11,536	19,408	26,115	24,795	25,225	24,749	17,907	10,364	721	124,771	88,146
2014	50%	10,393	6,287	31,325	10,849	16,871	22,560	21,241	15,778	20,508	11,347	8,960	946	109,297	67,767
2015	43%	10,103	5,824	30,667	10,521	15,380	19,939	18,671	15,563	18,695	11,873	7,995	925	101,512	64,645
2016	63%	10,392	6,038	34,844	10,842	19,551	22,798	25,634	20,642	25,354	18,829	10,306	984	126,082	80,133
2017	175%	45,270	2,000	67,171	4,399	56,730	22,106	71,201	12,959	66,222	9,243	24,741	915	331,335	51,622
2018	93%	14,351	8,646	41,346	9,588	25,911	23,140	34,601	18,896	35,628	12,050	13,807	973	165,643	73,293
2019	132%	34,517	7,127	54,377	5,670	40,650	21,356	48,370	17,000	49,725	9,994	18,534	973	246,174	62,120
2020	76%	11,041	11,170	37,879	9,437	23,190	18,647	29,560	21,503	29,801	9,949	11,742	985	143,212	71,691
2021	46%	10,330	8,337	30,841	10,901	16,215	11,366	20,160	22,339	19,028	9,128	8,036	1,010	104,612	63,081
2022	51%	10,699	8,356	31,498	10,945	17,318	20,086	22,001	20,067	20,708	7,744	8,894	1,005	111,117	68,203
2023	197%	35,127	3,060	66,480	1,491	47,748	15,081	83,056	17,714	83,510	7,580	31,573	861	347,495	45,787
2024	103%	23,294	3,064	43,482	799	28,424	12,868	39,455	9,199	44,824	6,593	18,114	910	197,594	33,433
2025	78%	11,428	8,343	37,623	11,560	23,342	19,621	30,411	14,098	33,631	9,971	13,207	723	149,642	64,316
2026 (a)	76%	11,192	1,638	37,500	1,218	22,168	6,964	27,458	4,077	29,847	1,777	11,852	51	140,017	15,725
(b) TOTAL		321,220	131,579	819,065	174,155	518,053	403,129	691,944	351,259	703,360	217,609	277,136	17,387	3,330,777	1,295,118
Estimated Apr-Sep 2026 Pumping Limit			189,641		644,910		114,924		340,685		485,751		259,749		2,035,659

(a) Estimated Recharge for the 2026 Water Year; Approximate Pumping for First Half of Water year 2026 (Oct-Mar).

(b) Estimated 20 Year Total for Recharge; actual 19.5 Year Total for Pumping.

(c) Mining calculations are based Water Year (October-September) instead of Rrunoff Year (April-March).

**Table 1.5. LADWP Groundwater Pumping Wells Exempt from ON/OFF Provisions of Water Agreement**

Revised: May 6, 2016

Well Number	Wellfield	Duration	Reason
354	Laws	Annual	Sole Source-Town Supply
413 <sup>(1)</sup>	Laws	Annual	Same as above
422 <sup>(2)</sup>	Laws	Annual	Sole Source-Irrigation; no impact on groundwater dependent vegetation
236 <sup>(2)</sup>	Laws	Irrigation Season	Sole Source-Irrigation
413 E/M <sup>(1)</sup>	Laws	Irrigation Season	Sole Source – Irrigation for Laws Museum irrigation project
415 <sup>(3)</sup>	Big Pine	Annual	Sole Source-Town Supply
341	Big Pine	Annual	Same as above
352	Big Pine	Annual	Same as above
375 E/M	Big Pine	Annual	Make-up water for Big Pine Regreening Project up to 150 AF per year
330 <sup>(4)</sup>	Big Pine	Annual	Sole Source-Fish Hatchery
332 <sup>(4)</sup>	Big Pine	Annual	Same as above
409 <sup>(4)</sup>	Big Pine	Annual	Same as above
218	Big Pine	Annual	No impact on groundwater dependent vegetation
219	Big Pine	Annual	Same as above
118	Taboose-Aberdeen	Annual	Same as above
355	Taboose-Aberdeen	Annual	Sole Source- supply 1,600 acre project
351	Thibaut-Sawmill	Annual	Sole Source – Fish Hatchery
356	Thibaut-Sawmill	Annual	Same as above
401	Independence-Oak	Annual	No Impact on groundwater dependent vegetation
59	Independence-Oak	Annual	Same as above
60	Independence-Oak	Annual	Same as above
65	Independence-Oak	Annual	Same as above
383 E/M	Independence-Oak	Annual	Same as above
384 E/M <sup>(1)</sup>	Independence-Oak	Annual	Same as above
61	Independence-Oak	Irrigation season	Sole Source-Irrigation; no impact on groundwater dependent vegetation
423 E/M	Independence-Oak	Irrigation Season	Same as above
357	Independence-Oak	Annual	Sole Source – Town Supply
384 <sup>(1)</sup>	Independence-Oak	Annual	Same as above
402 E/M	Symmes-Shepherd	Irrigation season	Sole Source-Irrigation; no impact on groundwater dependent vegetation
343 <sup>(5)</sup>	Bairs-Georges	Annual	Sole Source-irrigation and stock water
425 E/M	Lone Pine	Irrigation Season	Sole Source-Irrigation; no impact on groundwater dependent vegetation
344	Lone Pine	Annual	Sole Source – Town Supply
346	Lone Pine	Annual	Same as above

1. Wells 413 in Laws and 384 in Independence are dual purpose wells to supply water for E/M supply and backup for town domestic supply.
2. Well 422 designated as primary and Well 236 designated as backup irrigation supply.
3. Replaced well W341 as the primary Big Pine town supply.
4. Wells 330, 332, and 409 may only be pumped two at a time, unless pumped for testing or emergencies.
5. Well 343 is exempt in below normal RYs to supplement flow in Georges Creek for irrigation and stock water supply

**Table 1.6. Planned Owens Valley Pumping for the 2026-27 RY (AF)**

Month	Laws	Bishop	Big Pine	Taboose-Aberdeen	Thibaut-Sawmill	Indep.-Oak	Symmes-Shepherd	Bairs-Georges	Lone Pine	TOTAL
April	200-400	1,100	1,000-1,800	100-500	500-800	600-1,000	200-300	50-100	110	3,870-6,120
May	400-800	1,200	1,000-1,800	100-500	500-800	600-1,000	200-300	50-100	110	4,170-6,620
June	800-1,200	1,400	1,000-1,800	100-500	500-800	600-1,000	200-300	50-100	110	4,770-7,220
July	1,200-1,600	1,400	1,000-1,800	100-500	500-800	600-1,000	200-300	50-100	110	5,170-7,620
August	1,200-1,600	1,400	1,000-1,800	100-500	500-800	600-1,000	200-300	50-100	110	5,170-7,620
September	1,200-1,600	1,400	1,000-1,800	100-500	500-800	600-1,000	200-300	50-100	110	5,170-7,620
October	350-700	500	1,600-2,000	800-1,200	500-800	400-800	400-600	50-150	50	4,650-6,800
November	350-700	500	1,600-2,000	800-1,200	500-800	400-800	400-600	50-150	50	4,650-6,800
December	350-700	500	1,600-2,000	800-1,200	500-800	400-800	400-600	50-150	50	4,650-6,800
January	200-500	500	1,200-1,600	800-1,200	500-800	400-800	400-600	50-150	50	4,100-6,200
February	100-300	500	1,200-1,600	800-1,200	500-800	400-800	400-600	50-150	50	4,000-6,000
March	100-300	500	1,200-1,600	800-1,200	500-800	400-800	400-600	50-150	50	4,000-6,000
<b>TOTAL</b>	6,450-10,400	10,900	14,400-21,600	5,400-10,200	6,000-9,600	6,000-10,800	3,600-5,400	600-1,500	960	54,310-81,360

## Groundwater Level Forecasts

LADWP uses regression models to forecast the approximate changes in groundwater levels in the shallow aquifer. Groundwater pumping for the 2026-27 RY will be contingent on environmental conditions, runoff volumes, and water needs assessed during the year. Based on the forecasted below-average runoff and planned pumping, groundwater levels are projected to slightly decrease.

The range of planned LADWP groundwater pumping for the year by wellfield is included in Table 1.3. The forecasted runoff and planned pumping for the entire year allow for forecasting estimated groundwater levels in April 2027. Based on the planned groundwater pumping in each wellfield, the forecasted depth-to-water changes over the next year, in each Owens Valley wellfield and overall, in Owens Valley, utilizing select monitoring wells, are listed in Table 1.7.

**Table 1.7. Forecasted Change in Average Wellfield Groundwater Levels between April 1, 2026, and April 1, 2027**

Wellfield	Planned Pumping (af)	Select Monitoring Wells	Forecast Change in Average Groundwater Level*
Laws	6,450 TO 10,400	T107, T435, T490, T492	-2.3 TO -3.6
Big Pine	14,400 TO 21,600	T425, T571, T691, T800	-0.3 TO -2.4
Taboose-Aberdeen	5,400 TO 10,200	T502, T586, T801, T803	-0.6 TO -1.3
Thibaut-Sawmill	6,000 TO 9,600	T376, T415, T463, T660	0.6 TO -0.9
Independence-Oak	6,000 TO 10,800	T407, T409, T453, T809	-1.2 TO -3.6
Symmes-Shepherd	3,600 TO 5,400	T403, T601, T644, V009G	-1.6 TO -2.7
Bairs-George	600 TO 1,500	T398, T400, T444, T652	-0.3 TO -0.6
Owens Valley	54,310 TO 81,360**	All Monitoring Wells Listed Above	-0.8 TO -2.2

\* Using the forecasted Owens Valley runoff and planned wellfield pumping.

\*\* Including planned pumping in Bishop and Lone Pine.

### 1.2.1. Laws Wellfield (Figure 1.3)

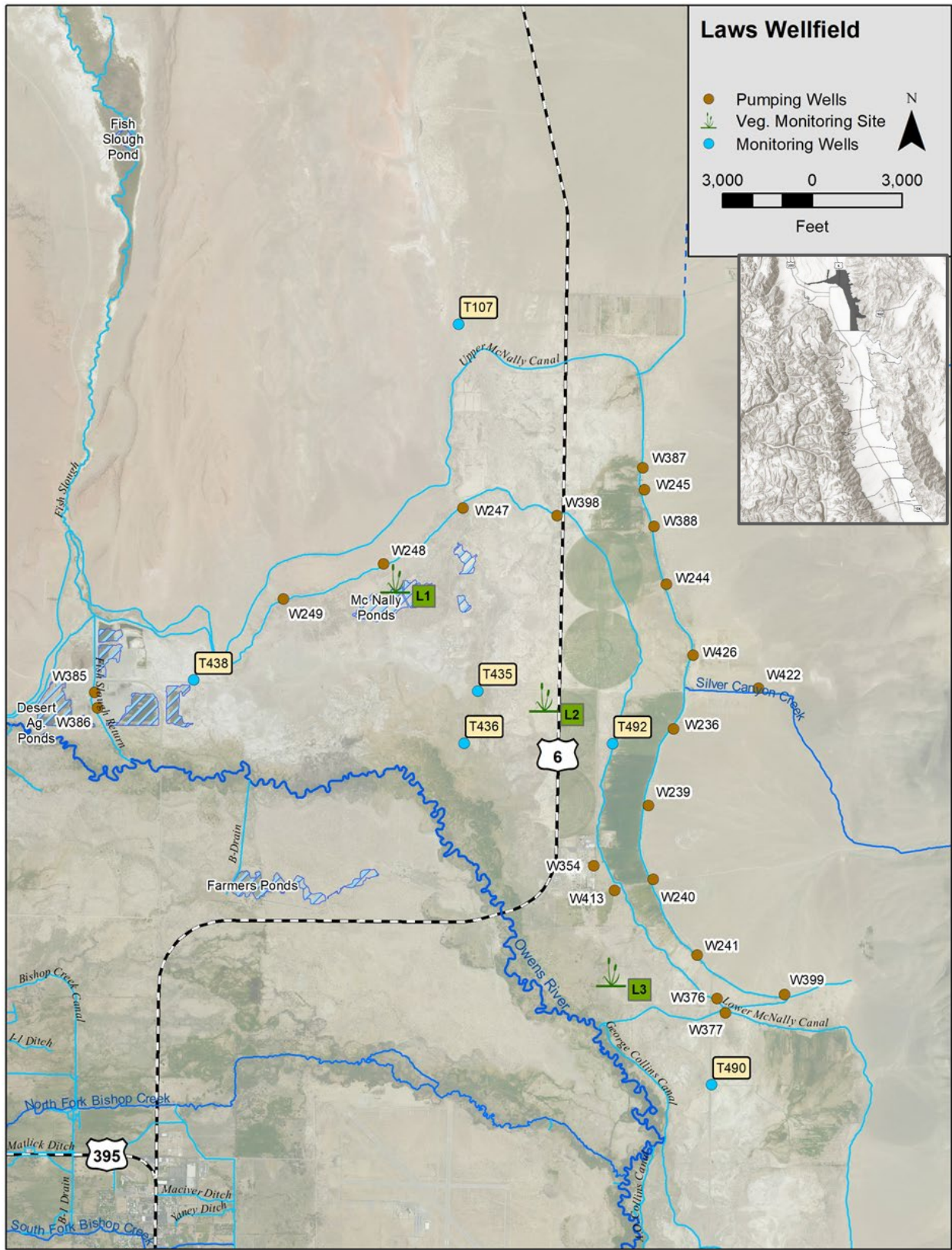
Monitoring sites L1, L2, and L3 are in ON status. Production wells controlled by these monitoring sites have available production capacities of 12,670, 10,430, and 9,990 AF, respectively. Wells linked to monitoring site L5 have a capacity of 9,770 AF. Exempt wells within the Laws Wellfield have a capacity of 1,520 AF. The total available pumping capacity in the Laws Wellfield is 44,380 AF. Well 426, associated with monitoring site L2, is used as a backup along with Well 422 as an exempt well irrigation water supply.

LADWP's planned groundwater pumping in the Laws Wellfield ranges between 6,450 AF and 10,400 AF, contingent on runoff and operation conditions, water needs, and environmental conditions. Groundwater pumping is planned to supply water for Owens Valley demands, including the town water system, E/M projects, and irrigated lands, and for export to the City.

LADWP, in cooperation with ICWD, conducted a two-month operational test of modified well W385 between December 2019 and February 2020. Wells W385 and W386 associated with monitoring site L4 were modified in 2014 by sealing the screened zone within the shallow aquifer. The modification resulted in a reduction of pumping capacity in W385 from 10.2 cfs to 2.8 cfs and in W386 from 6.1 cfs to 2.8 cfs based on the initial 24-hour pumping test. The goal of the operational test was to document the effect of well modification and to allow comparison with a similar operational test conducted in 1993-94 based on the effect on nearby shallow groundwater levels both north and south of the Owens River. Using data collected from the operational well, the Bishop-Laws groundwater flow model was updated and recalibrated. The model can simulate the future operation of W385 and W386 wells.

During the two-month operational test of W385, groundwater levels were monitored at 29 locations. Six wells were designated as trigger wells, and trigger levels were assigned to each well by staff from LADWP, ICWD, and CDFW. During the test, groundwater levels in none of the trigger wells reached the preset trigger levels. W385 pumped 463 AF of water during the pumping test. LADWP spread the same volume of water to the Five Bridges Area during the following RY from Bishop Creek Canal. Staff from LADWP and ICWD prepared a joint report that described the operational test and presented the data collected during the test.

Based on the two-month operational test results at W385, LADWP plans to conduct similar testing of W386, contingent on field conditions. While a test for W386 has not yet been submitted, LADWP is actively working on the details and will prepare a W386 testing plan for consideration by the Inyo County/Los Angeles Technical Group. In the interim, LADWP has expanded hydrologic monitoring in the vicinity of wells W385 and W386 and is currently collecting baseline hydrologic data. Quarterly monitoring data are compiled, and reports are submitted to ICWD and CDFW. The forthcoming testing plan for W386 will include an expanded monitoring plan and an updated trigger mechanism similar to the one used during the W385 operational testing.



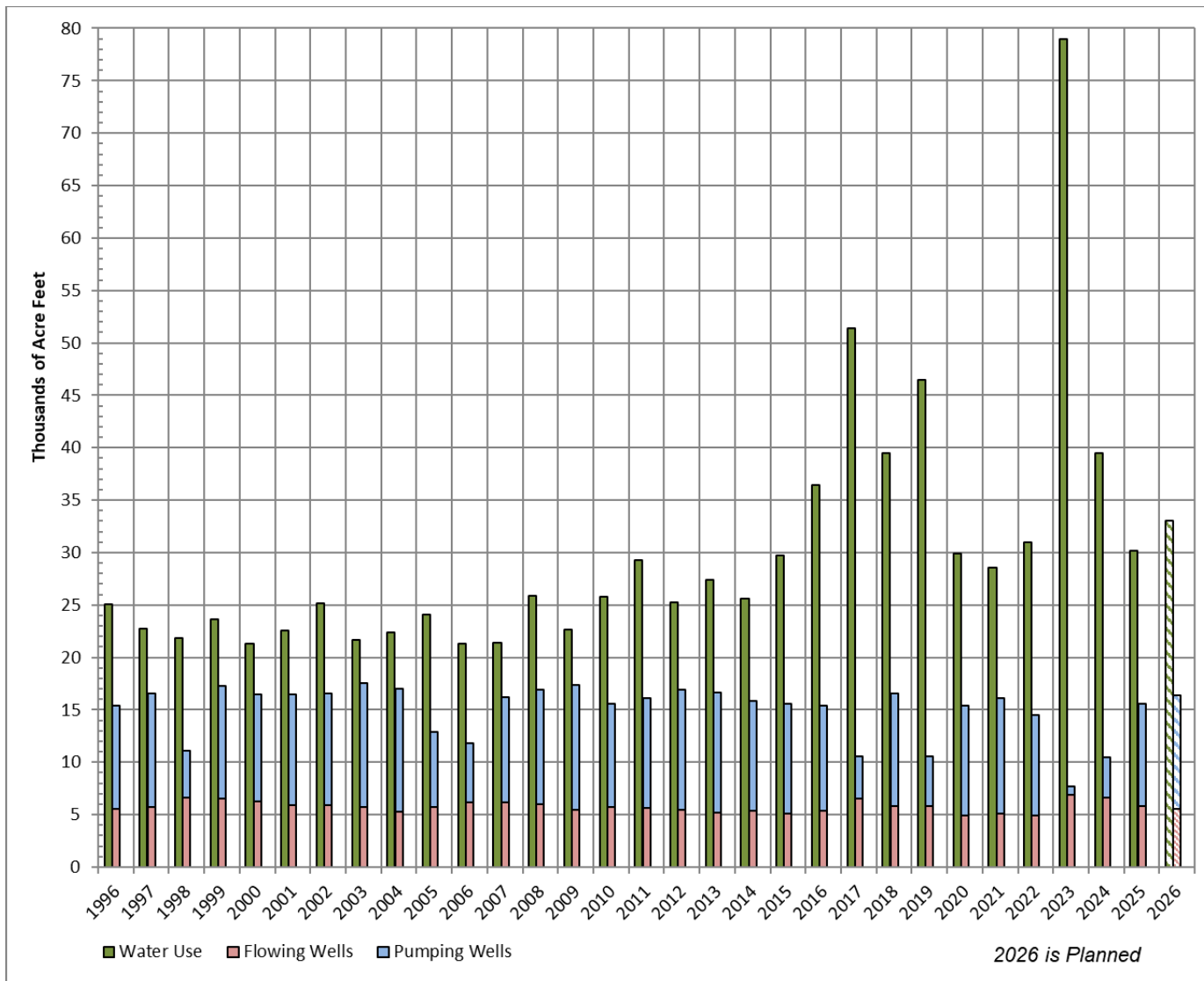
### 1.2.2. Bishop Wellfield (Figure 1.5)

Figure 1.4 illustrates water use on City-owned Lands on Bishop Cone compared to groundwater extractions (flowing and pumping wells) for RYs 1996 to the present.

Pumping in the Bishop Wellfield is governed by the provisions of the Hillside Decree and the Water Agreement, which limit LADWP's annual groundwater extractions (pumping and flowing wells) from Bishop Cone to an amount commensurate with the total amount of water used on City lands on Bishop Cone (including conveyance and other losses). Beginning with the 2015-16 RY, the water accounting methods were modified to analyze each area's inflows and outflows to calculate total water use. Under the modified audit protocols, the total water used on City lands within the Bishop Cone area has been approximately 38,000 AF per year in recent years. The estimated water use during this RY will be approximately 33,000 AF. The current total available groundwater extraction capacity in Bishop Wellfield is approximately 18,310 AF. The planned groundwater pumping from the Bishop Wellfield is 10,900 AF, contingent on runoff conditions, water needs, and environmental conditions.

LADWP has had operational issues with well W371 in the past irrigation seasons. LADWP drilled well W429 to replace Well W371 in 2021 and plans to equip it during the current RY.

Currently, LADWP has no backup wells in Bishop Cone in case of operational issues with any of its existing supply wells. Installing wells at sites B-2 and B-5 would provide LADWP with the operational flexibility in supplying water to uses on City-owned lands in the Bishop Cone. The planned wells at sites B2 and B5 would also help provide a stable water supply for adjacent irrigation fields during prolonged droughts. LADWP is currently evaluating the installation of wells at sites B-2 and B-5 that address the County's concern with the potential impacts on nearby non-LADWP wells.



\*According to the Hillside Decree, total groundwater extraction cannot exceed total water use on City-owned land on the Bishop Cone.  
**Figure 1.4. Groundwater Extraction (Flowing & Pumping) and Water Use on City Land in Bishop Cone**

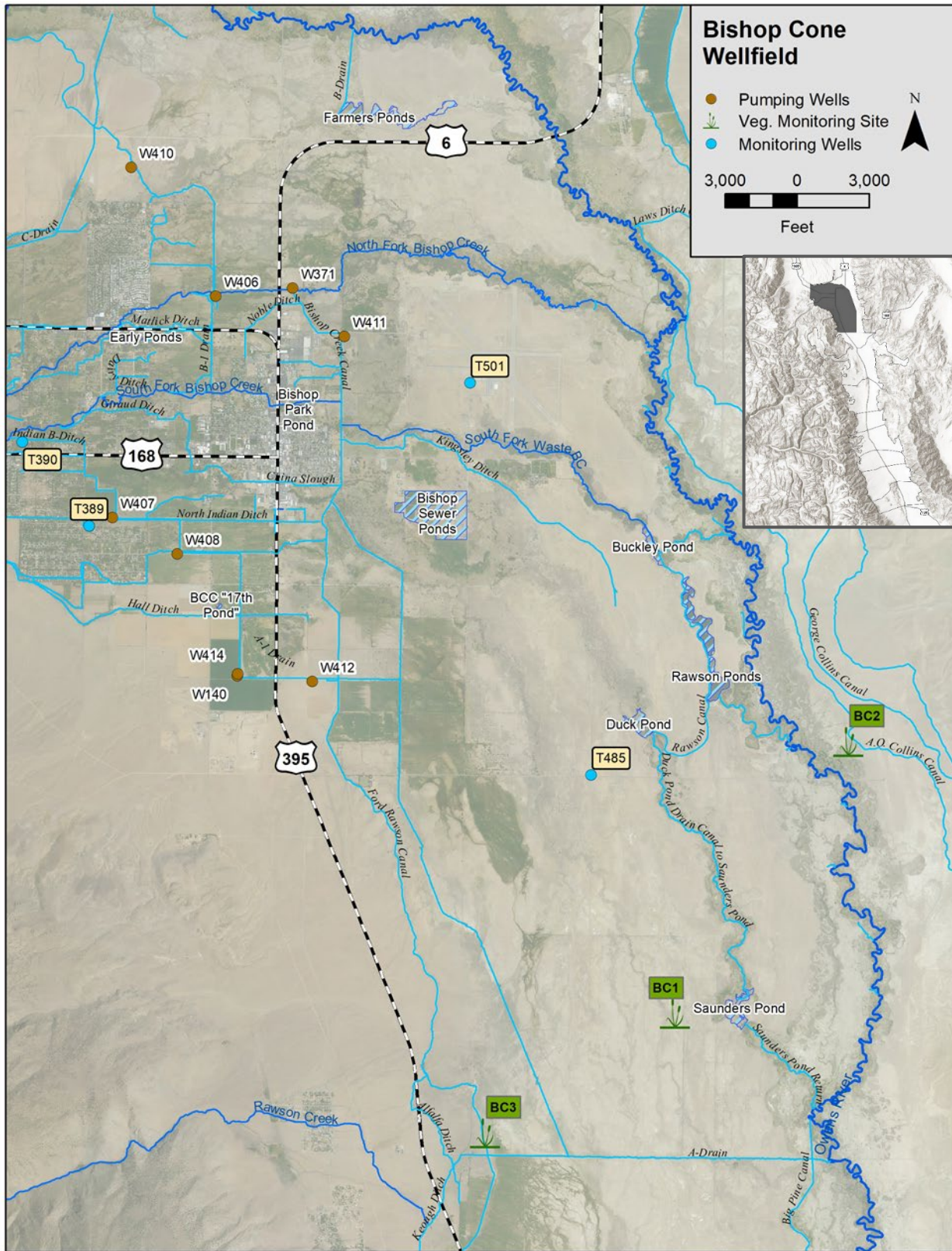


Figure 1.5. Bishop Wellfield

### 1.2.3. Big Pine Wellfield (Figure 1.6)

Vegetation monitoring sites BP1, BP3, and BP4 are in ON status. Production wells controlled by monitoring site BP1 have 10,430 AF pumping capacity, production wells controlled by monitoring site BP3 have 4,850 AF pumping capacity, and production Well 331, controlled by monitoring site BP4, has 7,530 AF pumping capacity. Exempt wells, including Well 218, Well 219, town supply wells, and Fish Springs Fish Hatchery wells in the Big Pine Wellfield, have a combined 27,700 AF pumping capacity. The total available pumping capacity in the Big Pine Wellfield is 50,510 AF. The planned pumping in the Big Pine Wellfield ranges between 14,400 AF and 21,600 AF, contingent on runoff conditions, water needs, and environmental conditions.

### 1.2.4. Taboose-Aberdeen Wellfield (Figure 1.7)

Vegetation monitoring sites TA3, TA4, TA5, and TA6 in Taboose-Aberdeen Wellfield are in ON status. Production wells controlled by monitoring Site TA3 have 11,005 AF available pumping capacity. Production wells controlled by Site TA4 have 19,400 AF available pumping capacity. Production well W349, controlled by the vegetation monitoring site TA5, has 12,240 AF available pumping capacity. Production wells associated with monitoring site TA6 have a 5,720 AF pumping capacity. Exempt wells W118 and W355 have an available pumping capacity of 2,560 AF. The total available groundwater pumping capacity in the Taboose-Aberdeen Wellfield is 50,925 AF. The planned groundwater pumping in the Taboose-Aberdeen Wellfield ranges between 5,400 AF and 10,200 AF, contingent on runoff conditions, water needs, and environmental conditions.

### 1.2.5. Thibaut-Sawmill Wellfield (Figure 1.8)

Vegetation monitoring sites TS1, TS2, TS3, and TS4 in Thibaut-Sawmill Wellfield are in ON status. Production well W159, controlled by vegetation monitoring site TS1, has a pumping capacity of 1,014 AF. Production well W155, controlled by vegetation monitoring site TS2, has a pumping capacity of 800 AF. Production wells W103, W104, and W382, controlled by vegetation monitoring site TS3, have 2,970 AF of available pumping capacity, and production wells W380 and W381, controlled by vegetation monitoring site TS4, have 4,350 AF of available pumping capacity. Exempt Blackrock Fish Hatchery supply wells W351 and W356 are limited to pump 8,000 AFY combined based on the resolution of a dispute between Inyo County and LADWP regarding the conditions of the vegetation parcel BLK94. The total available pumping capacity in the Thibaut-Sawmill Wellfield is 17,134 AF, and the planned pumping ranges between 6,000 and 9,600 AF, subject to hatchery demands, runoff conditions, water supply needs, and environmental conditions.

### 1.2.6. Independence-Oak Wellfield (Figure 1.8)

Production wells W391 and W400 are controlled by the vegetation monitoring site IO1. These wells have a combined pumping capacity of 5,285 AF per year. Production well W063, controlled by vegetation monitoring Site IO2, has a pumping capacity of 2,317 AF. Exempt wells in the Independence-Oak Wellfield have a combined pumping capacity of 12,200 AF. The total available pumping capacity of Independence-Oak Wellfield is 19,802 AF. The planned groundwater pumping in the Independence-Oak

Wellfield ranges between 6,000 AF and 10,800 AF, subject to runoff conditions, irrigation, and town water system and E/M projects water demand.

Production well W061 in Independence Wellfield was associated with the vegetation monitoring site IO3 and exempt from ON/OFF provisions of the Green Book during the irrigation season as the sole source for an alfalfa field. Well W061 had become inoperable recent years. LADWP replaced well W061 with a new well, W427, and converted W061 to a multi-string monitoring well. The replacement well is not pump-equipped yet.

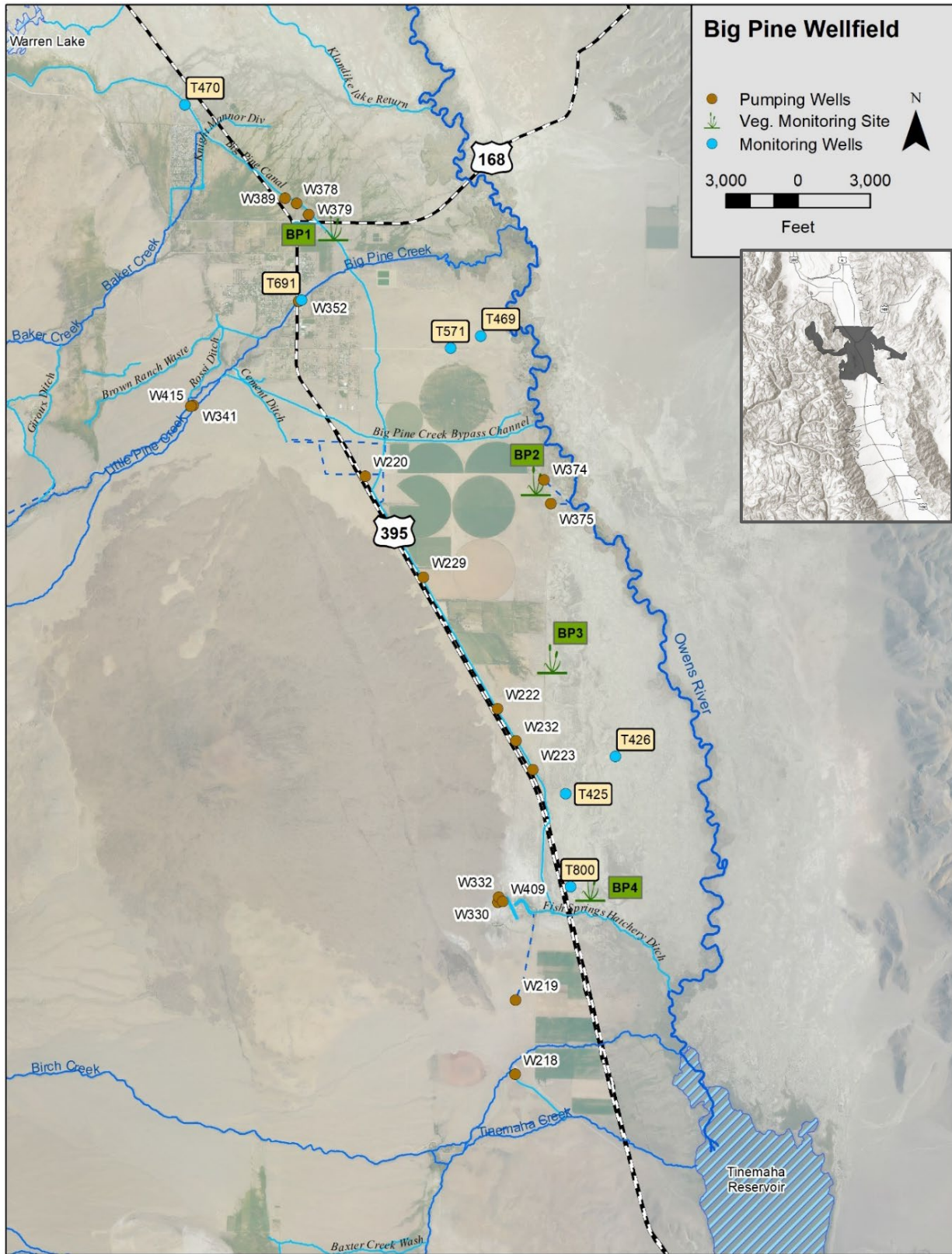


Figure 1.6. Big Pine Wellfield

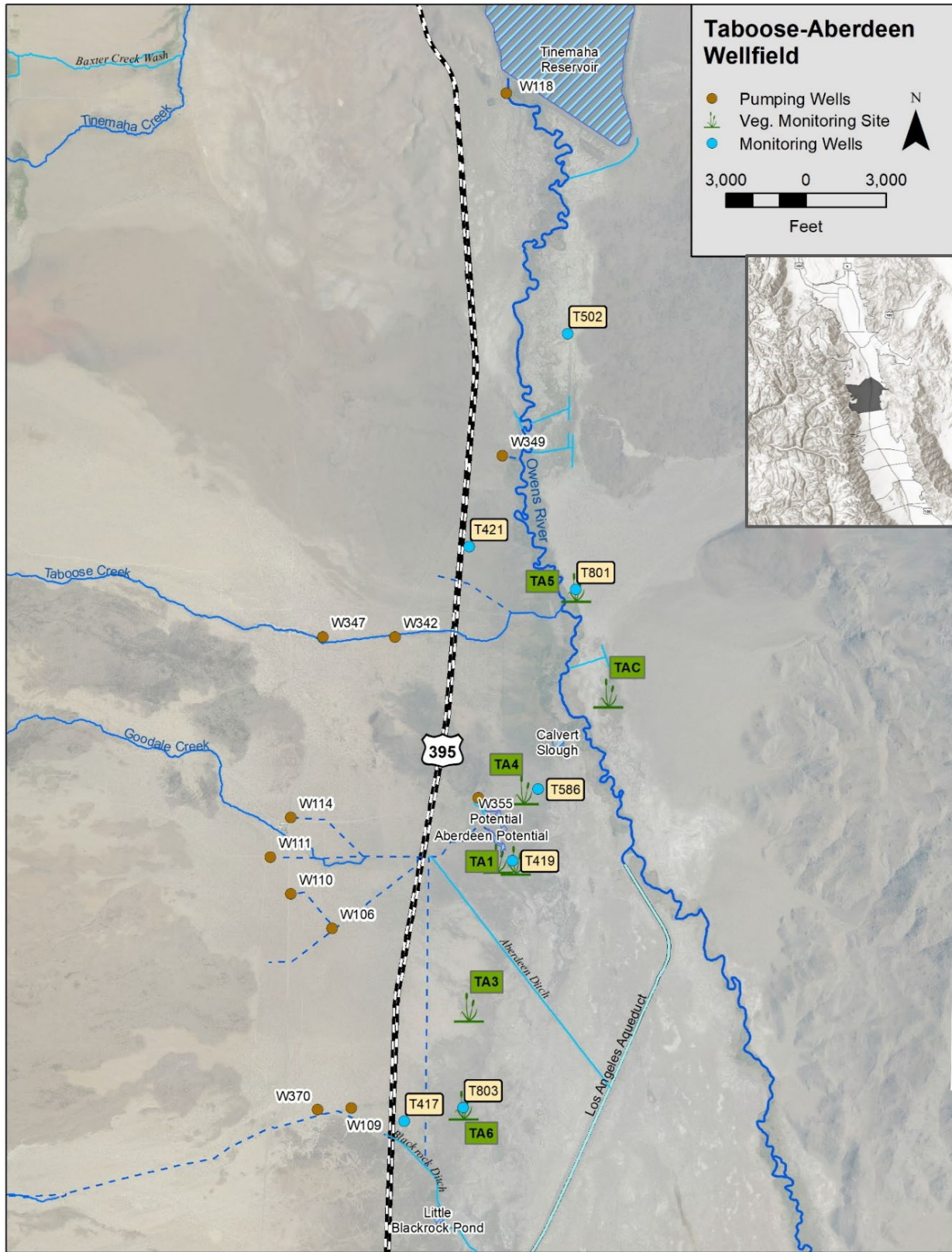


Figure 1.7. Taboose-Aberdeen Wellfield

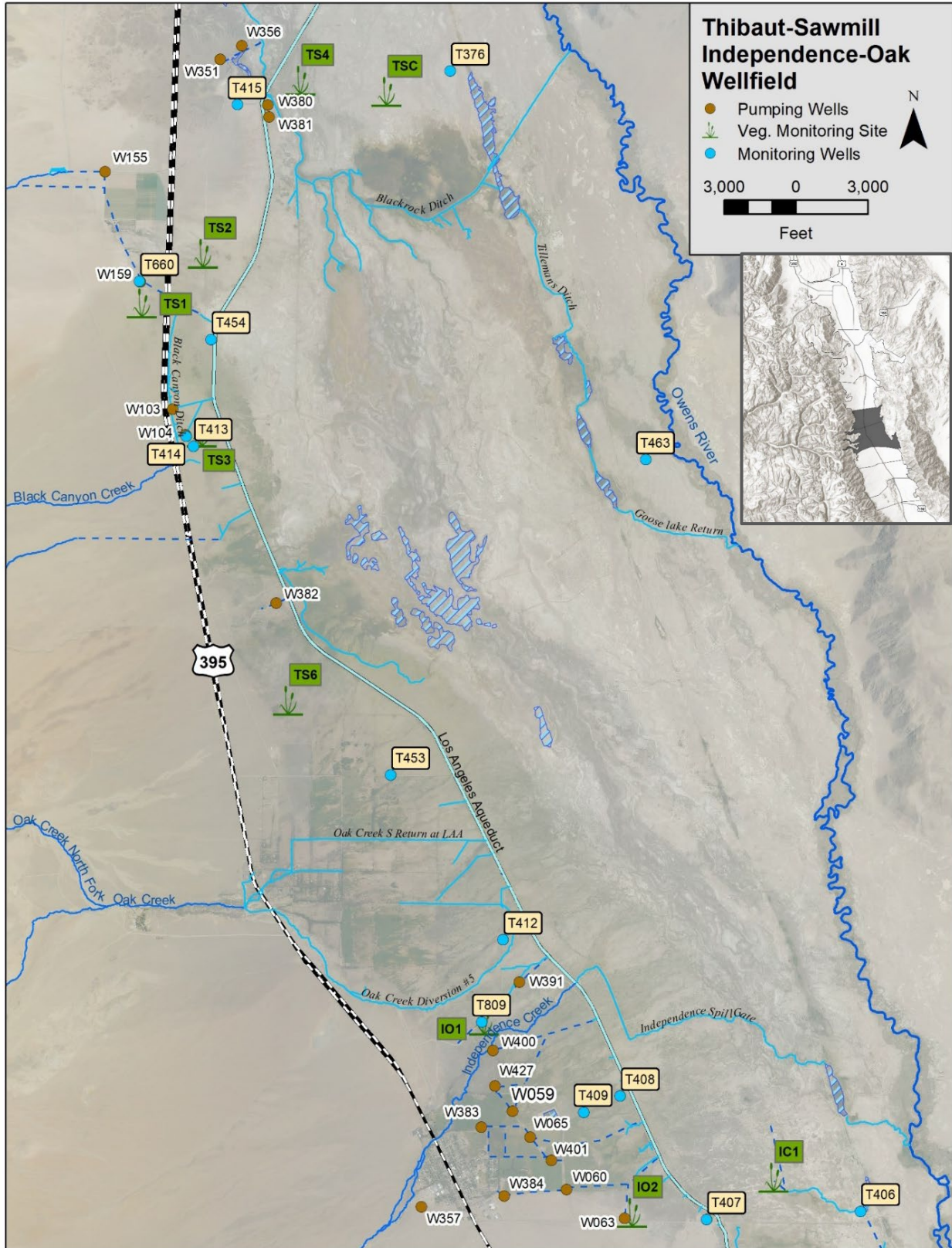


Figure 1.8. Thibaut-Sawmill and Independence-Oak Wellfields

### **1.2.7. Symmes-Shepherd Wellfield (Figure 1.9)**

The vegetation monitoring sites SS1, SS3, and SS4 are in ON status. The available pumping capacity of wells associated with site SS1 is 7,385 AF. The available pumping capacity of wells associated with vegetation monitoring site SS3 is 5,647 AF. The available pumping capacity of wells associated with vegetation monitoring site SS4 is 6,009 AF. The total available pumping capacity in the Symmes-Shepherd Wellfield is approximately 20,241 AF. The planned pumping in the Symmes-Shepherd Wellfield ranges between 3,600 AF and 5,400 AF, contingent on runoff conditions, E/M project water needs, and environmental conditions.

### **1.2.8. Bairs-Georges Wellfield (Figure 1.9)**

Vegetation monitoring site BG2 is in ON status. The wells controlled by this monitoring site have a combined 2,830 AF pumping capacity. Planned groundwater pumping in the Bairs Georges Wellfield ranges between 600 and 1,500 AF, contingent on runoff conditions, water needs, and environmental conditions. In this wellfield, LADWP has replaced well W076, which has been out of operation in recent years. The replacement well W430 has not been pump-equipped yet.

### **1.2.9. Lone Pine Wellfield (Figure 1.10)**

Lone Pine Wellfield exempt wells are town supply wells W344 and W346, and E/M project supply Well W425. These three wells have an annual available pumping capacity of approximately 990 AF. The planned groundwater pumping from Lone Pine Wellfield is approximately 960 AF, contingent on runoff conditions, water supply needs, and environmental conditions.

Well W416 is a production well in the Lone Pine Wellfield, drilled in 2002. An operational pumping test was conducted on Well W416 during the 2009 RY. This well was modified in 2014 to seal the screened portion of the well within the shallow aquifer. LADWP is planning to develop an operational plan for this well to ensure non-LADWP wells are protected and then equip and conduct the initial operation of this well. If the initial operation is performed during the 2026-27 RY, it will be in addition to the currently planned pumping from Lone Pine Wellfield. LADWP has requested the Technical Group to designate a vegetation monitoring site for this well.

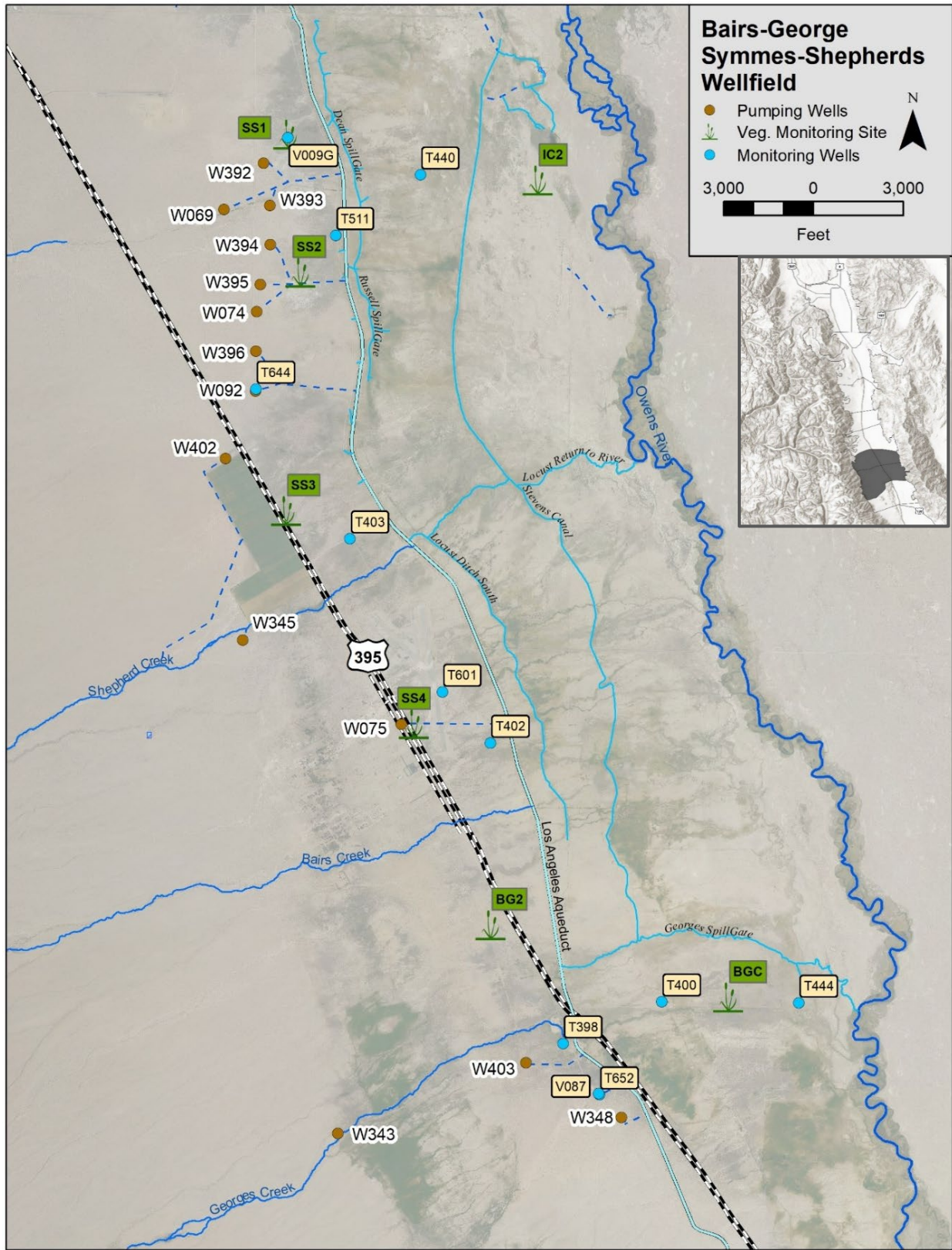


Figure 1.9. Symmes-Sheperds and Bairs-Georges Wellfields

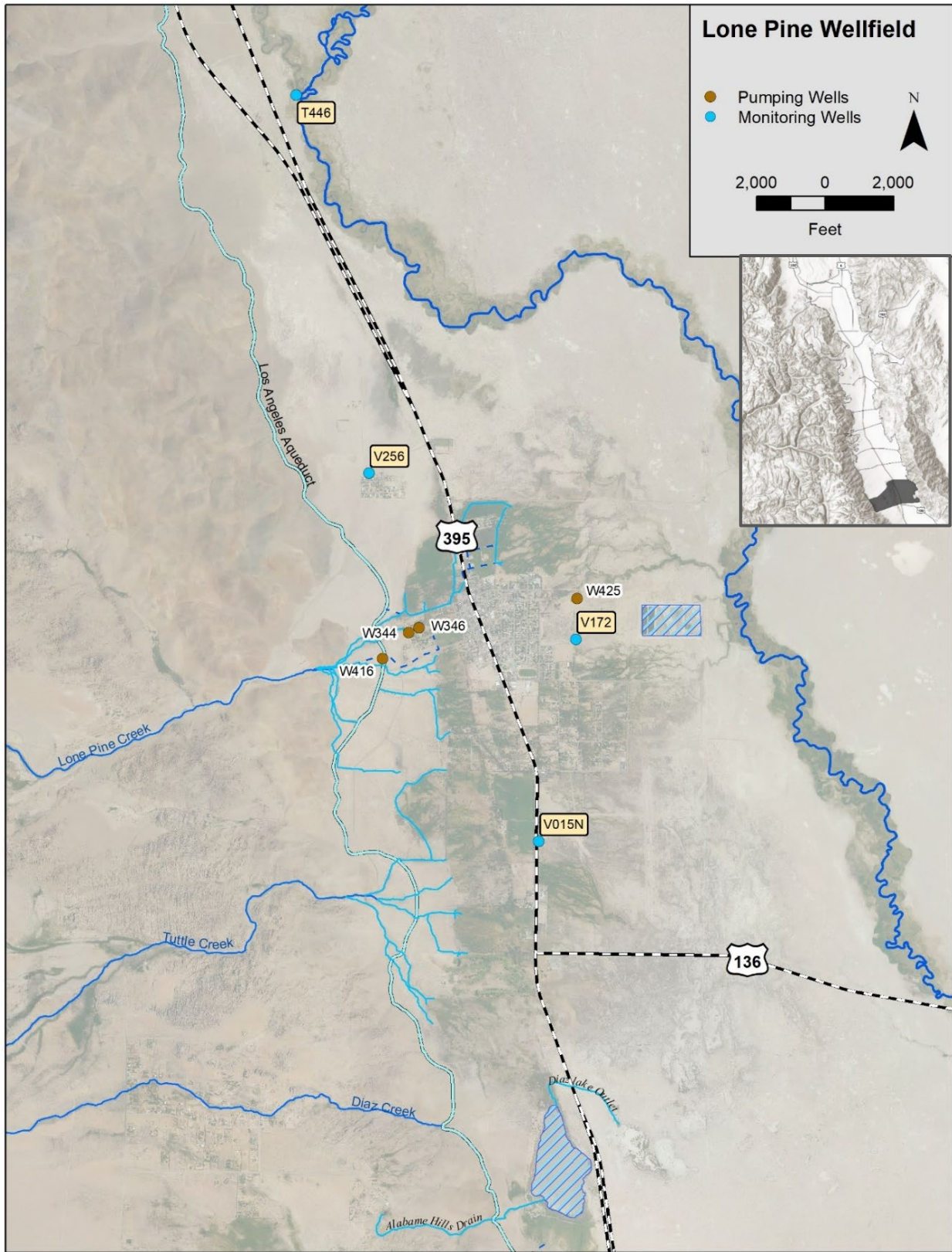


Figure 1.10. Lone Pine Wellfield

### 1.3. Owens Valley Uses (Including E/M Projects)

Table 1.8 shows the historical (1981-82) uses and the planned monthly uses on City-owned lands within the Owens Valley for the current RY. The in-valley uses shown in Table 1.8 consist of irrigation, stockwater, recreation and wildlife projects, E/M projects supply, LORP usage, and 1600 AF Projects.

Releases to the LORP from the LAA Intake facility began on December 6, 2006. A minimum flow of over 35 cfs is maintained throughout the 62-mile stretch of the Lower Owens River, south of the Intake structure. When needed, the releases at the Intake are augmented through additional releases at the Independence, Blackrock, Georges, Locust, and Alabama Spill Gates to maintain required flows in the river channel. Table 1.8 shows projected water use by the LORP on a monthly basis. Total LORP uses include the Lower Owens River, Owens Delta, BWMA, and project-associated losses.

Figure 1.11 shows the distribution of planned water use in the Owens Valley on land owned by the City for the current RY. Types of uses consist of irrigation, stockwater, recreation and wildlife projects, E/M projects supply, LORP usage, and 1600 AF Projects.

The Water Agreement provides that "... E/M projects shall continue to be supplied by E/M wells as necessary." Due to the monitoring sites controlling some of the production wells supplying E/M projects being in OFF status, the amount of water supplied to E/M projects has often exceeded the amount of water provided by E/M project supply wells. In the past, LADWP chose to supply certain E/M projects from surface water sources. Future E/M allotments may be influenced by the availability of E/M wells and operational demands. Table 1.9 shows the planned water supply to E/M projects and the forecast imbalance between the E/M project water use and the E/M project groundwater supply through the end of the current RY. Table 1.9 also shows the cumulative E/M water supply shortfall projected through the end of the current RY.

The Technical Group is currently evaluating the water supply issues associated with the E/M projects and will provide its findings to the Inyo/Los Angeles Standing Committee. It is expected that the Standing Committee will be requested to take the appropriate action necessary to ensure water supplied to E/M projects is in conformance with the provisions of the Water Agreement.

**Table 1.8. Water Uses on City-Owned Lands in Owens Valley  
Actual Use in 1981-82 and Planned Use in RY 2026-27 (AF)**

Use	April		May		June		July		August		September		TOTAL Apr-Sep	
	1981	2026	1981	2026	1981	2026	1981	2026	1981	2026	1981	2026	1981	2026
Irrigation	3,980	6,040	7,958	8,580	10,373	9,990	9,476	9,400	8,295	8,050	6,321	4,520	46,403	46,580
Stockwater	1,141	990	1,319	1,070	1,244	1,050	1,245	1,010	1,219	1,020	1,319	860	7,487	6,000
E / M	0	1,270	0	1,540	0	1,730	0	2,060	0	1,630	0	1,110	0	9,340
LORP	0	540	0	2,230	0	2,670	0	3,600	0	2,630	0	2,660	0	14,330
Rec. & Wildlife	379	290	804	600	1,160	690	1,455	870	1,381	840	1,406	730	6,585	4,020
1600 ACFT Proj.	0	100	0	100	0	100	0	100	0	200	0	210	0	810
<b>Total</b>	<b>5,500</b>	<b>9,230</b>	<b>10,081</b>	<b>14,120</b>	<b>12,777</b>	<b>16,230</b>	<b>12,176</b>	<b>17,040</b>	<b>10,895</b>	<b>14,370</b>	<b>9,046</b>	<b>10,090</b>	<b>60,475</b>	<b>81,080</b>

Use	October		November		December		January		February		March		TOTAL Oct-Mar		TOTAL Apr-Mar	
	1981	2026	1981	2026	1981	2026	1982	2027	1982	2027	1982	2027	81-82	25-26	81-82	25-26
Irrigation	263	160	0	0	0	0	0	0	0	0	14	50	277	210	46,680	46,790
Stockwater	1,065	1,050	1,045	930	1,050	870	1,007	820	1,010	690	1,098	840	6,275	5,200	13,762	11,200
E / M	0	500	0	300	0	270	0	270	0	40	0	30	0	1,410	0	10,750
LORP	0	1,560	0	760	0	480	0	260	0	220	0	490	0	3,770	0	18,100
Rec. & Wildlife	781	790	713	560	565	350	478	290	342	250	447	340	3,326	2,580	9,911	6,600
1600 ACFT Proj.	0	70	0	110	0	170	0	200	0	120	0	120	0	790	0	1,600
<b>Total</b>	<b>2,109</b>	<b>4,130</b>	<b>1,758</b>	<b>2,660</b>	<b>1,615</b>	<b>2,140</b>	<b>1,485</b>	<b>1,840</b>	<b>1,352</b>	<b>1,320</b>	<b>1,559</b>	<b>1,870</b>	<b>9,878</b>	<b>13,960</b>	<b>70,353</b>	<b>95,040</b>

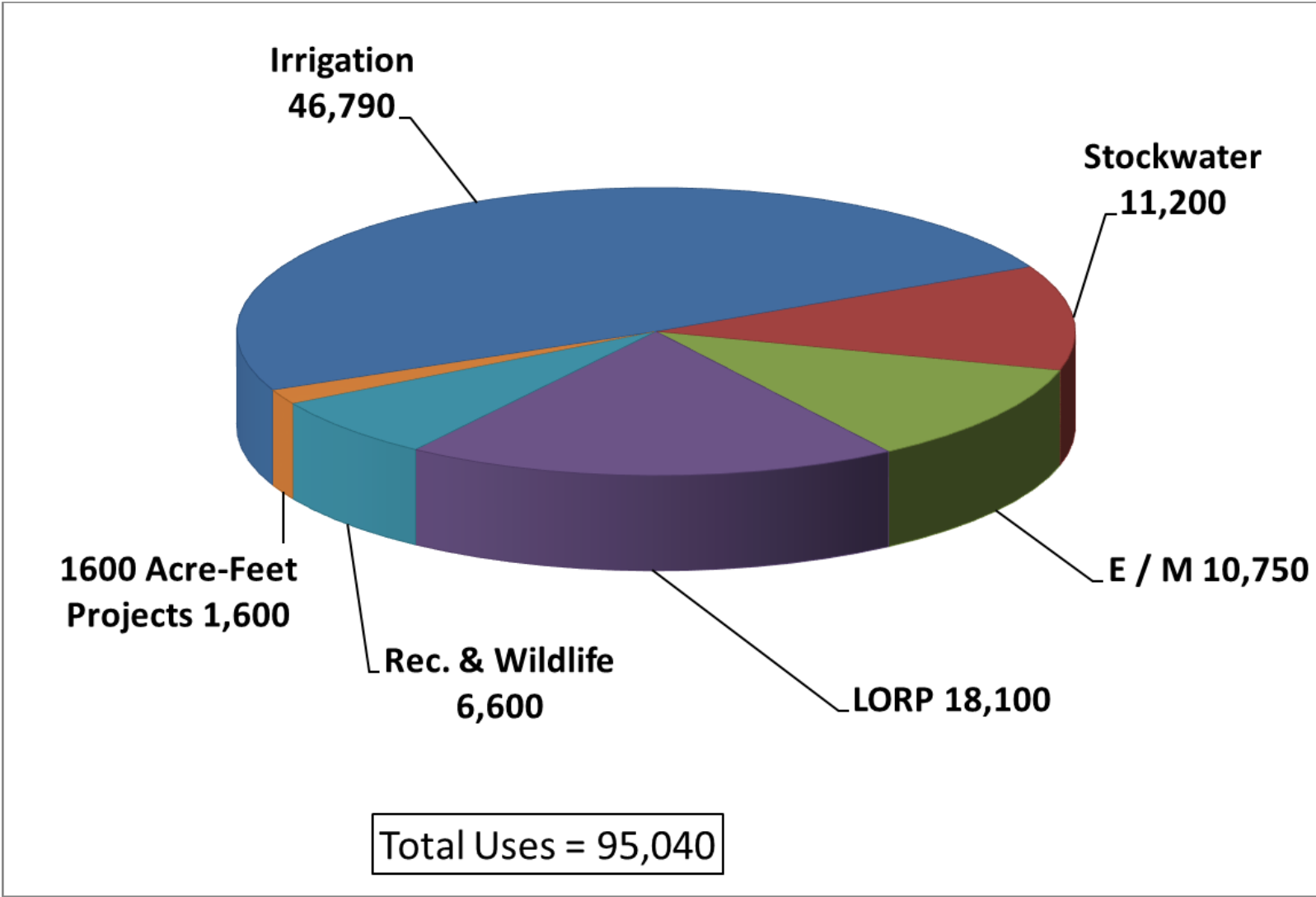


Figure 1.11. Distribution of Planned Water Use in Owens Valley on City-Owned Lands for 2026-27 RY

**Table 1.9. Owens Valley Groundwater Pumping and E/M Water Use  
(1992-93 through 2025-26 RY (AF))**

Runoff Year	Owens River Basin Runoff (1)	Total Pumping	Non-E/M Pumping	E/M Pumping	E/M Water Uses	E/M Pumping & Use Imbalance	Cumulative E/M Pumping & Use Imbalance
1992-93	62%	84,453	70,688	13,765	18,357	-4,592	-9,319
1993-94	108%	76,329	67,338	8,991	19,310	-10,319	-19,638
1994-95	67%	89,219	78,209	11,010	20,812	-9,802	-29,440
1995-96	156%	69,752	57,180	12,572	22,943	-10,342	-39,782
1996-97	137%	74,904	57,981	16,923	23,949	-7,026	-46,808
1997-98	126%	66,914	52,760	14,154	21,608	-7,346	-54,154
1998-99	151%	51,574	47,353	4,221	19,672	(3)	-54,154
1999-00	90%	63,675	59,342	4,333	24,452	-20,117	-74,271
2000-01	85%	67,795	61,456	6,339	20,782	-14,272	-88,543
2001-02	84%	73,349	70,055	3,294	21,815	-18,521	-107,064
2002-03	68%	81,979	76,059	5,920	21,394	-15,474	-122,538
2003-04	83%	87,727	80,729	6,998	21,116	-14,118	-136,656
2004-05	78%	85,820	78,110	7,710	18,918	-10,617	-147,273
2005-06	138%	56,766	51,695	5,071	20,032	-14,285	-161,558
2006-07	148%	58,621	53,925	4,696	17,357	(3)	-161,558
2007-08	61%	60,338	53,413	6,925	11,565	-4,640	-166,198
2008-09	75%	68,149	60,231	7,918	10,646	-2,728	-168,926
2009-10	79%	64,138	57,946	6,192	10,697	-4,505	-173,431
2010-11	104%	78,171	71,156	7,015	10,407	-3,392	-176,823
2011-12	142%	91,728	84,394	7,334	11,462	-4,128	-180,951
2012-13	58%	88,308	82,653	5,655	9,257	-3,602	-184,553
2013-14	54%	79,221	74,090	5,131	8,222	-3,091	-187,644
2014-15	53%	66,561	60,671	5,890	9,520	-3,630	-191,274
2015-16	48%	70,273	65,149	5,124	8,265	-3,141	-194,415
2016-17	82%	75,340	70,070	5,270	10,967	-5,697	-200,112
2017-18	202%	47,443	44,466	2,977	11,652	(3)	-200,112
2018-19	98%	84,709	77,758	6,951	9,895	-2,944	-203,056
2019-20	155%	53,453	49,722	3,731	11,196	(3)	-203,056
2020-21	75%	73,314	64,389	8,925	9,311	-386	-203,442
2021-22	47%	62,410	55,813	6,597	10,223	-3,626	-207,068
2022-23	58%	66,185	59,342	6,843	9,812	-2,969	-210,037
2023-24	217%	35,217	33,224	1,993	12,791	(3)	-210,037
2024-25	99%	48,678	45,770	2,908	12,642	-9,734	-219,771
2025-26	88%	55,040	51,040	4,000	12,000	-8,000	-227,771
2026-27	79%	(2)		7,000	10,750	-3,750	-231,521

(1) Based on applicable 50-year mean

(2) Planned pumping range is 54,310 - 81,360 acre-feet

(3) surface water was available

#### 1.4. Aqueduct Operations

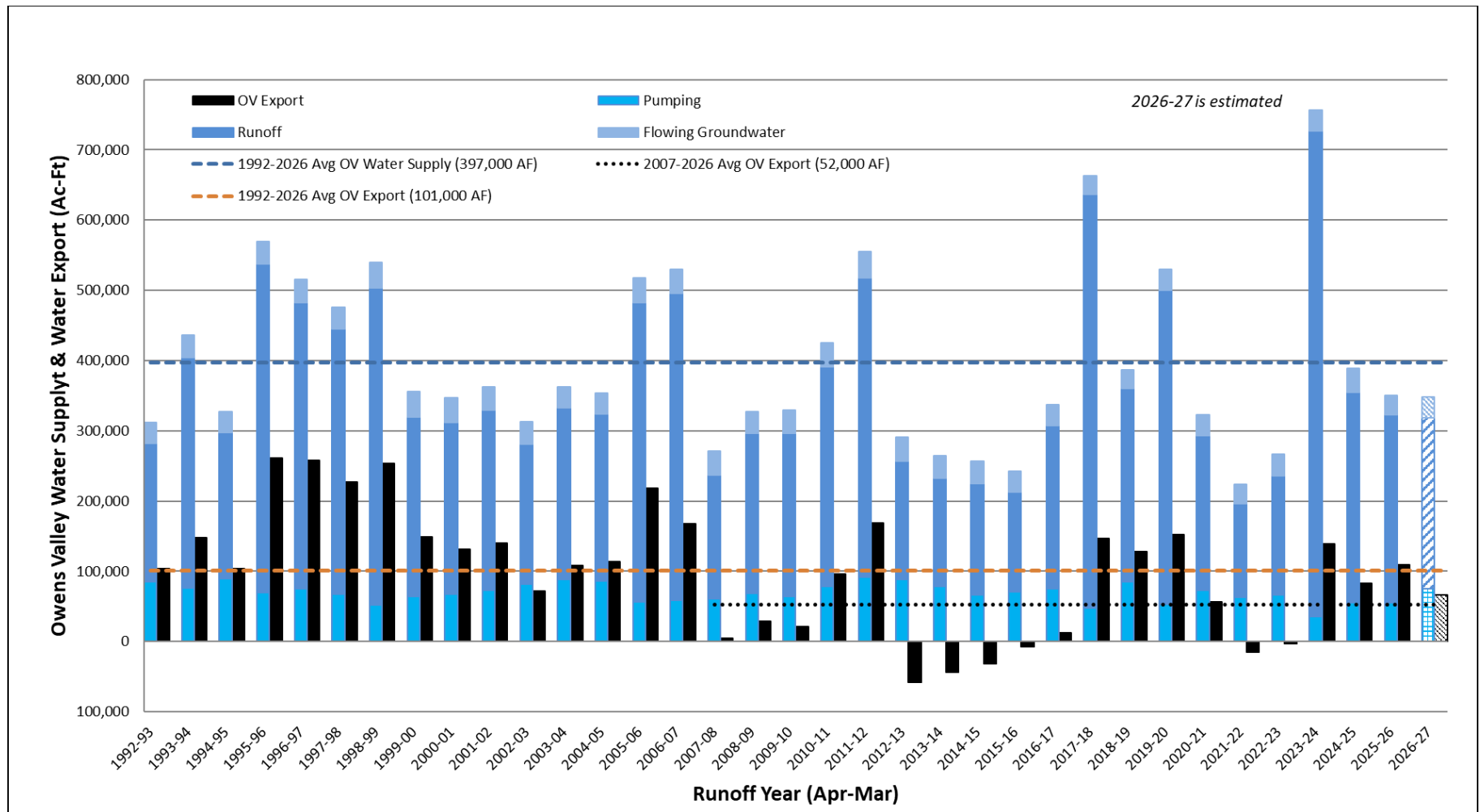
Table 1.10 shows planned LAA reservoir storage levels and monthly deliveries to Los Angeles along with the total planned export from Eastern Sierra to the City during the RY. Approximately 66,000 AF of export will come from the Owens Valley water supply.

Figure 1.12 shows the historical total Owens Valley water supply (made up of flowing groundwater, runoff, and pumping) alongside the amount of water exported to Los Angeles which comes from that total supply.

The 1991 EIR analyzed water supply for the LAA for pre-project conditions and for conditions under implementation of the Water Agreement. This analysis isolated the Owens Valley to determine what effect implementation of the Water Agreement would have on water supply for the LAA. Table S-1 of the 1991 EIR showed the components of aqueduct supply in average years during the pre-project and under the proposed project (1970-1990 and the Water Agreement). Calculations taken from Table S-1 show that prior to the building of the Second LAA in 1971, 38% of Owens Valley water supply was exported to Los Angeles on an annual basis. The 1991 EIR projected 44% of Owens Valley Water Supply being exported to Los Angeles annually. However, since implementation of the Water Agreement, on average, 25% of the Owens Valley water supply has been exported to Los Angeles.

**Table 1.10. Planned LAA Operations for 2026-27 RY**

<b>Month</b>	<b>Owens Valley-Bouquet Reservoir Storage 1<sup>st</sup> of month Storage (acre-feet)</b>	<b>Exports from Eastern Sierra (acre-feet)</b>
April, 2026	228,000	15,000
May	245,000	32,000
June	234,000	26,000
July	211,000	24,000
August	183,000	22,000
September	159,000	16,000
October	141,000	9,000
November	151,000	15,000
December	153,000	19,000
January, 2027	162,000	16,000
February	184,000	17,000
March	194,000	16,000
<b>TOTAL</b>	<b>-34,000</b>	<b>227,000</b>



Note: The blue bar made up of Runoff, Flowing Groundwater, and Pumping is the Owens Valley water supply. The black bar is the amount of the Owens Valley water supply exported to Los Angeles. The black bar is below 0 in certain RYs because the Owens Valley uses exceeded the supply and imported water was used to meet the water demands.

**Figure 1.12 Owens Valley Water Supply and Export**

## **1.5. Water Exports to Los Angeles**

Figure 1.13 provides a record of water exports from the Eastern Sierra to Los Angeles since 1970. Figure 1.14 shows the LAA contribution to the City water supply relative to other sources and the total annual water supplied to Los Angeles since 1970. LADWP estimates that the City will require about 457,000 AF of water during the RY. Water from the Owens Valley will make up 14% of the supply for Los Angeles, while water from the entire Eastern Sierra will make up about 47% of the total supply. Los Angeles area aquifers will supply about 13%, MWD will supply about 37%, and recycled water will supply about 3%.

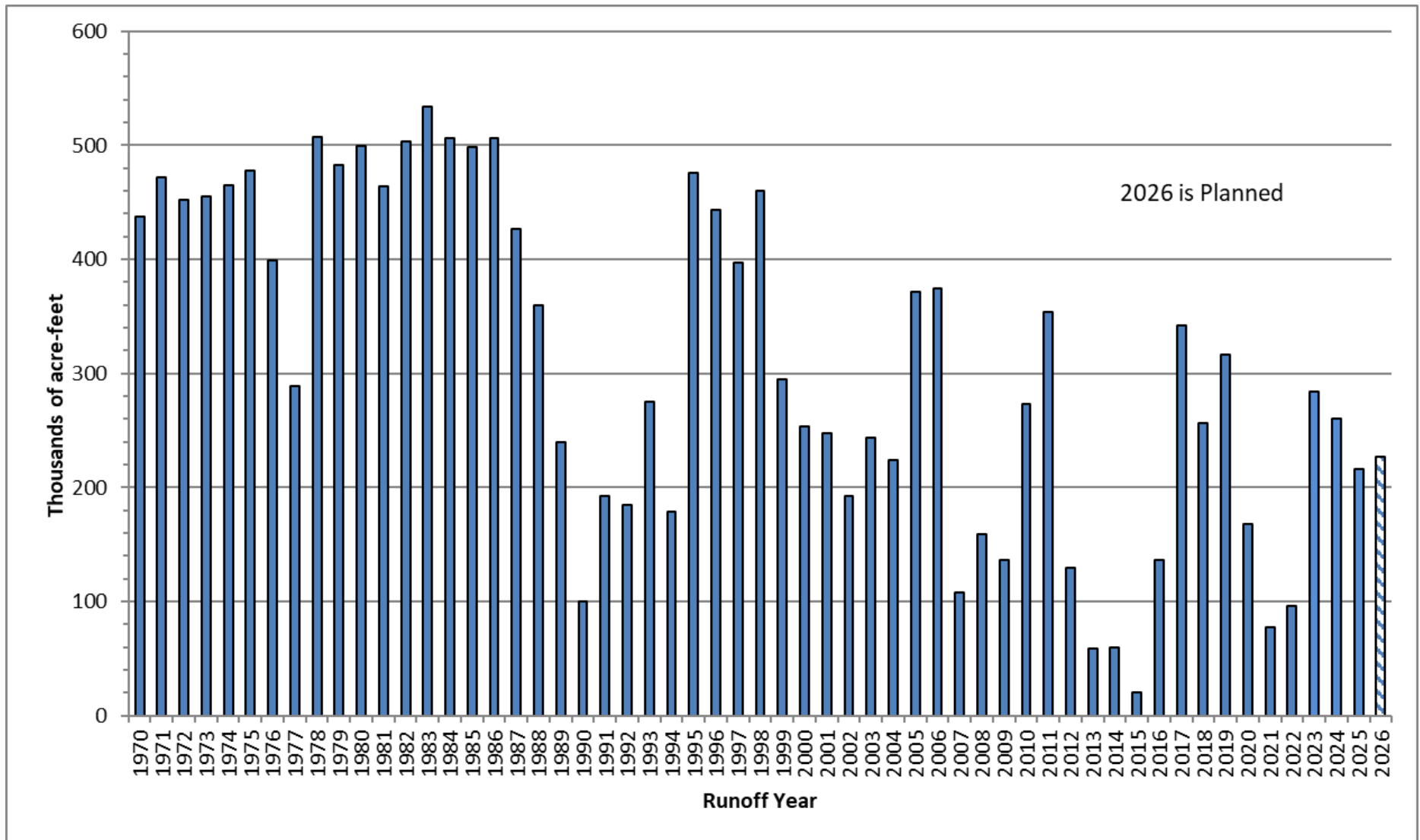


Figure 1.13 Water Export from the Eastern Sierra

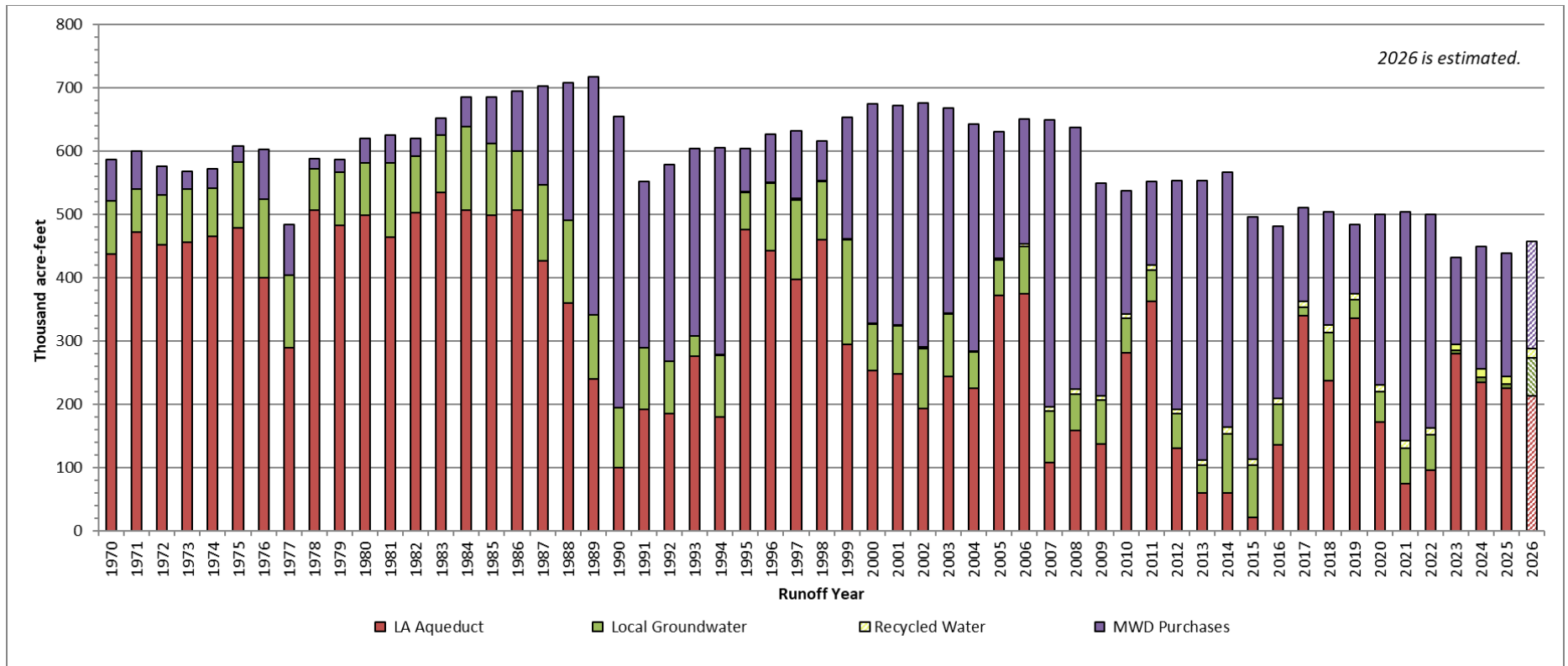


Figure 1.14. Sources of Water for the City

## **1.6. Water Spreading in the Owens Valley**

In years with much greater than normal snowmelt, the volume of runoff may at times exceed the capacity of the LAA system. During periods of high runoff, LADWP may spread runoff water for groundwater recharge purposes. In addition, other operational needs may require LADWP to spread water.

No water spreading is planned in the Owens Valley.

## **CONDITIONS IN THE OWENS VALLEY**

## 2.0 CONDITIONS IN THE OWENS VALLEY

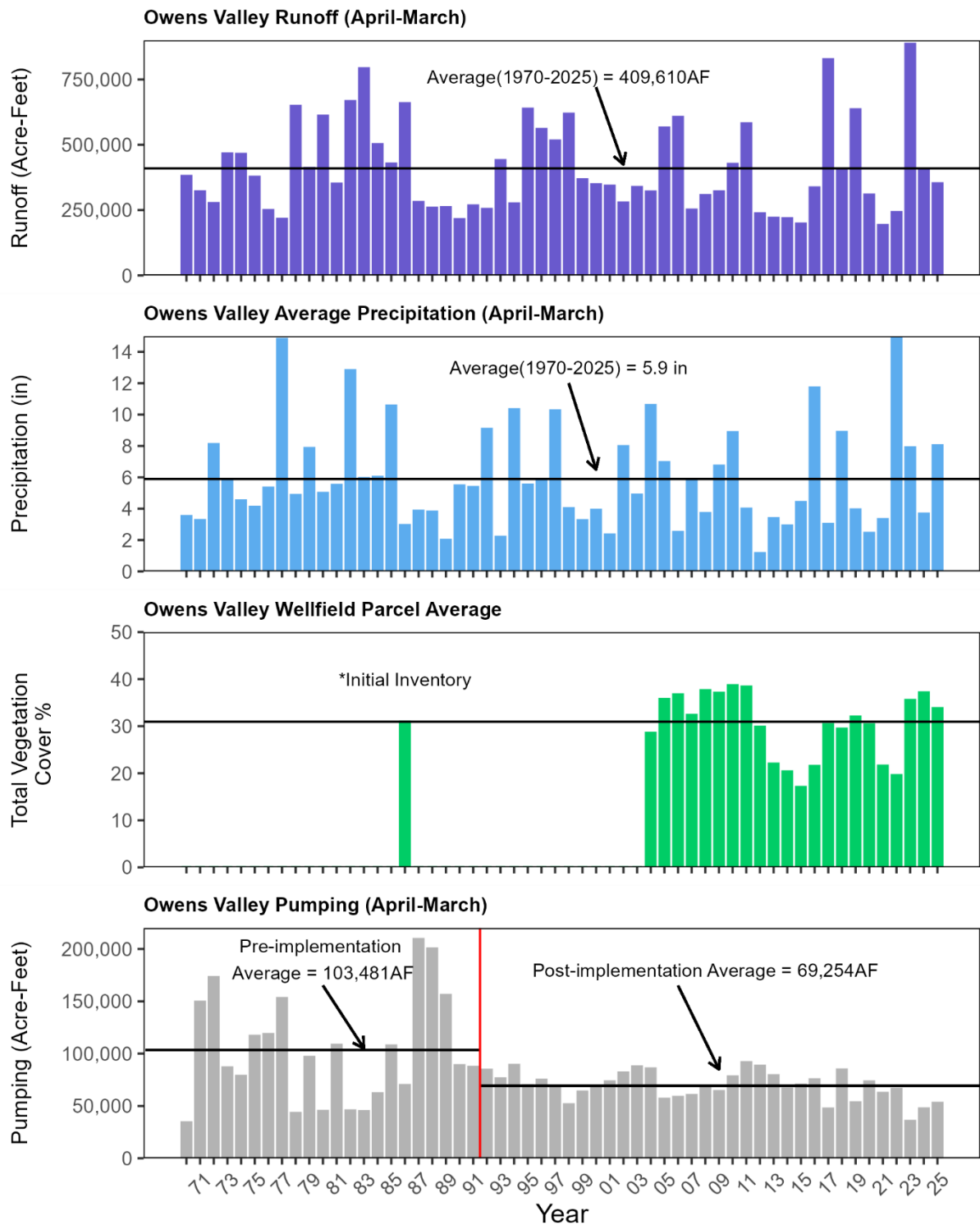
As of April 1, 2026, the Eastern Sierra overall snowpack was measured to be 24% of normal (Table 2.5). Owens River Basin runoff is forecast to be 322,300 AF or approximately 79% of normal (Section 1, Table 1.1). Owens Valley floor precipitation during the prior RY was about 145% of average (Table 2.6). Overall, vegetation cover in the Owens Valley is comparable to mid-1980s baseline conditions. A graphical summary of Owens Valley conditions is provided in Figure 2.1. Groundwater levels are generally stable in most areas of the valley, based on depth to water in selected monitoring wells in each of LADWP's nine wellfields, as shown in Figures 2.2 through Figure 2.21.

### 2.1. Water Well ON/OFF Status

The Water Agreement includes the vegetation protection provisions of linking pumping wells to specific monitoring sites. If the available soil moisture measured at a vegetation monitoring site is not sufficient to meet the estimated demands of the vegetation associated with that monitoring site, the wells linked to that site are designated as being in the OFF status and may not be operated. The wells linked to a monitoring site may be operated if the available soil water is determined to be sufficient to have met the estimated water requirements of the vegetation at the time that the associated wells were designated as being in the OFF status. The Green Book includes the complete well ON/OFF procedures. Table 2.1 lists Owens Valley monitoring site ON/OFF status as of April 2026, the monitoring wells associated with each monitoring site, and the linked pumping wells.

Some pumping wells are designated as exempt from linkage to vegetation sites and the ON/OFF provisions of the Water Agreement because they are in areas that do not cause significant adverse impacts to the vegetation or because the County and LADWP have determined them to be a necessary source of water. A list of exempt wells and the reasons for exemption are included in Section 1, Table 1.5.

### Summary of Owens Valley Conditions



**Figure 2.1. Summary of Owens Valley Conditions**

**Table 2.1. Owens Valley Monitoring Site Status (ON/OFF) as of April 2026**

Wellfield	Monitoring Site	Monitoring Well	Pumping Wells	E/M Wells	ON/OFF Status
Laws	L1	795T	247, 248, 249, 398		ON
	L2	USGS 1	236*, 239, 243, 244		ON
	L3		240, 241, 242	376, 377	ON
	L4a, L4b			385, 386	na
	L5**		245	387, 388	na
	Exempt		236*, 354, 422, 413		Exempt
Bishop	All wells		140, 411, 410, 371		na
			406, 407, 408, 412		na
Big Pine	BP1	798T	210, 352	378, 379, 389	ON
	BP2	799T	220, 229, 374		OFF
	BP3	567T	222, 223, 231, 232		ON
	BP4	800T	331		ON
	Exempt		218, 219, 330, 332, 341, 352, 375, 415		Exempt
Taboose-Aberdeen	TA3	505T	106, 110, 111, 114		ON
	TA4	586T	342, 347		ON
	TA5	801T	349		ON
	TA6	803T	109, 370		ON
	Exempt		118		Exempt
Thibaut-Sawmill	TS1	807T	159		ON
	TS2	T806	155		ON
	TS3	454T	103, 104	382	ON
	TS4	804T		380, 381	ON
	Exempt		351, 356		Exempt
Independence-Oak	IO1	809T	391, 400		ON
	IO2	548T	63		ON
	Exempt		59, 60, 61, 65, 401, 357, 384*	383, 384	Exempt
Symmes-Shepherd	SS1	USGS 9G	69, 392, 393		ON
	SS2	646T	74, 394, 395		OFF
	SS3	561T	92, 396		ON
	SS4	811T	75, 345		ON
	Exempt			402	Exempt
Bairs-Georges	BG2	812T	76, 343*, 348, 403		ON
	Exempt		343*		na
Lone Pine	Exempt		344, 346	425	Exempt
	Other		416		na

**2.2. Groundwater Level Fluctuations**

LADWP’s Water Operations hydrographers monitor groundwater levels in over 900 monitoring wells throughout the Owens Valley. This enables evaluation of groundwater levels since the early 1970s when LADWP began to utilize groundwater resources on a more consistent basis. This section presents hydrographs of the average groundwater levels in each wellfield and overall, in the Owens Valley.

Groundwater levels in select monitoring wells were used to calculate the average groundwater level in each wellfield. Four monitoring wells were selected per wellfield, listed in Table 2.2 using the following criteria: 1) be representative of the shallow aquifer that support vegetation, 2) be located spatially distributed throughout the wellfield, and 3) have groundwater level measurements back to the early 1970s.

**Table 2.2 Selected Monitoring Wells in Each Wellfield Used to Prepare Hydrographs**

<b>Wellfield</b>	<b>Monitoring Wells</b>
<b>Laws</b>	<i>T107, T436, T438, T490</i>
<b>Bishop</b>	<i>T389, T390, T485, T501</i>
<b>Big Pine</b>	<i>T425, T426, T469, T470</i>
<b>Taboose-Aberdeen</b>	<i>T417, T419, T421, T502</i>
<b>Thibaut-Sawmill</b>	<i>T413, T414, T415, T454</i>
<b>Independence-Oak</b>	<i>T406, T407*, T412, T453</i>
<b>Symmes-Shepherd</b>	<i>T402, T403, T440, T511</i>
<b>Bairs-George</b>	<i>T398, T400, T444, T652</i>
<b>Lone-Pine</b>	<i>T446, V015N, V172, V256</i>

A summary of the data analyzed is presented in Table 2.3, showing average wellfield pumping, Owens River Basin runoff, and DTW, for the 1991 through 2025-26 RYs.

The last row of the table shows the same information for the entire Owens Valley based on the data from all of the monitoring wells in Table 2.2.

**Table 2.3 Average Annual Pumping and Depth to Groundwater since 1991 RY**

<b>Wellfield</b>	<b>Average (1991-2025 RYs)</b>	
	<b>Pumping (AF/Year)</b>	<b>Depth to Groundwater<sup>§</sup> (FT)</b>
<b>Laws</b>	<i>6,741</i>	<i>15.2</i>
<b>Bishop</b>	<i>9,139</i>	<i>12.2</i>
<b>Big Pine</b>	<i>22,009</i>	<i>16.4</i>
<b>Taboose-Aberdeen</b>	<i>7,499</i>	<i>20.0</i>
<b>Thibaut-Sawmill</b>	<i>11,226</i>	<i>11.8</i>
<b>Independence-Oak</b>	<i>8,094</i>	<i>5.6</i>
<b>Symmes-Shepherd</b>	<i>2,840</i>	<i>6.4</i>
<b>Bairs-George</b>	<i>648</i>	<i>6.9</i>
<b>Lone Pine</b>	<i>1,099</i>	<i>17.4</i>
<b>Owens Valley</b>	<b>69,295</b>	<b>12.5</b>

§ Average distance to water from surface is calculated using 1992-2026 April 1 values.

\* Average 1991-2025 RYs Owens River Basin Runoff is 402,758 acre-feet.

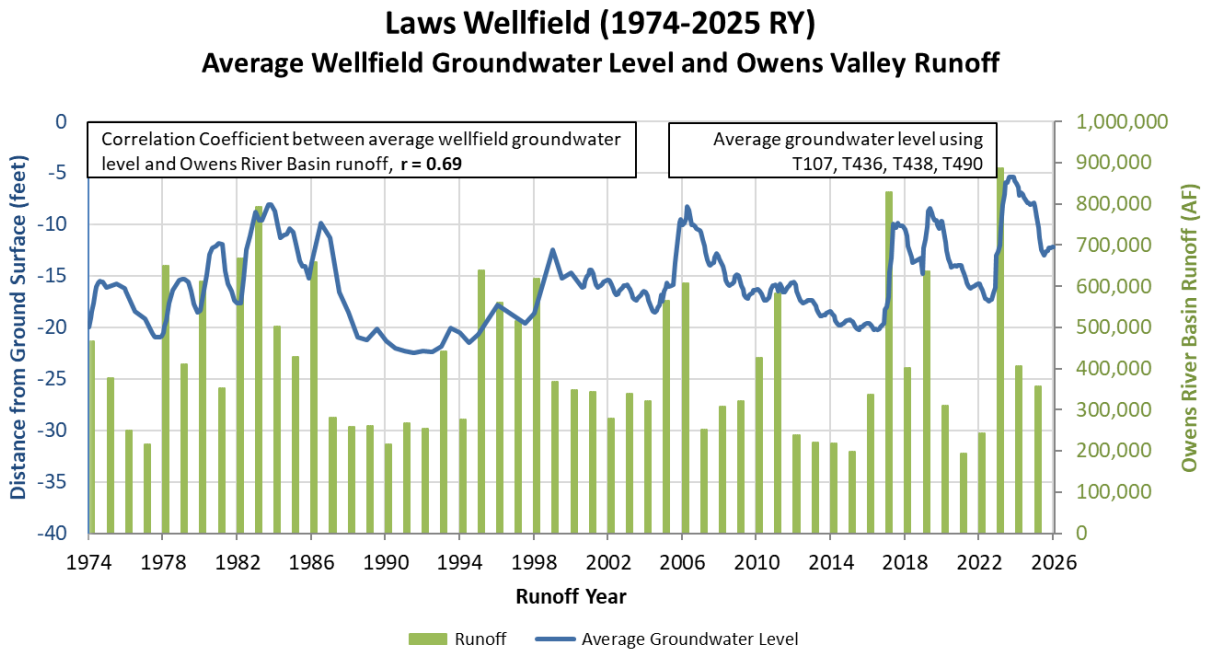
† Based on data from select monitoring wells presented in Table 2.2.

The following figures show graphically the change in average groundwater level with Owens River Basin runoff and pumping for each of the wellfields and for the overall Owens Valley from the early 1970s to the 2025-26 RY. These figures also show the correlation coefficient of the average wellfield groundwater levels with both runoff and pumping. The correlation coefficient (r-value) represents the statistical relationship between two variables and can vary between 0.0 and 1.0 for positively related variables and between -1.0 and 0.0 for negatively related variables. The closer the correlation coefficient is to 1.0 or -1.0, the stronger the relationship between the two variables.

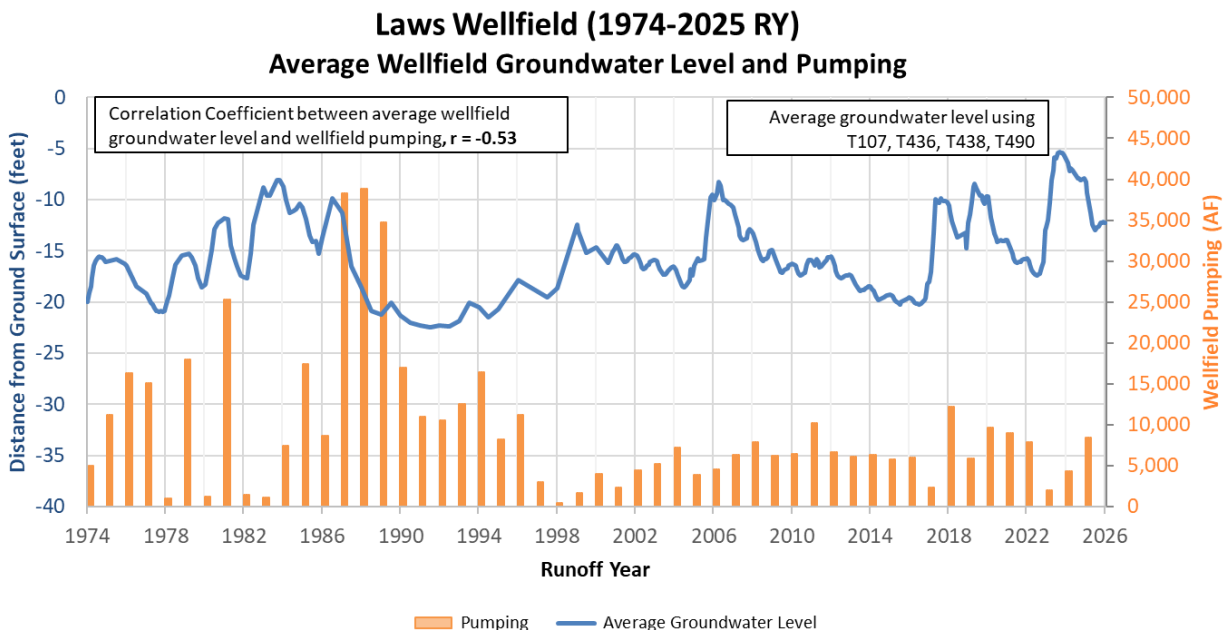
A review of Table 2.3 and the following wellfield and overall Owens Valley hydrographs shows that since the implementation of the Inyo/Los Angeles Water Agreement in 1991:

- Owens River Basin runoff has been highly variable, ranging from 194,000 AF in 2021 to 888,000 AF in 2023 and an average of 402,000 AFY,
- LADWP pumping in Owens Valley was relatively stable, ranging from 35,000 AF in 2023 to 91,000 AF in 2011 and an average of 69,200 AFY,
- Average Owens Valley groundwater level was generally stable, ranging from 7 to 17 feet below ground surface with an average of 12.5 ft below ground surface and without any long-term rising or declining trends,
- The year-to-year average groundwater level trend in Owens Valley has been relatively stable based on the calculated autocorrelation.

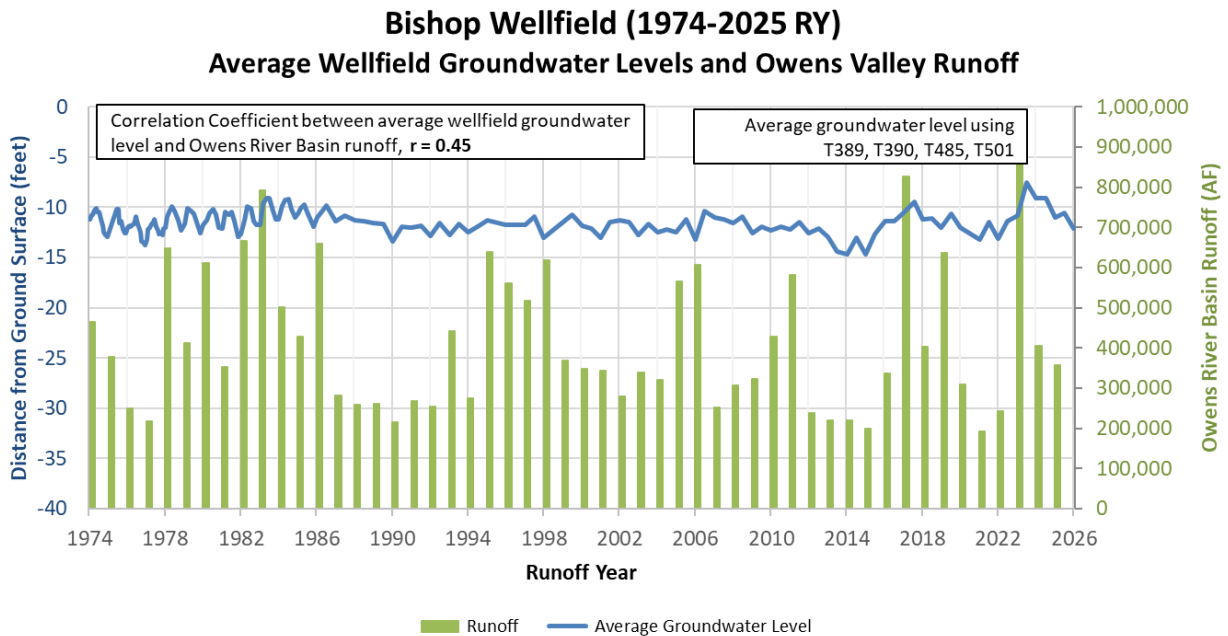
As presented in Figures 2.2 - 2.21, historical average groundwater levels in Owens Valley correlate positively with Owens River Basin Runoff ( $r = 0.65$ ) and negatively with pumping ( $r = -0.62$ ). Among all wellfields, groundwater levels in Lone Pine Wellfield correlated strongest with runoff ( $r = 0.72$ ), while groundwater levels in Symmes-Shepherd Wellfield correlated weakest with runoff (0.39). Groundwater levels in Bairs-Georges Wellfield correlated strongest with pumping ( $r=-0.65$ ), while groundwater levels in Lone Pine Wellfield correlated weakest with pumping ( $r=-0.18$ ). Generally, average groundwater levels have a stronger correlation with runoff than pumping in all wellfields, except Taboose-Aberdeen, Thibaut-Sawmill, Symmes-Shepherd, and Bairs-Georges wellfields.



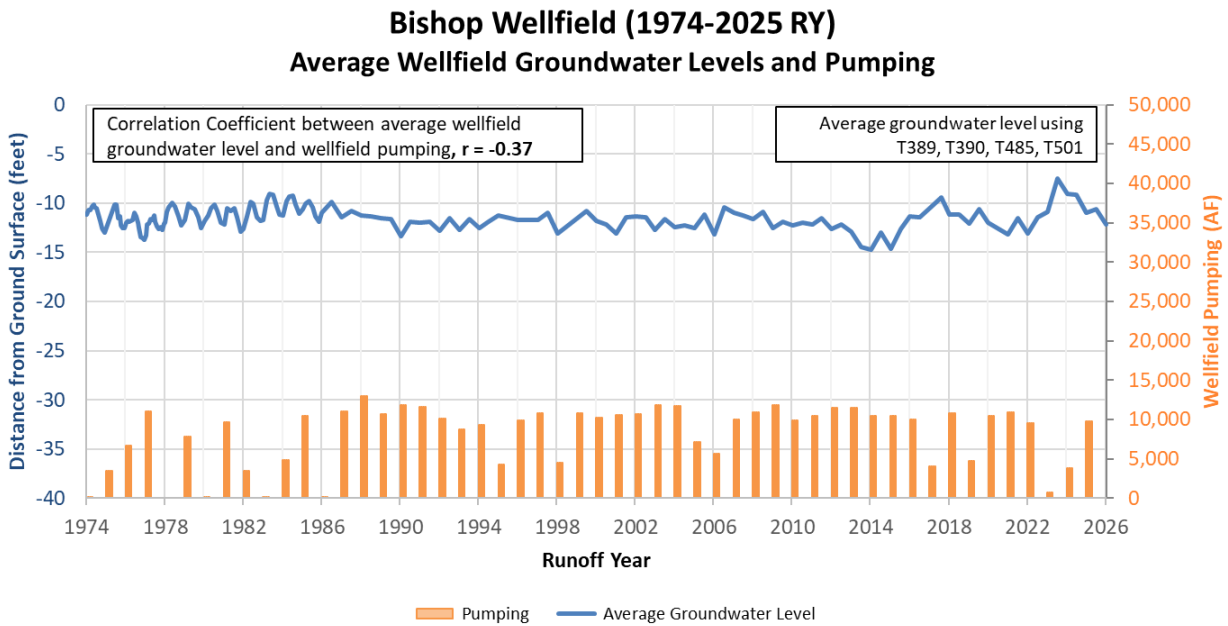
**Figure 2.2. Average Laws Wellfield Groundwater Level and Owens River Basin Runoff**



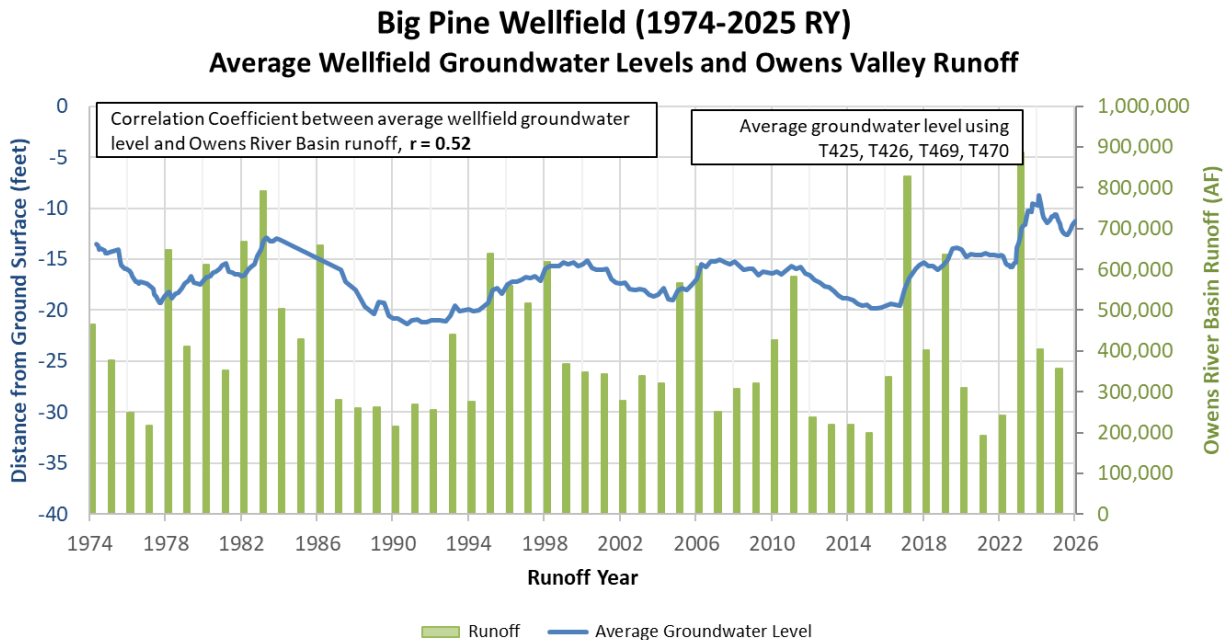
**Figure 2.3. Average Laws Wellfield Groundwater Levels and Pumping**



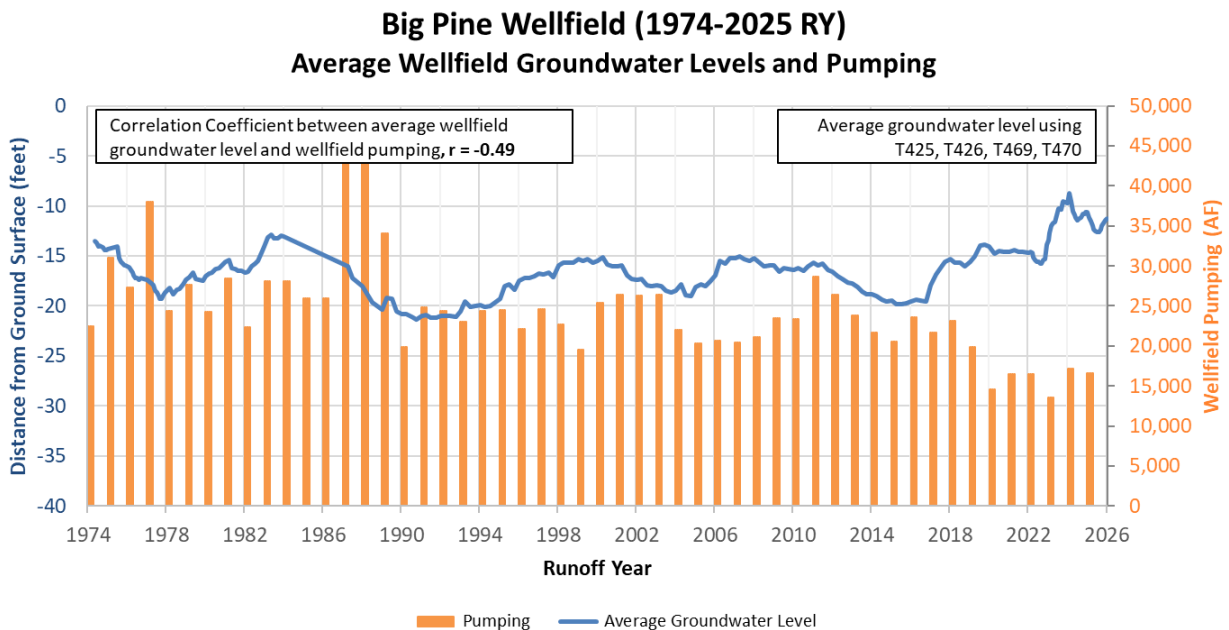
**Figure 2.4. Average Bishop Wellfield Groundwater Level and Owens River Basin Runoff**



**Figure 2.5. Average Bishop Wellfield Groundwater Levels and Pumping**

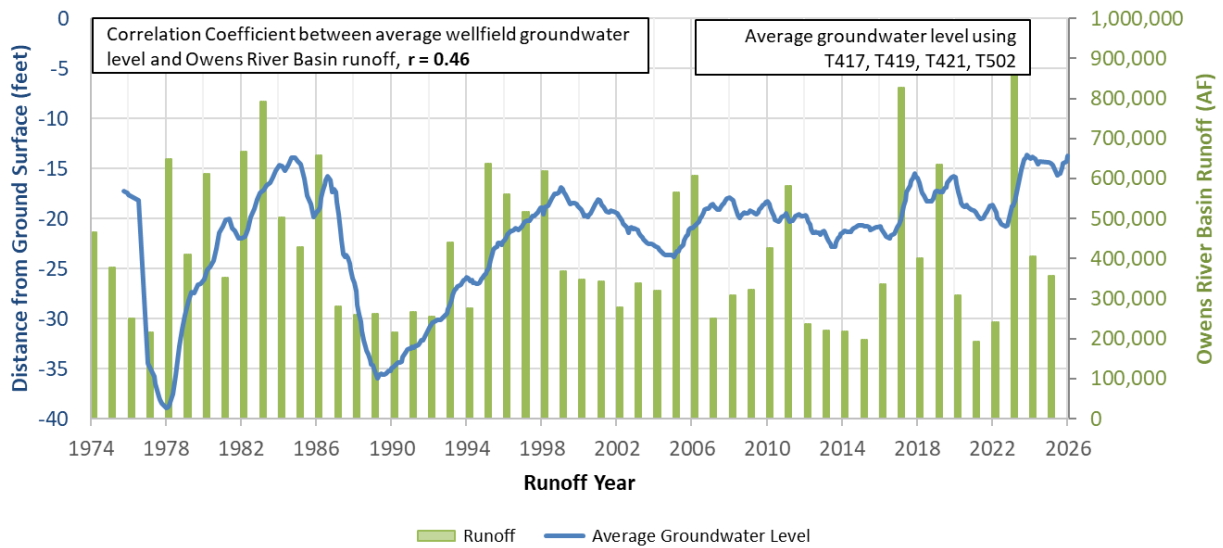


**Figure 2.6. Average Big Pine Wellfield Groundwater Level and Owens River Basin Runoff**



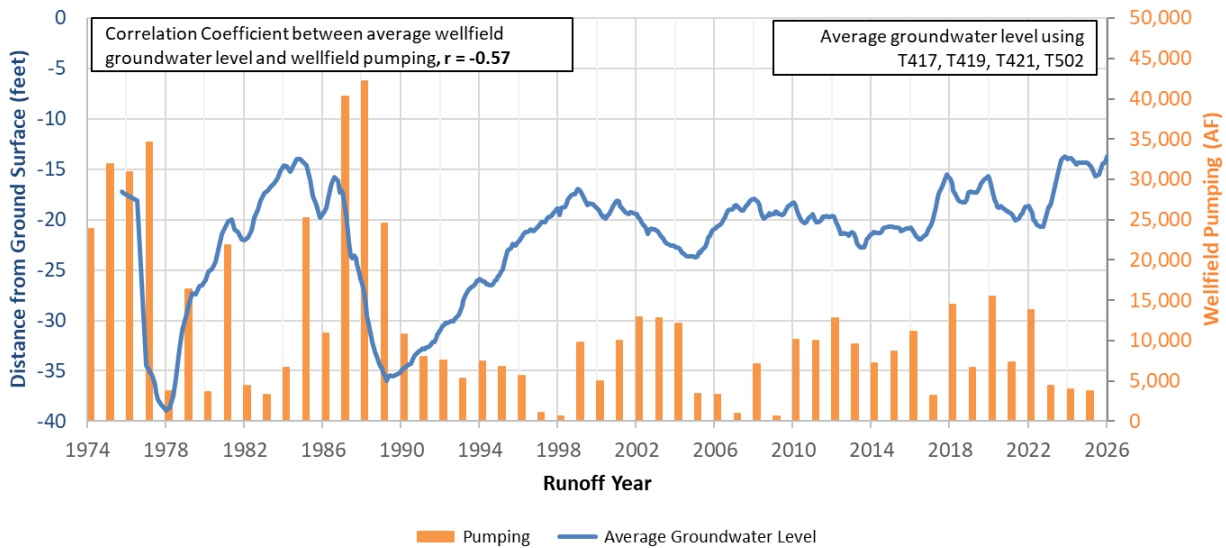
**Figure 2.7. Average Big Pine Wellfield Groundwater Levels and Pumping**

### Taboose-Aberdeen Wellfield (1974-2025 RY) Average Groundwater Levels and Owens Valley Runoff

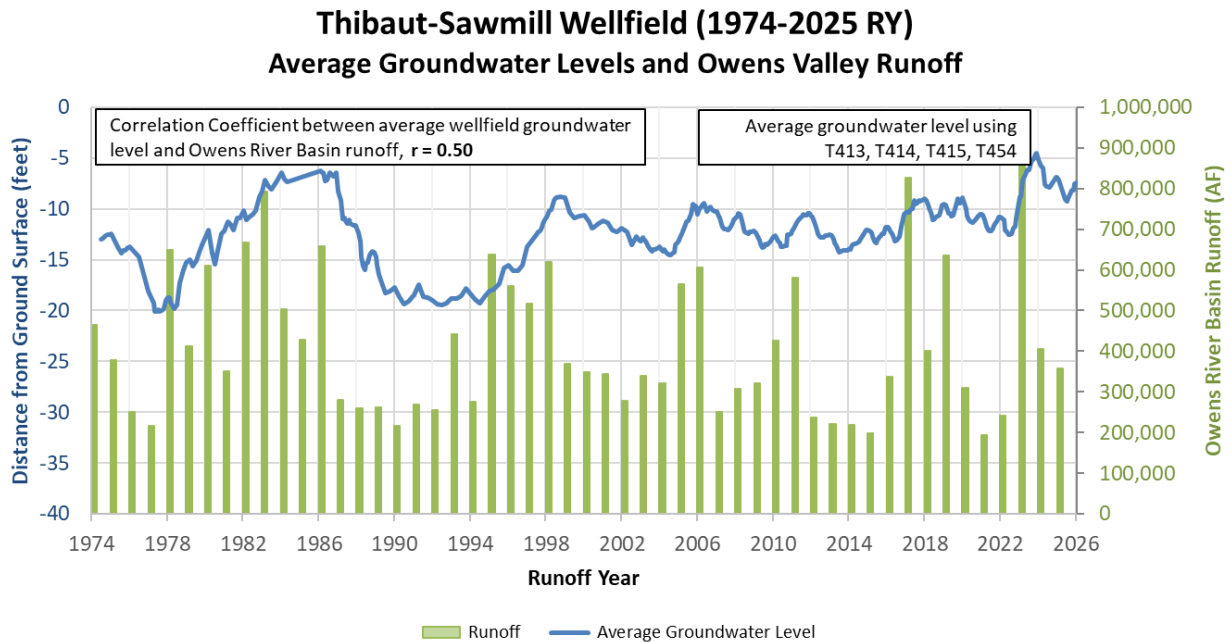


**Figure 2.8. Average Taboose-Aberdeen Wellfield Groundwater Level and Owens River Basin Runoff**

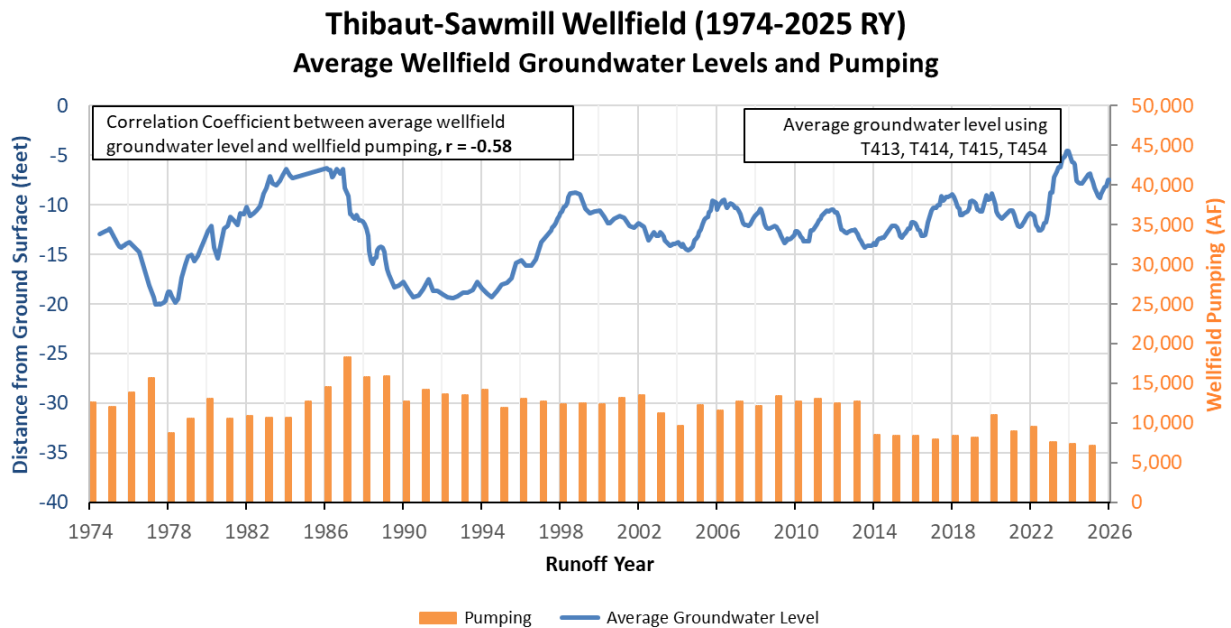
### Taboose-Aberdeen Wellfield (1974-2025 RY) Average Wellfield Groundwater Levels and Pumping



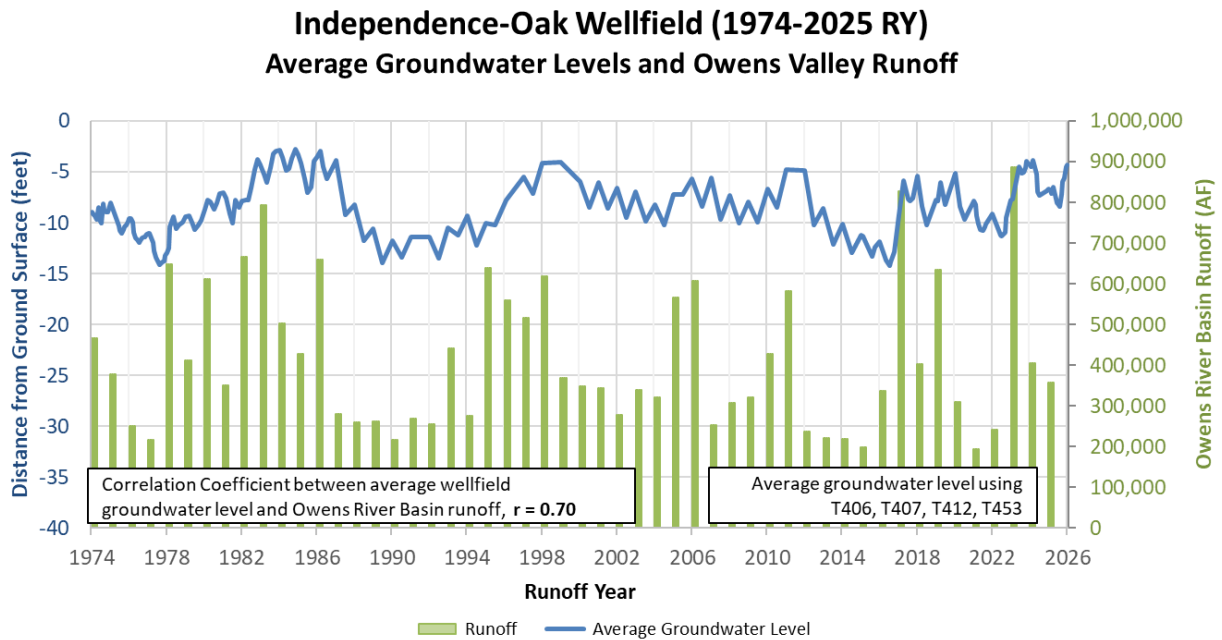
**Figure 2.9. Average Taboose-Aberdeen Wellfield Groundwater Levels and Pumping**



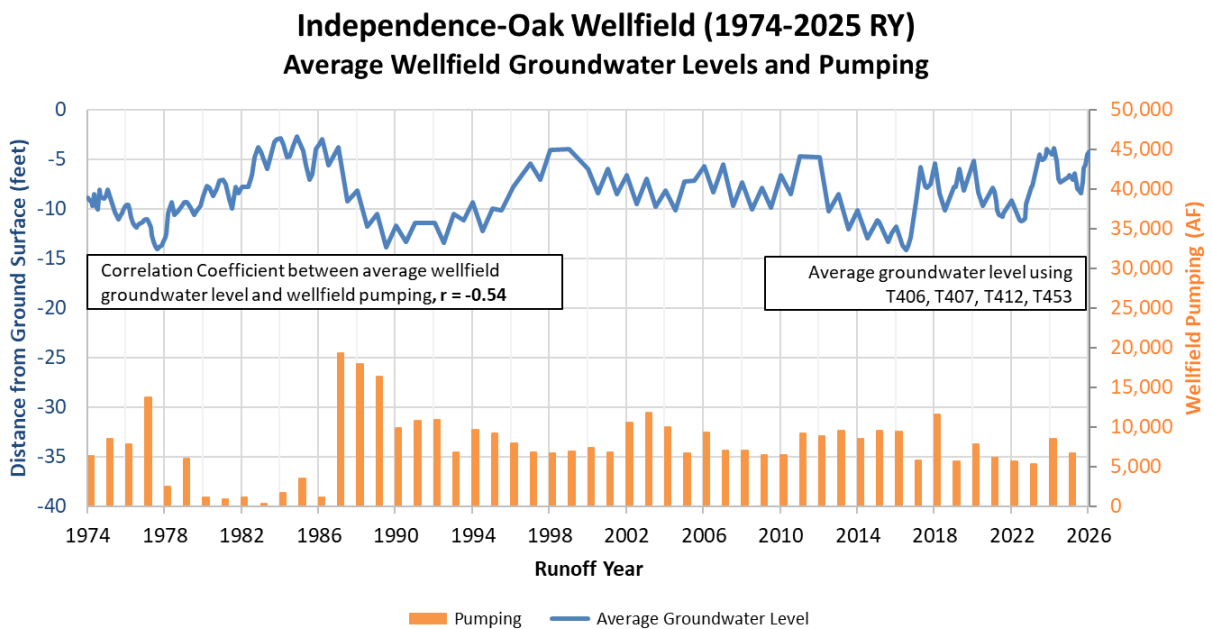
**Figure 2.10. Average Thibaut-Sawmill Wellfield Groundwater Level and Owens River Basin Runoff**



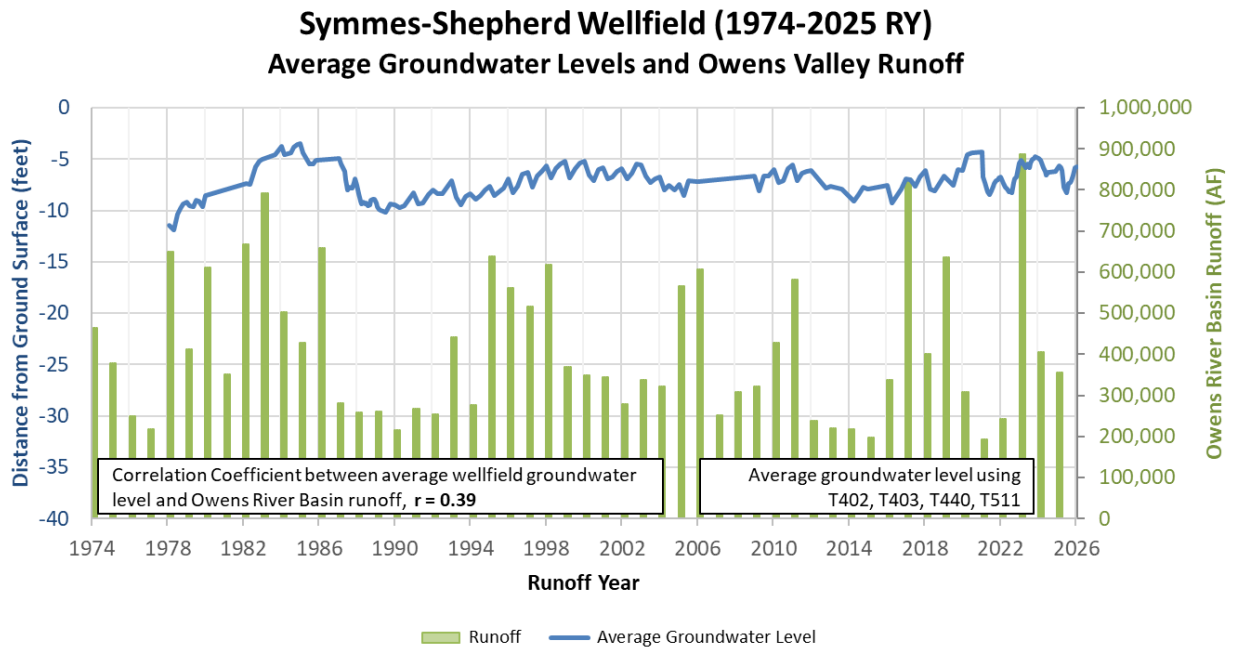
**Figure 2.11. Average Thibaut-Sawmill Wellfield Groundwater Levels and Pumping**



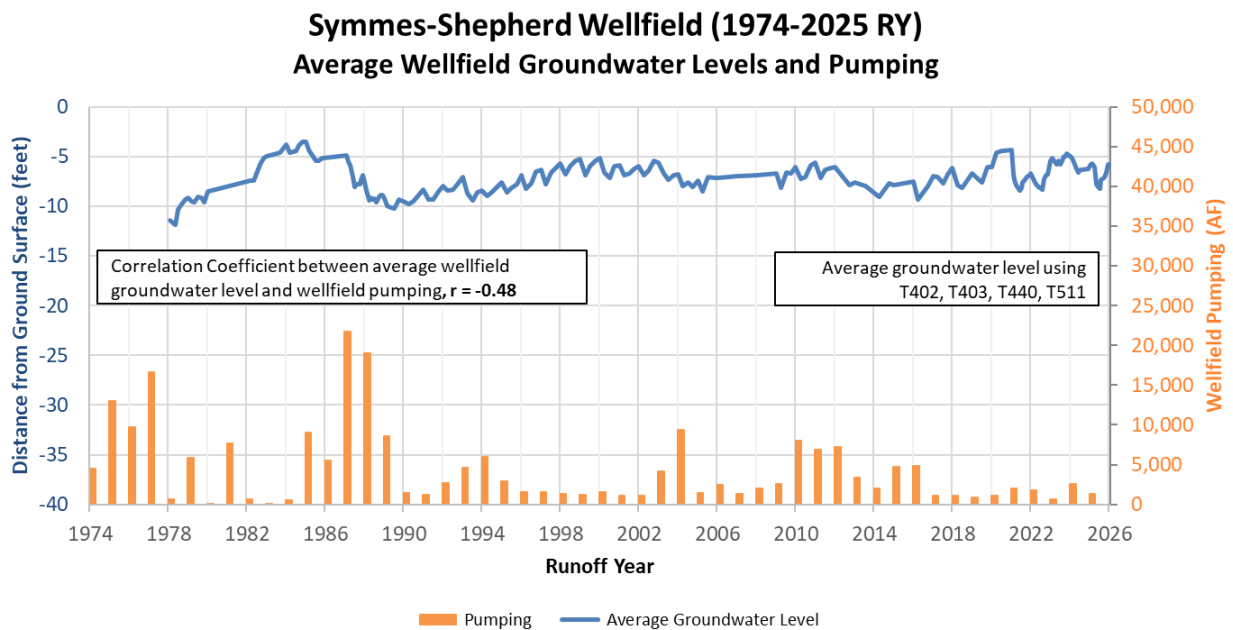
**Figure 2.12. Average Independence-Oak Wellfield Groundwater Level and Owens River Basin Runoff**



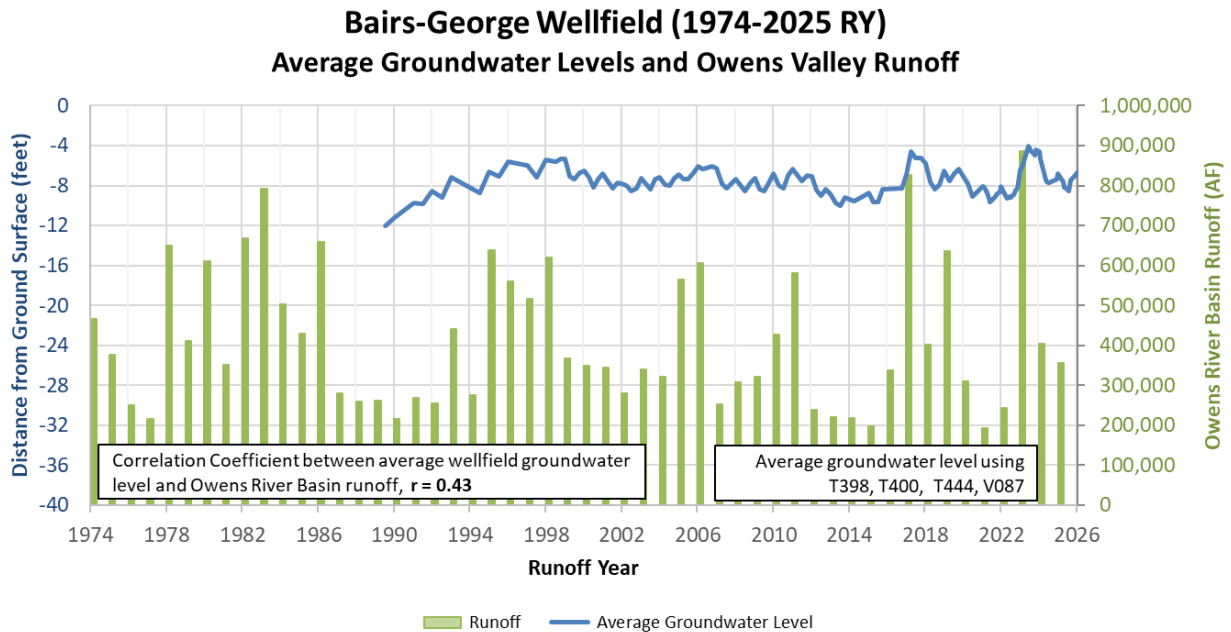
**Figure 2.13. Average Independence-Oak Wellfield Groundwater Levels and Pumping**



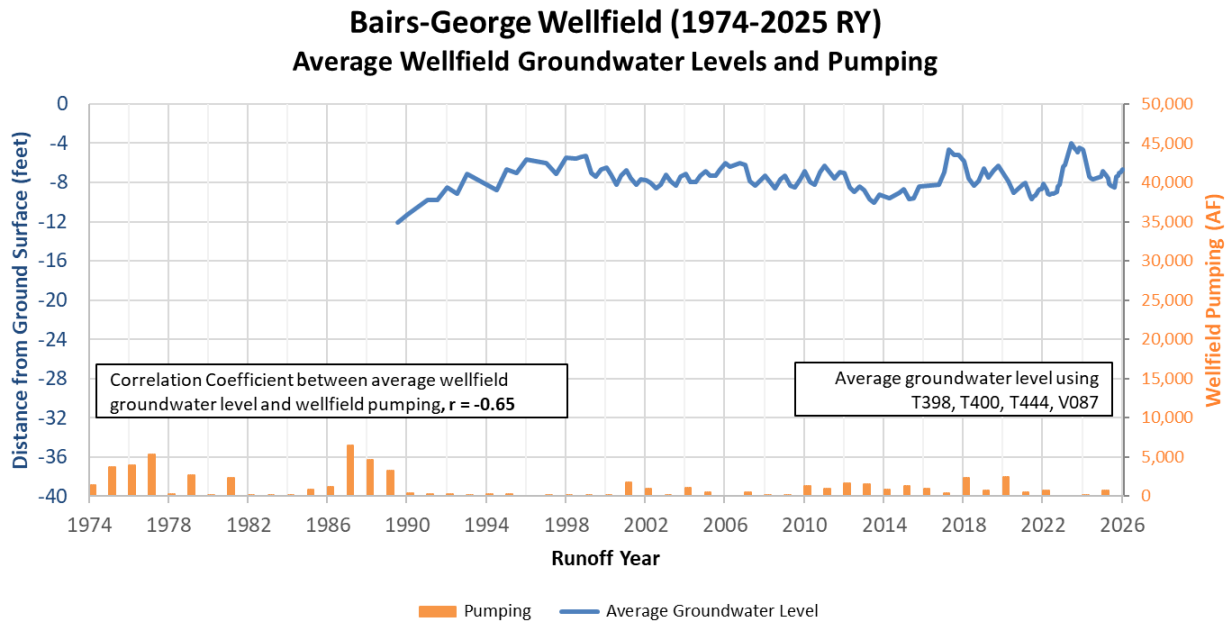
**Figure 2.14. Average Symmes-Shepherd Wellfield Groundwater Level and Owens River Basin Runoff**



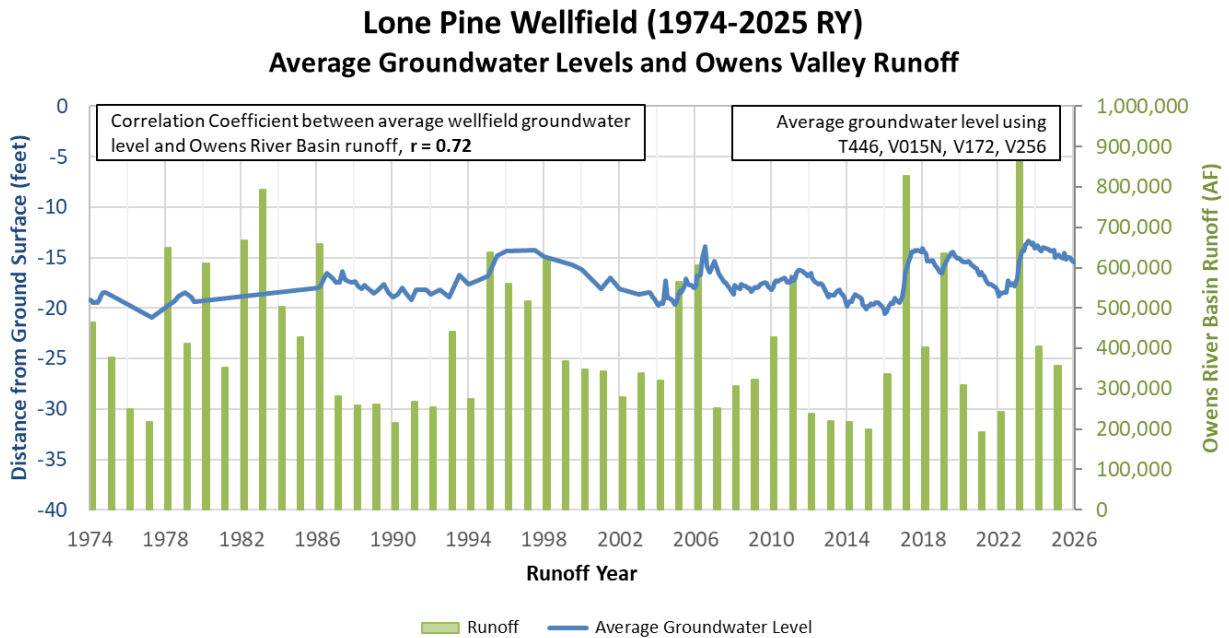
**Figure 2.15. Average Symmes-Shepherd Wellfield Groundwater Levels and Pumping**



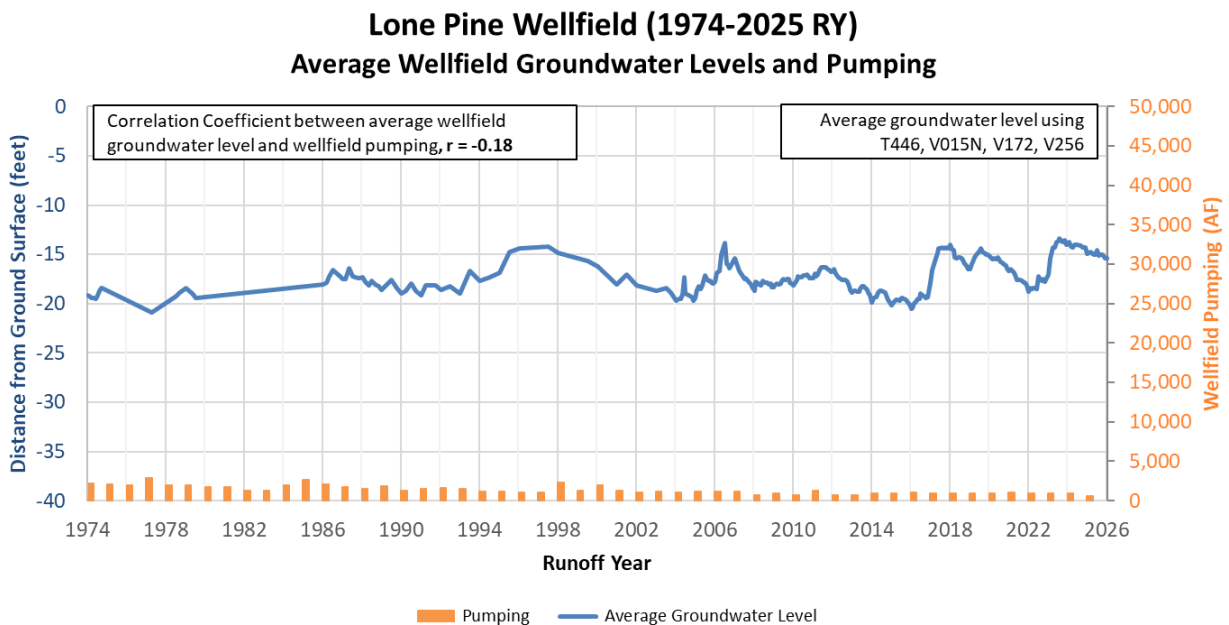
**Figure 2.16. Average Bairs-George Wellfield Groundwater Level and Owens River Basin Runoff**



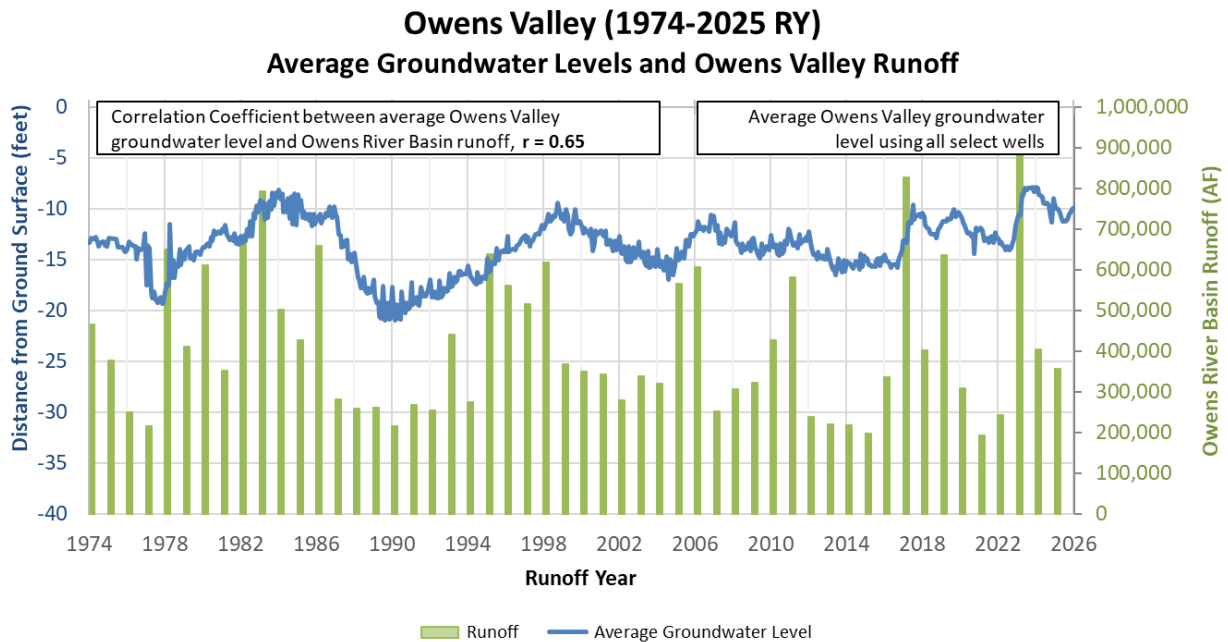
**Figure 2.17. Average Bairs-George Wellfield Groundwater Levels and Pumping**



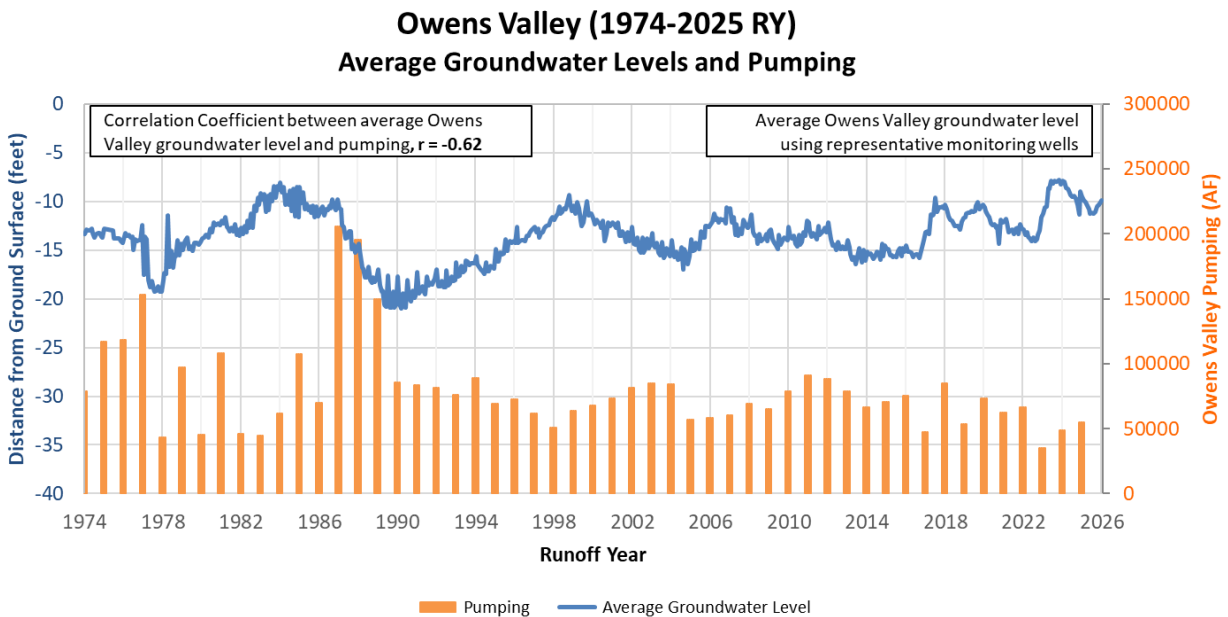
**Figure 2.18. Average Lone Pine Wellfield Groundwater Level and Owens River Basin Runoff**



**Figure 2.19. Average Lone Pine Wellfield Groundwater Levels and Pumping**



**Figure 2.20. Average Owens Valley Groundwater Level and Owens River Basin Runoff**



**Figure 2.21. Average Owens Valley Groundwater Levels and Pumping**

**Table 2.4 Owens Valley Wellfield Pumping in 2026-27 RY and Change In Average Groundwater Levels between April 2025 and April 2026**

<b>Wellfield</b>	<b>2025-26 RY Pumping (af)</b>	<b>Groundwater Level Change From April 2025 to April 2026 (ft)</b>
<b>Laws</b>	8,479	-3.98
<b>Bishop</b>	9,762	-1.15
<b>Big Pine</b>	16,630	-0.66
<b>Taboose-Aberdeen</b>	3,678	0.68
<b>Thibaut-Sawmill</b>	7,194	-0.62
<b>Independence-Oak</b>	6,696	2.38
<b>Symmes-Shepherd</b>	1,342	0.16
<b>Bairs-George</b>	711	0.13
<b>Lone Pine</b>	538	-0.42
<b>Owens Valley</b>	<b>55,030</b>	<b>-0.39</b>

### 2.3. Precipitation Record and Runoff Forecast

Table 2.5 presents the Eastern Sierra Snow Survey results as of April 1, 2026 summarizing snowpack conditions of the Mammoth Lakes, Rock Creek, Bishop, Big Pine, and Cottonwood areas. For each area, the table shows water content measurements, April 1 normal values, and the corresponding percentage of normal. Area-specific averages are included, along with an overall weighted Eastern Sierra snowpack average.

The Owens River Basin runoff forecast for the 2026-27 RY is 322,300 or 79% of the 50-year average (Table 1.1). Figure 2.22 compares the forecasted runoff for the 2025-26 RY to the actual runoff in previous RYs.

Table 2.6 details monthly precipitation totals for last RY as well as the long-term averages at representative precipitation gauges throughout the Owens Valley.

**Table 2.5. Eastern Sierra April 1, 2026 Snow Survey Results**

<b>EASTERN SIERRA SNOW SURVEY RESULTS</b>
<b>April 1, 2026</b>

<b>MAMMOTH LAKES AREA</b> (Contributes 27% of Owens River Basin runoff)
---

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Mammoth Pass	16.7	42.8	39%
Mammoth Lakes	2.2	20.2	11%
Minarets 2	5.7	29.4	19%
<b>Average:</b>	<b>8.2</b>	<b>30.8</b>	<b>27%</b>

<b>ROCK CREEK AREA</b> (Contributes 16% of Owens River Basin runoff)
--

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Rock Creek 1	0.0	7.4	0%
Rock Creek 2	0.3	10.3	3%
Rock Creek 3	0.1	13.2	1%
<b>Average:</b>	<b>0.1</b>	<b>10.3</b>	<b>1%</b>

<b>BISHOP AREA</b> (Contributes 19% of Owens River Basin runoff)
--

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Sawmill	6.1	19.3	32%
<b>Average:</b>	<b>6.1</b>	<b>19.3</b>	<b>32%</b>

<b>BIG PINE AREA</b> (Contributes 13% of Owens River Basin runoff)
--

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Big Pine Creek 2	1.9	12.8	15%
Big Pine Creek 3	9.1	18.0	50%
<b>Average:</b>	<b>5.5</b>	<b>15.4</b>	<b>36%</b>

<b>COTTONWOOD AREA</b> (Contributes 25% of Owens Basin River runoff)
--

<u>Course</u>	<u>Water Content</u>	<u>April 1 Normal</u>	<u>% of April 1 Normal</u>
Cottonwood Lakes 1	0.6	12.6	5%
Trailhead**	1.6	12.8	13%
<b>Average:</b>	<b>1.1</b>	<b>12.7</b>	<b>9%</b>

<b>EASTERN SIERRA OVERALL SNOW PACK</b> (Average of all snow courses)
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<b>Average of all Snow Courses</b>	<b>Water Content</b>	<b>April 1 Normal*</b>	<b>% of April 1 Normal</b>
	4.2	17.7	24%

**Table 2.6. Owens Valley Precipitation during RY 2025-26 in Inches**

Month	Bishop	Big Pine	Tinemaha Reservoir	LAA Intake	Indep. Yard	Alabama Gates	Lone Pine	Cotton-wood	South Haiwee	Average Owens Valley
April, 2025	0.23	0.47	0.3	0.2	0.13	0	0	0.11	0.00	0.16
May	0.04	0.05	0.14	0.12	0.06	0.16	0.14	0.18	0.09	0.11
June	0.03	0.01	0.01	0	0	0	0	0.11	0.00	0.02
July	0.19	0.01	0.1	0	0	0	0	0.26	0.00	0.06
August	0.02	0.06	0.01	0	0	0.04	0.7	0.12	0.07	0.11
September	0.06	0	0.1	0.02	0.25	0.04	0.18	0.22	0.72	0.18
October	0.58	0.98	1.12	0.8	0.25	0.54	0.82	1.24	1.38	0.86
November	2.12	2.12	2.32	2.13	1.86	1.83	2.4	3.07	4.81	2.52
December	2.35	1.6	2.5	1.71	1.29	0.81	1.14	3.07	2.11	1.84
January, 2026	0.94	1.11	1.64	1.24	1.14	0.74	0.59	0.51	0.68	0.95
February	1.59	1.63	2.08	1.04	0.85	0.62	1	1.74	1.73	1.36
March	0	0	0	0	0	0	0	0	0.00	0.00
<b>2025-26</b>	8.2	8.0	10.3	7.3	5.8	4.8	7.0	10.6	11.6	8.2
<b>Average*</b>	6.0	6.4	6.3	5.3	5.3	4.0	3.8	6.5	7.0	5.6
<b>% of Average</b>	136%	126%	163%	136%	110%	120%	182%	163%	165%	145%

\*Average for 1971 through 2020.

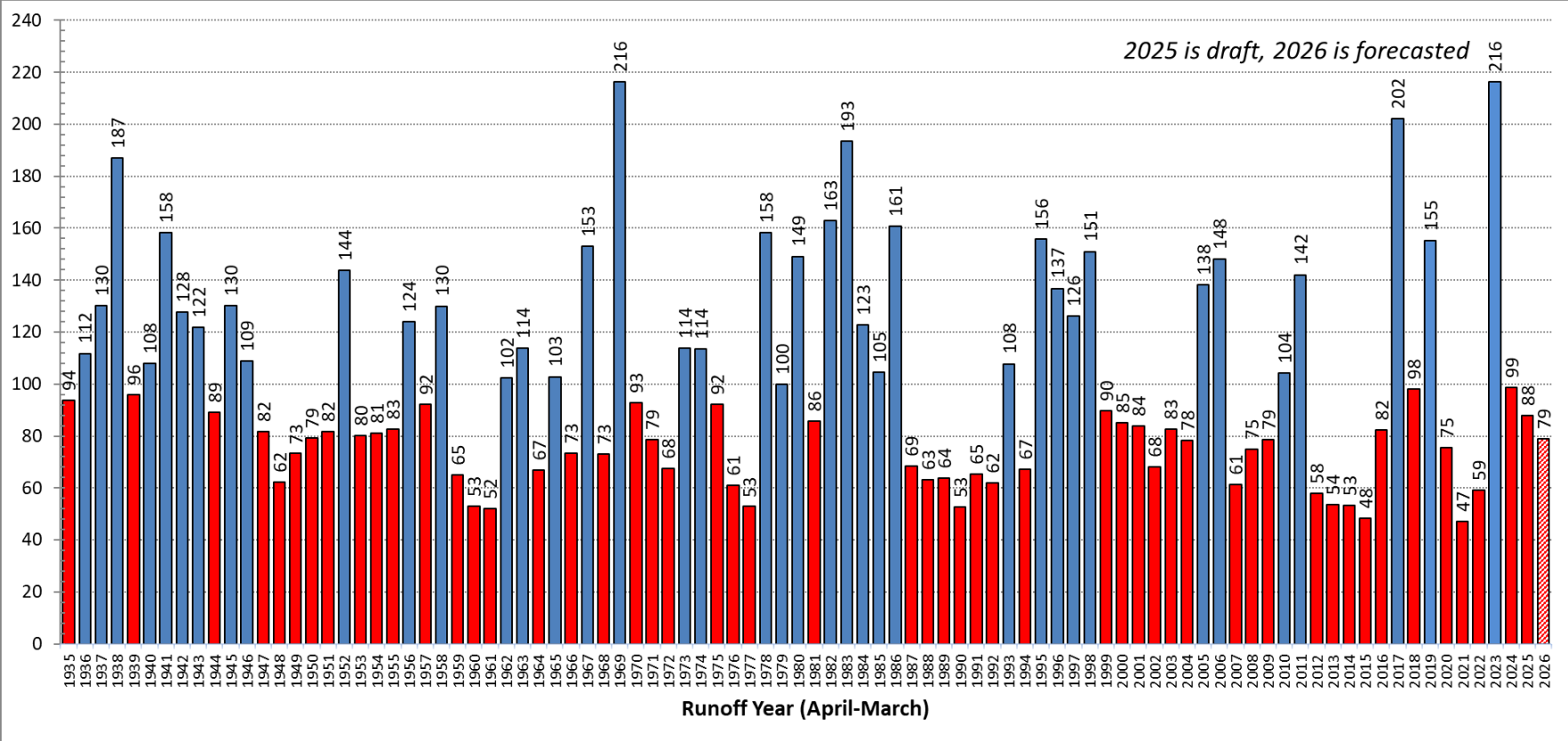


Figure 2.22. Owens River Basin Runoff – Percent of Normal

## 2.4. Owens Valley Water Supply and Uses

Table 2.7 provides an overview of the Owens Valley water supply, in-valley uses and losses, and LAA exports for the post-Water Agreement period as compared to the pre-project average (pre-Second LAA) and projected water supply and uses (based on the Water Agreement, 1991 EIR, and 1997 MOU). Table 2.7 is based on a similar table from the 1991 EIR, Table S-1, that described the actual pre-project as well as projections for post-Water Agreement water supply, in-valley uses and losses, and LAA exports. Actual water uses in the Owens Valley are generally consistent with the projected values under the 1991 EIR and 1997 MOU.

While Owens Valley water supply (runoff, flowing wells, and pumped groundwater) has remained about the same over the long-term average, exports are considerably less than anticipated under the 1991 EIR and 1997 MOU. The fundamental reasons for reducing the exports for the municipal water supply in Los Angeles are increased water uses for dust mitigation on Owens Lake, mandated decreases in water exported from the Mono Basin, and less groundwater pumping than anticipated under the Water Agreement.

Current Owens Valley water uses are compared to pre-project uses, as well as those uses projected under the Water Agreement and 1997 MOU in Figure 2.23. The components of LADWP's water exports from the Eastern Sierra are compared to pre-project exports as well as those projected under the Water Agreement and 1997 MOU in Figure 2.24.

Table 2.8 provides a breakdown of Owens Valley water uses from 1992 to the present and planned water uses for the RY. While much of Table 2.8 is self-explanatory, for clarity, E/M water supply is the water supplied to E/M projects referenced in the 1991 EIR.

Table 2.9 lists a breakdown of water supplied to E/M projects.

**Table 2.7 Owens Valley Water Supply and Uses**

(Amounts in Thousands of Acre-Feet/Year)				
	Pre-Project (1945-70)	Projected per MOU/ Water Agreement	Actual Data for Runoff Year 2025-26	Actual Post Water Agreement Averages (1992-2025)
<b>Owens Valley Water Supply</b>				
Runoff (Owens Valley & Round Valley)	292	310 <sup>(1)</sup>	267	297
Flowing Wells	44	15	27	31
Pumped Groundwater	10	110 <sup>(2)</sup>	55	70
<b>Total</b>	<b>346</b>	<b>435</b>	<b>349</b>	<b>398</b>
<b>In-Valley Uses &amp; Losses</b>				
<u>Water Used on City Lands in O.V.</u>				
Irrigated Lands <sup>(3)</sup>	62	46	53	48
Stockwater, Wildlife, and Rec. Uses <sup>(4)</sup>	20	23	20	22
Post 1985 E/M Projects <sup>(5)</sup>	0	12	12	15 <sup>(8)</sup>
Lower Owens River <sup>(6)</sup>	0	27 <sup>(7)</sup>	18	15 <sup>(8)</sup>
Additional Mitigation (1,600 af from MOU)	0	0	2	2 <sup>(8)</sup>
<b>Sub-Total</b>	<b>82</b>	<b>110</b>	<b>104</b>	<b>101</b>
<u>Other O.V. Uses and Losses <sup>(9)</sup></u>	134	135	136	196
<b>Total</b>	<b>216</b>	<b>245</b>	<b>240</b>	<b>297</b>
<b>Components of Aqueduct Export</b>				
Owens Valley Contribution to Export	130	190	109	101
Long Valley Contribution to Export	134	135	91	137
Mono Basin Contribution to Export <sup>(10)</sup>	58	30	16	12
<b>Total</b>	<b>322</b>	<b>355</b>	<b>216</b>	<b>250</b>
<p>1. Average runoff for period 1935 to 1988 (Runoff Year)</p> <p>2. Assumed based on 1991 O.V. Groundwater Pumping EIR</p> <p>3. Does not include areas receiving water supplies non-tributary to the Owens River/Aqueduct (approx. 7,000 AFY).</p> <p>4. Includes projects such as the Tule Elk Field, Farmers Ponds implemented after 1970 and before 1985 when E/M projects commenced. Also includes the LORP Off-River Lakes and Ponds uses.</p> <p>5. Except Lower Owens River Rewatering E/M Project</p> <p>6. Includes river losses, releases to the Blackrock Waterfowl Habitat Area, and the Delta</p> <p>7. Assumes: 6,000 AF year-round flow to delta, 1,000 AF to Blackrock, and 19,600 AF for river channel losses.</p> <p>8. Represents recent history.</p> <p>9. Includes uses for dust mitigation for Owens Lake, Indian land, private lands, conveyance losses, recharge, evaporation, and operational releases.</p> <p>10. 1993 Court decision allows approximately 30,000 AFY when lake reaches elevation 6392. Prior to Court decision Mono Basin export averaged 81,000/yr.</p>				

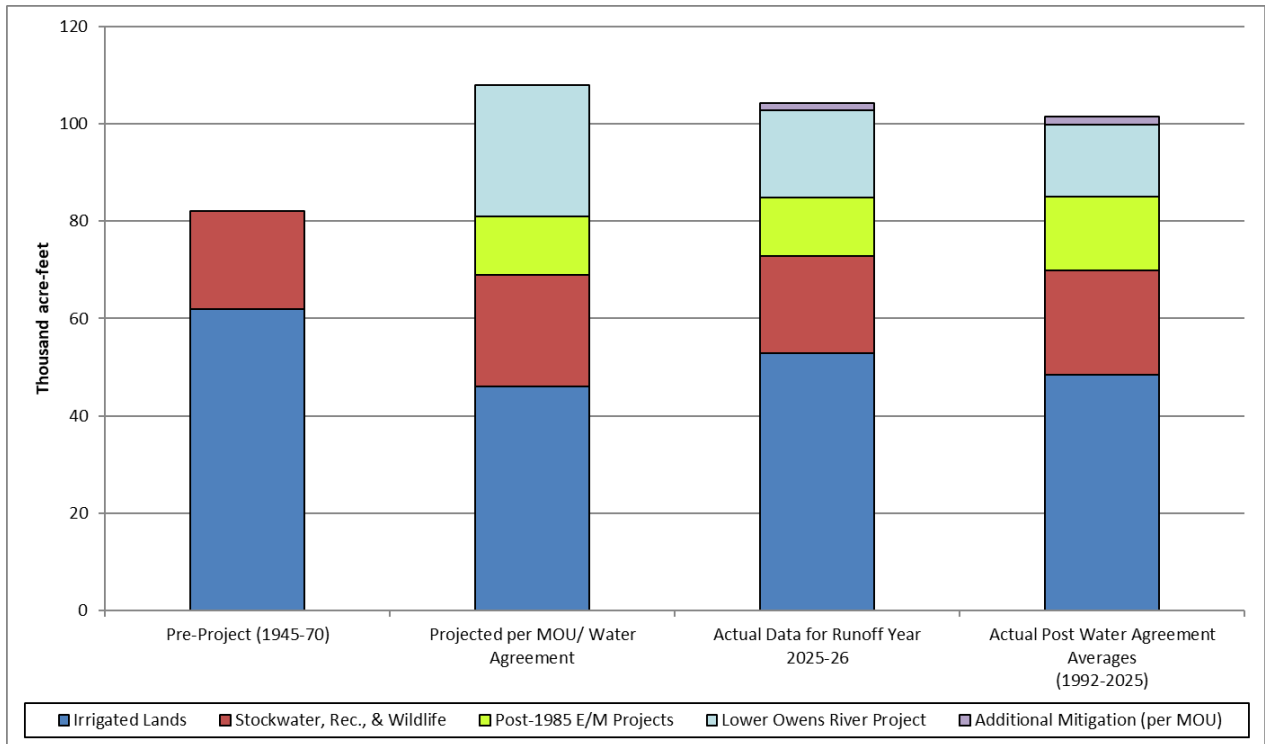


Figure 2.23. Owens Valley Water Uses

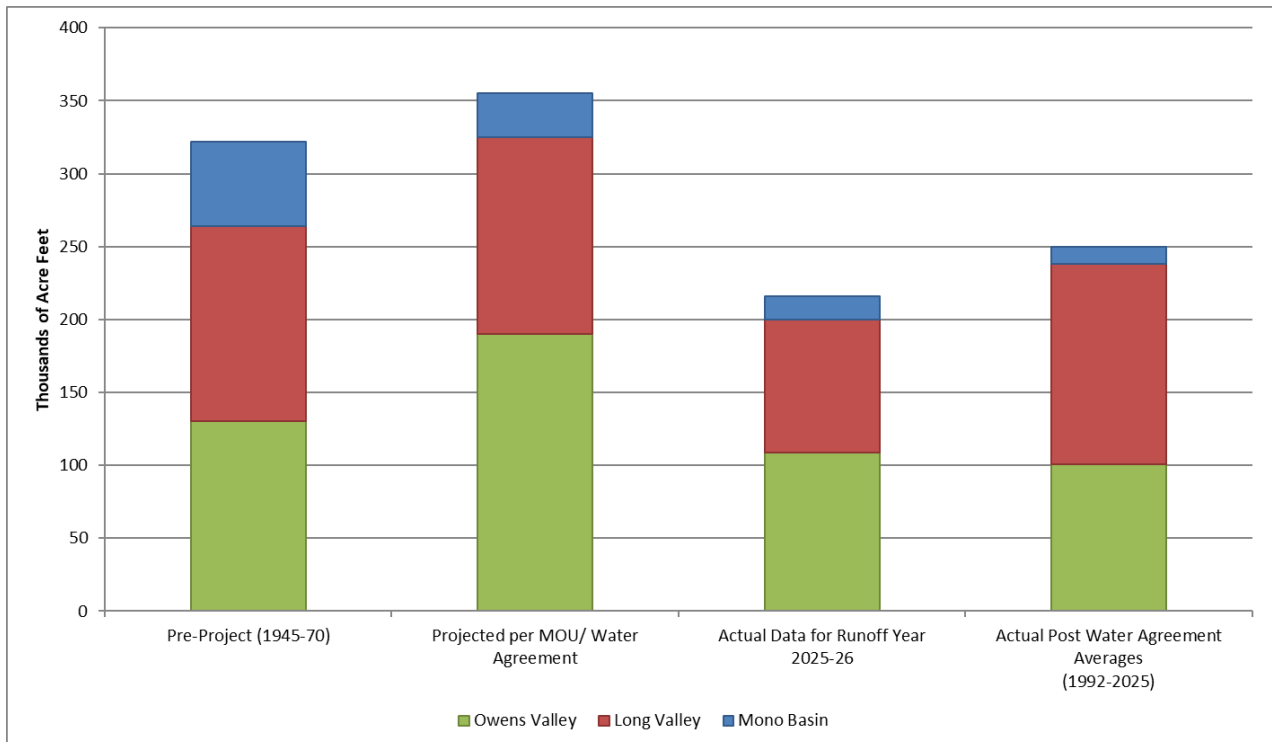


Figure 2.24. Components of the Eastern Sierra Water Exports

**Table 2.8. Water Uses for 1992-93 through 2024-25 and Planned Uses for the 2026-27 RY (AF)**

(1) Runoff Year	(2) Owens River Basin Runoff %	(3) Owens Valley Pumping (1000 af)	(4) Irrigation	(5) Stock Water	(6) E/M	(7) Rec. & Wildlife	(8) LORP	(9) 1600 AF Projects	(10) In-Valley Uses (sum of 4+5+6+ 7+8+9)	Groundwater Recharge		(13) Operations	(14) All Uses (sum of 10+11+12+13)
										(11) Big Pine & Independence Spreading	(12) Laws Spreading		
1992-93	62%	84	37,131	17,828	18,357	7,725	9,269		90,310	0	0	12,179	102,489
1993-94	108%	76	47,798	17,230	19,310	8,676	5,867		98,881	14,512	10,640	12,433	136,466
1994-95	67%	89	37,790	17,178	20,812	8,116	11,638		95,534	0	56	12,102	107,692
1995-96	156%	70	57,748	20,919	22,943	12,479	11,636		125,725	30,126	21,148	13,561	190,560
1996-97	137%	75	46,171	19,757	23,949	9,438	13,031		112,346	4,606	0	21,125	138,077
1997-98	126%	67	47,114	16,422	21,608	8,022	13,069		106,235	4,113	4,106	13,874	128,328
1998-99	151%	52	45,445	13,654	19,672	8,691	11,192		98,654	24,970	31,077	23,016	177,717
1999-00	90%	64	49,529	14,461	24,452	7,470	15,973		111,885	0	0	11,263	123,148
2000-01	85%	68	49,327	13,442	20,782	7,263	12,090		102,904	0	790	12,517	116,211
2001-02	84%	73	43,296	12,759	21,815	7,487	12,485		97,842	0	230	12,973	111,045
2002-03	68%	82	43,929	12,291	21,394	7,377	9,690		94,681	0	0	8,431	103,112
2003-04	83%	88	45,974	11,620	21,116	6,853	10,243		95,806	0	0	8,787	104,593
2004-05	78%	86	50,311	11,546	18,918	6,866	8,910		96,551	243	695	9,536	107,025
2005-06	138%	57	53,832	11,355	20,032	7,807	7,566		100,592	16,212	24,187	14,814	155,805
2006-07	148%	59	50,968	12,041	17,357	7,849	11,700		99,915	29,457	16,855	38,937	185,164
2007-08	61%	60	47,699	12,161	11,565	10,122	22,501		104,048	0	0	5,631	109,679
2008-09	75%	69	56,130	11,435	10,646	8,479	20,957		107,647	1,342	0	7,651	116,640
2009-10	79%	65	52,933	11,450	10,697	10,398	15,708		101,186	0	0	8,453	109,639
2010-11	104%	80	52,983	12,275	10,407	12,106	17,020		104,791	2,993	1,973	14,280	124,037
2011-12	142%	92	62,391	11,566	11,462	9,702	19,556		114,677	13,231	4,119	8,785	140,812
2012-13	58%	89	48,763	10,961	9,257	9,254	20,927	1,612	100,774	0	0	4,081	104,855

(1) Runoff Year	(2) Owens River Basin Runoff %	(3) Owens Valley Pumping (1000 af)	(4) Irrigation	(5) Stock Water	(6) E/M	(7) Rec. & Wildlife	(8) LORP	(9) 1600 AF Projects	(10) In-Valley Uses (sum of 4+5+6+ 7+8+9)	Groundwater Recharge		(13) Operations	(14) All Uses (sum of 10+11+12+13)
										(11) Big Pine & Independence Spreading	(12) Laws Spreading		
2013-14	54%	79	44,160	11,161	8,222	8,022	17,845	1,625	91,035	0	0	1,926	92,961
2014-15	53%	66	45,491	11,582	9,520	7,615	12,681	1,604	88,493	8,742	0	1,423	98,658
2015-16	48%	70	39,598	11,752	8,265	7,934	16,828	1,614	85,991	434	0	1,255	87,680
2016-17	82%	76	49,219	10,969	10,967	8,199	18,585	1,702	99,641	4,200	7,783	17,770	129,394
2017-18	202%	48	53,864	12,534	11,652	10,313	19,533	1,615	109,511	85,175	38,815	90,407	323,908
2018-19	98%	85	49,836	11,437	9,895	7,742	13,777	1,645	94,332	1,406	2,489	2,640	100,867
2019-20	155%	53	53,981	12,429	11,196	8,336	20,749	1,608	108,299	33,976	26,346	32,002	200,623
2020-21	75%	73	47,249	11,189	9,311	6,600	20,643	1,650	96,642	0	0	1,697	98,339
2021-22	47%	62	38,572	10,605	10,223	6,511	18,355	1,603	85,869	0	0	1,864	87,733
2022-23	58%	66	39,271	11,418	9,812	6,410	19,855	2,200	88,966	0	13,212	28,668	130,846
2023-24	217%	35	53,353	13,585	12,791	11,488	10,983	2,809	105,009	92,451	92,874	262,761	553,095
2024-25	99%	49	49,912	12,666	12,642	6,383	13,246	1,720	96,569	6,267	23,001	21,345	147,182
2025-26	88%	55	52,900	12,700	12,000	7,200	17,900	1,600	104,300	318	21	5,700	110,339
2026-27	79%	(A)	46,790	11,200	10,750	6,600	18,100	1,600	95,040	0	0	0	95,040
AVG.	100%	69	48,373	13,129	15,090	8,380	14,765	1,758	100,460	11,023	9,424	21,879	142,786

NOTES: AVG. REFLECTS RUNOFF YEAR DATA FROM 1992-1993 THROUGH 2024-2025.  
 2026-27 REFLECTS CURRENT YEAR OPERATIONS FORECAST. E/M EXCLUDES RELEASES TO THE LORP.  
 LORP IS RECORD OF THE REWATERING E/M (1985-2006) AND THE MITIGATION PROJECTS (STARTED IN DECEMBER 2006).  
 LORP RECORD INCLUDES RIVERINE LOSS, RELEASES TO BLACKROCK WATERFOWL, AND RELEASES TO DELTA.  
 (A) SEE SECTION 1.2 FOR OWENS VALLEY PUMPING DISCUSSION.

**Table 2.9. Water Supplied to E/M Projects During 2025-26**

Project	Water Supplied (acre-feet)
McNally Canals Conveyance Losses	1,980
McNally/Laws/Poleta Native Pasture Lands	1,820
McNally Ponds	800
Laws Historical Museum	120
Klondike Lake	1,630
Big Pine Regreening	140
Lower Owens River Rewatering	-
Independence Pasture Lands	1,730
Independence Springfield	1,440
Independence Ditch System	360
Independence Woodlot	110
Independence Regreening	60
Shepherd Creek Alfalfa Lands	960
Lone Pine Park/Richards Field	300
Lone Pine Woodlot	60
Lone Pine Van Norman Field	340
Lone Pine Regreening	220
<b>Total E/M Uses</b>	<b>12,070</b>

## 2.5. Owens Valley Vegetation Conditions

Vegetation conditions within the Owens Valley are monitored using vegetation transects as well as other methods. The Green Book describes the methodology and purposes of vegetation transects. As stated in the Green Book: “Vegetation transects are included within the Green Book to serve two purposes: 1) to estimate transpiration from a monitoring site, and 2) for use in determining whether vegetation has decreased or changed significantly from the previous cover.” A reference for comparison of vegetation changes is the 1984-87 vegetation inventory data.

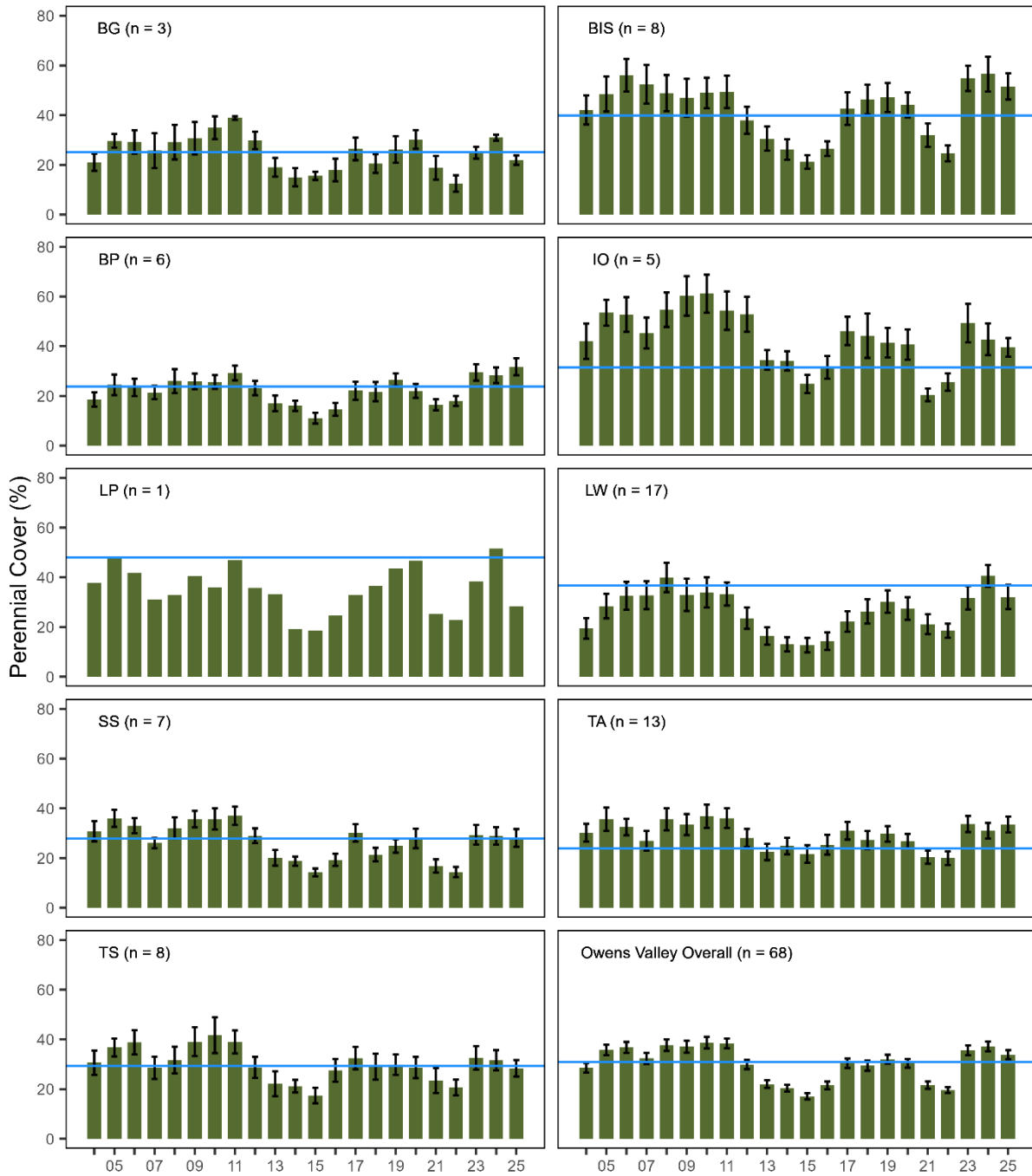
The Green Book requires the 1984-87 vegetation inventory to be used as a baseline when determining whether vegetation cover and/or species composition have changed. The 1984-1987 inventory transects were chosen using aerial photos to aid in determining transect locations. Transects were located visually by choosing lines that appeared to cover the representative units of vegetation within the parcel being measured. Transects were generally run toward the center of the parcels in order to avoid transitional areas at parcel edges. A minimum of five transects were run on each parcel. If the vegetation cover was particularly heterogeneous, a qualitative method was employed in selecting additional transects. The transect data were checked visually and additional transects were run to lessen the degree of variability as necessary.

The Green Book directs that future transects should be performed in a similar manner as the initial inventory to determine whether vegetation has changed but allows the technique to be modified by the Technical Group to permit statistical comparison by randomly selected transects. The procedures for modifying the Green Book procedures are included under Water Agreement Section XXV. In any case, the Green Book requires the Technical Group to perform a statistical analysis in order to determine the statistical significance of any suspected vegetation changes from the 1984-87 inventory maps.

In 2004, LADWP began running transects annually within parcels located both inside and outside wellfields. Some parcels are evaluated annually, while others are not. Percent total cover is calculated and compared to data collected within parcels during the period of baseline inventory.

Figure 2.25 includes vegetation transect data collected by LADWP and presented in a series of graphs documenting Owens Valley vegetation conditions. LADWP monitors vegetation using established vegetation transects that enable the Technical Group to reliably assess annual changes in vegetation cover and composition.

### Owens Valley Vegetation Conditions Wellfield Areas and Overall Wellfield Average



Notes: Blue horizontal lines represent average cover during the initial inventory for respective wellfields. Data were collected by LADWP and ICWD.

Notes: — represents a mean cover during the initial inventory. Data were collected by LADWP and ICWD.

**Figure 2.25. Owens Valley Vegetation Condition for Wellfields**

## 2.6. Bishop Cone Audit

LADWP's groundwater pumping on the Bishop Cone is governed by provisions of the Hillside Decree) as well as the Water Agreement. Annual groundwater extractions from the Bishop Cone are limited to an amount not greater than the total amount of water used on City lands on the Bishop Cone during that year. Annual groundwater extractions by LADWP on the Bishop Cone are the sum of all groundwater pumped plus the amount of artesian water that has flowed from wells on the Bishop Cone during the year. Water used on City lands on the Bishop Cone are the quantity of water supplied to such lands, including conveyance losses, less any return flow to the aqueduct system.

The ICWD performs an annual audit of LADWP water uses and groundwater extractions by LADWP on the Bishop Cone. As shown in Figure 1.4, LADWP has historically pumped much less than allowed under the terms of the Hillside Decree. Beginning in the 2015-16 RY, the audit water account methods were modified to analyze each areas inflows and outflows to calculate total water use. The most recent Bishop Cone Audit report is available on the ICWD website and is included in Appendix A of this report.

## 2.7. Reinhackle Spring Monitoring

As required by the 1991 EIR, Owens Valley groundwater pumping is managed to avoid reductions in spring flows that would cause significant decreases or changes in spring-associated vegetation. Groundwater pumping from wells that may affect flow from Reinhackle Spring are managed so that flows from the spring are not significantly reduced compared to flows under prevailing natural conditions. Table 2.10 shows daily flow values for Reinhackle Spring. Over the 2025-26 RY, Reinhackle Spring had an average daily flow of about 1.8 cfs.

Analysis of Reinhackle Spring was included in a 2004 cooperative study by LADWP and ICWD on the Owens Valley groundwater geochemistry. During the study, water samples from Reinhackle Spring were chemically analyzed and compared to water samples from the LAA, nearby pumping wells, samples from the deep aquifer, and samples from shallow monitoring wells. The 2004 study concluded that the water flowing from Reinhackle Spring is similar in composition to aqueduct water and not similar to the deep aquifer samples or up-gradient shallow aquifer wells. Testing to determine the effects of groundwater pumping and LAA seepage on Reinhackle Spring flow was conducted between May 2010 and April 2011. Data and analysis from the 2004 cooperative study and 2010-11 testing have been included in a draft monitoring and operations plan for the Bairs-Georges Wellfield known as the draft Reinhackle Spring Flow Characterization Report and Operations Plan. The draft Reinhackle Spring Flow Characterization Report and Operations Plan was sent to the ICWD for review in November 2012.

**Table 2.10. Reinhackle Spring Flow in cfs during 2025-26 RY**

Day of Month	April	May	June	July	August	September	October	November	December	January	February	March	Annual
1	1.70	1.66	1.79	2.20	2.12	2.12	2.01	1.84	1.74	1.77	1.70	1.66	
2	1.70	1.68	1.79	2.22	2.12	2.12	2.00	1.83	1.74	1.75	1.69	1.66	
3	1.70	1.70	1.78	2.22	2.12	2.12	1.98	1.82	1.74	1.78	1.66	1.65	
4	1.70	1.70	1.76	2.22	2.12	2.12	1.98	1.79	1.74	1.79	1.66	1.69	
5	1.70	1.70	1.79	2.22	2.12	2.12	1.98	1.79	1.73	1.77	1.65	1.70	
6	1.70	1.70	1.78	2.22	2.11	2.12	1.98	1.79	1.72	1.74	1.65	1.70	
7	1.70	1.70	1.79	2.17	2.12	2.12	1.98	1.79	1.70	1.74	1.65	1.70	
8	1.69	1.70	1.79	2.17	2.12	2.12	1.96	1.79	1.70	1.74	1.65	1.70	
9	1.70	1.70	1.84	2.17	2.12	2.12	1.93	1.79	1.70	1.74	1.65	1.70	
10	1.70	1.70	1.84	2.17	2.12	2.10	1.93	1.79	1.70	1.73	1.65	1.70	
11	1.68	1.70	1.87	2.17	2.12	2.08	1.93	1.79	1.70	1.73	1.65	1.70	
12	1.68	1.70	1.88	2.17	2.12	2.07	1.93	1.79	1.70	1.71	1.65	1.70	
13	1.67	1.70	1.89	2.17	2.12	2.07	1.93	1.79	1.70	1.70	1.65	1.70	
14	1.66	1.70	1.93	2.17	2.12	2.07	1.93	1.79	1.70	1.70	1.65	1.70	
15	1.65	1.70	1.94	2.17	2.12	2.04	1.93	1.80	1.70	1.70	1.65	1.70	
16	1.65	1.74	1.98	2.17	2.12	2.03	1.92	1.79	1.70	1.70	1.66	1.70	
17	1.66	1.74	2.00	2.17	2.12	2.03	1.89	1.79	1.70	1.70	1.66	1.70	
18	1.65	1.74	2.03	2.17	2.12	2.03	1.88	1.79	1.70	1.70	1.66	1.70	
19	1.66	1.74	2.03	2.17	2.12	2.03	1.88	1.79	1.70	1.70	1.66	1.70	
20	1.65	1.74	2.07	2.17	2.12	2.03	1.88	1.79	1.70	1.70	1.65	1.70	
21	1.65	1.74	2.07	2.17	2.12	2.03	1.88	1.79	1.70	1.70	1.65	1.70	
22	1.65	1.74	2.09	2.17	2.12	2.03	1.88	1.79	1.72	1.70	1.65	1.70	
23	1.64	1.75	2.12	2.17	2.12	2.03	1.86	1.78	1.74	1.70	1.65	1.70	
24	1.62	1.74	2.12	2.17	2.12	2.03	1.84	1.75	1.78	1.70	1.65	1.70	
25	1.62	1.74	2.12	2.16	2.12	2.03	1.84	1.75	1.79	1.70	1.65	1.70	
26	1.64	1.75	2.13	2.16	2.12	2.03	1.84	1.75	1.78	1.70	1.65	1.70	
27	1.64	1.78	2.17	2.15	2.12	2.03	1.84	1.76	1.76	1.70	1.65	1.70	
28	1.65	1.79	2.17	2.15	2.12	2.03	1.84	1.75	1.76	1.70	1.66	1.70	
29	1.65	1.79	2.17	2.14	2.12	2.03	1.84	1.74	1.77	1.70		1.70	
30	1.65	1.79	2.18	2.13	2.12	2.02	1.84	1.74	1.76	1.70		1.70	
31		1.79		2.12	2.12		1.84		1.75	1.70		1.70	
Average	1.67	1.73	1.96	2.17	2.12	2.06	1.91	1.78	1.73	1.72	1.66	1.70	1.85

**LADWP ENVIRONMENTAL MITIGATION PROJECTS  
AND OTHER LEGAL COMMITMENTS**

### 3.0 LADWP ENVIRONMENTAL MITIGATION PROJECTS AND OTHER LEGAL COMMITMENTS

#### 3.1. Introduction

Section 3 provides information on all LADWP's environmental mitigation projects and other commitments required under the Water Agreement, the 1991 EIR, the subsequent 1997 MOU and related documents. Tables 3.1 and 3.2 provide a quick reference to all the commitments. Projects/commitments are listed alphabetically in Tables 3.1 and 3.2 and have a corresponding number in the left column for reporting purposes only and show current status of these projects/commitments.

For reference, status of these projects is classified into the following categories:

*Complete:* Project has no additional commitments required (no water allotment or other financial or environmental mitigation; no continual monitoring and reporting),

*Ongoing as necessary/required:* These measures are only applied, when necessary (monitoring and reporting for mitigation measures for new projects, construction, etc.),

*Implemented and ongoing:* Project is fully implemented and is currently meeting goals; however, there may be ongoing water or financial commitments or monitoring and reporting requirements,

*Fully implemented but not meeting goals:* Project is fully implemented but has not yet met prescribed goals or success criteria,

*Not fully implemented:* Project is under development or under construction, but not fully implemented.

Presently, of the 66 required environmental mitigation projects, LADWP reports:

- 9 are complete,
- 0 are ongoing as necessary or required,
- 51 are implemented and ongoing (with ongoing water or financial commitments or monitoring and reporting requirements),
- 6 are fully implemented but not meeting goals,
- 0 are not fully implemented.

Of the 47 other commitments, LADWP reports:

- 19 are complete,
- 6 are ongoing as necessary or required,
- 20 are implemented and ongoing,
- 0 are fully implemented and not meeting goals, and
- 2 are not fully implemented

More detailed information regarding each of these projects and other legal commitments is provided in tabular format in Tables 3.3 and 3.10. Also included in this section are reports for: Additional Mitigation Projects Developed by the MOU *Ad Hoc* Group (Section 3.2.1), Laws Type E Revegetation (Section 3.2.2), Owens Valley Land Management Plan (OVLMP) (Section 3.2.3) and the Yellow Billed Cuckoo (YBC) Habitat Enhancement Plans (Section 3.2.4). These reports are followed by updates to the Mitigation Monitoring and Reporting Programs (MMRP) (Section 3.3) and the Big Pine Ditch System (Section 3.4).

**Table 3.1. LADWP Mitigation and Monitoring Summary**

1991 EIR	1991 EIR Enviro. Project	1991 EIR E/M Project	Revegetation Project	1997 MOU	<b>Table 3.1. LADWP MITIGATION PROJECT COMMITMENTS</b>	Complete Ongoing as necessary	Implemented and Ongoing	Implemented; not met goal	Not Fully Implemented	
				X	Aberdeen Ditch Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))		X			
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				
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)		X			
				X	Freeman Creek Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))		X			
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			
				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				
X			X		Independence 123 (EIR Impact 10-13)	X				
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 (includes 40-acres of revegetation) (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			
			X		LAWS 118 (19-acre portion) and LAWS 129 (Laws Type E Transfer MND)		X			
			X		LAWS 027 (Native Seed Farm) (Laws Type E Transfer MND)		X			
			X		LAWS 090 (Laws Type E Transfer MND)		X			
			X		LAWS 094 (Laws Type E Transfer MND)		X			
			X		LAWS 095 (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)		X			
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			
X	X	X			Millpond Recreation Area (EIR Impact 10-5, EIR Table 5-2 and 5-3)		X			
					North of Mazourka Canyon Road Project (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))		X			
X	X				Olancho-Cartago Irrigated Fields (EIR Impact 10-16)		X			
				X	Owens Valley Land Management Plan (MOU Section III.B)		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			
				X	Yellow-billed Cuckoo Habitat (Baker & Hogback Creeks) (MOU Section III.A.1)		X			
<b>Subtotals</b>						<b>9</b>	<b>0</b>	<b>51</b>	<b>6</b>	<b>0</b>

**Table 3.2. LADWP Other Legal Commitments**

Water Agreement	1991 EIR	Other Agreement	1997 MOU	Table 3.2. LADWP OTHER LEGAL COMMITMENTS	Completed	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented; Not Meeting Goals	Not Fully Implemented
			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)	X				
			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 Habitat 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
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				
<b>Subtotals</b>					<b>19</b>	<b>6</b>	<b>20</b>	<b>0</b>	<b>2</b>

### 3.2. LADWP Environmental Mitigation Projects

Table 3.3 provides project title, legal reference, mitigation measure/provision, progress to date, and current status (according to LADWP) on each of LADWP's environmental mitigation projects listed in Table 3.1.

Again, categories describing status are:

*Complete:* Project has no additional commitments required (no water allotment or other financial or environmental mitigation; no continual monitoring and reporting),

*Ongoing as necessary/required:* These measures are only applied, when necessary (monitoring and reporting for mitigation measures for new projects, construction, etc.),

*Implemented and ongoing:* Project is fully implemented and is currently meeting goals; however, there may be ongoing water or financial commitments or monitoring and reporting requirements,

*Fully implemented but not meeting goals:* Project is fully implemented but has not yet met prescribed goals or success criteria,

*Not fully implemented:* Project under development or under construction, but not fully implemented.

**Table 3.3. LADWP Mitigation and Monitoring**

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
1					X	Aberdeen Ditch Project  (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))				Project was implemented in April 2011 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Water continues to be provided annually to this project. Please refer to Section 3.2.1 for more information. Project is implemented and ongoing.			X	
2	X	X				Big and Little Seely Springs  (1-acre pond near Well W349; EIR Impact 10-14, EIR Table 5-2)	10-14: Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	In the area of Big and Little Seely Springs, LADWP well number 349 discharges water into a pond approximately one acre in size. This pond provides a temporary resting place for waterfowl and shorebirds when the pump is operating or Big Seely Spring is flowing. This water passes through the pond to the Owens River. Riparian vegetation has become established around this pond.	Project implementation is complete. Water continues to be provided annually to this project from Well 349. Project is implemented and ongoing.			X		
3	X				X	Big Pine Area Revegetation Project  (160 acres; EIR Impact 10-19)	10-19: Water management practices in a portion of the Big Pine Well Field have resulted in a significant adverse change and decrease of plant cover.	A revegetation program will be implemented for approximately 160 acres within the Big Pine area, which have lost all or part of its vegetation cover due to increased groundwater pumping or to abandonment of irrigation as part of operations to supply the second aqueduct. Will be revegetated.	Site was fenced to reduce disturbance in 1998. Permanent vegetation transects were established in 1999. Mulch was applied to the site in 1999 and soil microbial studies were conducted in 1999, 2003, 2004, and 2005 by consulting firm Montgomery Watson Harza (MWH).  Drill seeding of the site occurred in Spring 2011 (20 acres), Winter 2014 (28 acres), and Fall/Winter 2015/2016 (154 acres). Seed germination from the 2015/2016 seeding effort was largely successful at this site. Additionally, some natural recruitment is occurring along the perimeter of the site.  LADWP planted 100 greasewood ( <i>Sarcobatus vermiculatus</i> ) shrubs utilizing the <i>Cocoon Planting System</i> from Land Life Company in the fall of 2018. This technology allows for shrubs to grow in arid environments without additional irrigation post planting  Permanent transects were first read in 1999. In 2023, the parcel had achieved 13.9% native perennial vegetation cover with 13 native perennial species (17.7% cover goal with 10 native perennial species). The site will be considered complete when the				X	

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
									cover is 90% and composition is 75% of the stated goal with an 80% confidence limit. The project is implemented but has not yet attained cover, composition, and sustainability goals.					
4	X			X		Big Pine Area Revegetation Project  (20 acres; EIR Impact 10-19)	10-19: Water management practices in a portion of the Big Pine Well Field have resulted in significant adverse change and decrease of plant cover.	An area of approximately 20 acres directly to the east of Big Pine that is poorly vegetated because of pre-project activities and activities which are not a part of the project will be evaluated as a potential enhancement/mitigation project. If, in planning this project, it is determined that it is not feasible to permanently irrigate this area, a revegetation program will be implemented.	Site was fenced to reduce disturbance and promote reestablishment in 2007. In February 2014, LADWP crews seeded approximately 3.2 acres of this area with a native seed mix in conjunction with the adjacent 160-acre Big Pine parcel. Approximately 18 acres were drill seeded at 10lbs/acre using native shrub seed mix during winter 2015/2016. Seed germination from the 2015/2016 seeding efforts was largely successful at this site. Additionally, some natural recruitment is occurring at this site. LADWP reseeded a 10-acre low cover portion of this parcel with native species in March 2021.  Permanent transects were first read in 2013. In 2023, the parcel had achieved 6.1% native perennial vegetation cover with 3 perennial species (17.7% cover goal with 10 perennial species). The site will be considered complete when the cover is 90% and composition is 75% of the stated goal with an 80% confidence limit. The project is implemented but has not yet attained cover, composition, and sustainability goals				X	
5	X					Big Pine Ditch System  (EIR Impact 10-19)	10-19: Water management practices in a portion of the Big Pine Well Field have resulted in significant adverse change and decrease of plant cover.	The Big Pine Ditch Project was planned to be implemented as provided in the Agreement. Per the Agreement, LADWP is to provide up to \$100,000 for reconstruction and upgrading of the ditch system. Additionally, LADWP is to supply up to 6 cfs to the ditch system from a new well to be constructed west of Big Pine.  The Inyo/Los Angeles Water Agreement was modified in 2003 to change the source of the replacement water and to specify new sources for the Big Pine Ditch System. This revised project includes a new well to be drilled in Bell Canyon and includes an expansion of replacement water to include diversion from Big Pine Creek and Bell Canyon Ditch. Surface water flow in Big Pine Creek will be augmented with	The Standing Committee approved procedures and guidelines for implementing the project in 1998. An <i>Initial Study and Mitigated Negative Declaration for the Big Pine Ditch System and Modification to the Klondike Lake Project in the Big Pine Area of Inyo County</i> was circulated in 2003 and was approved by the Board of Water and Power Commissioners on November 12, 2003. The Water Agreement was also amended at this time, changing the project as originally described.  The Big Pine Irrigation and Improvement Association has implemented all phases required of them for the project and it has been in operation since 2005. LADWP has provided \$99,745 of the \$100,000 committed to the project.  LADWP annually supplies the required water to the project but is not currently recovering the makeup water. Well 415 has been drilled and equipped but is not yet operational. ICWD and LADWP adopted protocols for a 6-month pumping test of W415 with				X	

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								groundwater pumped from Well 415, and the surface water flow in Bell Canyon Ditch will be augmented from the proposed Bell Canyon Well. The project will be constructed, operated and maintained by the Big Pine Irrigation and Improvement Association.	associated monitoring requirements at their May 6, 2020 Technical Group Meeting. The test has not yet been conducted.  The Bell Canyon well has not yet been drilled. Although these two wells are not operational, this project is implemented and ongoing with water supplied annually to the project.					
6	X		X	X		Big Pine Northeast Regreening  (30 acres; EIR Impact 10-11 and 10-19, EIR Table 5-3)	10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.  10-19: Water management practices in a portion of the Big Pine Well Field have resulted in a significant adverse change and decrease of plant cover.	10-11: In the near future, two enhancement/mitigation projects will be initiated to mitigate areas affected by groundwater pumping adjacent to the towns of Independence (east side regreening project) and Big Pine (northeast regreening project). Each project was originally planned to be approximately 30 acres of irrigated pasture.  10-19: LADWP and Inyo County will implement the Big Pine Regreening enhancement/mitigation project by establishing irrigated pasture on approximately 30 acres to the north and east of Big Pine. The Standing Committee approved a revised scope of work for the Big Pine Northeast Regreening Project as an Enhancement/ Mitigation Project under the EIR on November 4, 2010. The revised scope modified the boundaries of the project and amended the water supply source to be Big Pine Creek via the Big Pine Ditch System, Baker Creek via the Mendenhall Park Ditch, or Baker Return Ditch, or the Big Pine Canal, or a combination of these. The project will be supplied with up to 150 AF of water per year, and surface water supplied to the project will be made up by pumping W375 in an amount equivalent to that supplied to the project on an annual basis. Additionally, irrigation water will be supplied by flood or sprinkler irrigation.	LADWP prepared and circulated an Initial Study and Negative Declaration (ND) for the Big Pine Northeast Regreening Project. This ND was approved by the Board of Water and Power Commissioners on March 6, 2012 and its Notice of Determination was filed with the State Clearinghouse and Inyo County Clerk on March 7, 2012. The Owens Valley Committee and the Big Pine Paiute Tribe brought a lawsuit against LADWP April 6, 2012 (Case No: SICVPT12-53541) challenging the adequacy of the ND and impacts from the use of W375 for makeup water for the project. This suit was settled in November 26, 2012. The Technical Group exempted well W375 on November 6, 2013 for project makeup water in order to make this project feasible. Installation of the irrigation system for this project occurred in winter 2013/2014. The Big Pine Northeast Regreening was fully implemented in Spring 2014. Water continues to be provided annually to this project. Project is implemented and ongoing.			X		

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	<b>Table 3.3 LADWP MITIGATION AND MONITORING</b>				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
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7	X			X		Bishop Area Revegetation Project  (120 acres; EIR Impact 10-16)	10-16: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	120 acres of formerly irrigated land near Bishop with a loss of vegetation cover will be revegetated. The process to successfully revegetate these lands will be determined through studies to be conducted by LADWP and Inyo County. These lands will not be permanently irrigated but will be revegetated with Owens Valley vegetation not requiring irrigation except perhaps during its initial establishment. Depending on the amount of rainfall and runoff, successful revegetation of these lands could take a decade or longer. The goal will be to achieve as full a vegetation cover as is feasible, but at a minimum, a vegetation cover sufficient to avoid blowing dust.	Site was fenced to reduce disturbance in 1998. Permanent transects were established in 1999. Environmental consultant MWH conducted dryland revegetation studies at this site in 2003 and a soil microbial study at this site in 2005. In 2011, approximately 35 acres were drill seeded with locally collected seeds. In 2012, a buried drip irrigation system was installed across 16 acres of the site and seed was planted at these emitters. In 2015, approximately 6 acres were hand seeded at emitters with native seed mix and 11.3 acres were drill seeded at the south end of the site.  Permanent transects were first read in 1999. In 2023 the cover was 14.3% and the composition was 9, meeting the cover and composition goals (15% cover goal with 12 perennial species). The site will be considered complete when the cover is 90% and composition is 75% of the stated goal with an 80% confidence limit. The project is implemented but has not yet attained cover, composition, and sustainability goals.				X	

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	<b>Table 3.3 LADWP MITIGATION AND MONITORING</b>				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
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8	X			X		Blackrock 16E Revegetation Project  (7.5 acres, EIR Impact 10-11)	10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.	Approximately 80 acres of land that lost a significant amount of its native vegetation cover because of increased groundwater pumping will be revegetated. The techniques that will be employed to revegetate these lands will be determined through studies that will be conducted by LADWP and Inyo County. These lands will not be permanently irrigated but will be revegetated with native Owens Valley vegetation not requiring irrigation except perhaps during its initial establishment. Depending on the amount of rainfall and runoff, successful revegetation of these lands could take a decade or longer. The goal will be to restore as full a native vegetation cover as is feasible, but at a minimum, vegetation cover sufficient to avoid blowing dust will be achieved in that area.	Site was fenced to reduce disturbance and permanent vegetation transects were established. These transects were run in 2010 and the parcel attained cover and composition goals (31% cover consisting of 5 perennial species). Exclusionary fencing has been removed. Project is complete. Owing to concerns from the MOU Parties that the parcel had been negatively impacted from flooding following the 2023 high runoff, the transects were re-run in 2024. In 2024, cover was 66.8% with 10 native perennial species. Torrey's saltbush accounted for 17% of the cover, saltgrass 15%, and alkali sacaton 2%. The project is complete.	X				
9	X					Blackrock Hatchery  (EIR Impact 10-14)	10-14: Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	No on-site mitigation will be implemented at Fish Springs and Big Blackrock Springs; however, CDFW fish hatcheries at these locations serve as mitigation of a compensatory nature by producing fish that are stocked throughout Inyo County.	The Blackrock Hatchery Ponds were first operated in 1941. In 1976, the hatchery was expanded. Spawning activities ceased in 2012 at this hatchery. This hatchery raises rainbow and California Golden trout for distribution to approved waters in the State of California. Hatchery operations are managed by CDFW. The hatchery is on City of Los Angeles property and LADWP annually supplies water to the project. Project is implemented and ongoing.			X		

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10	X	X				Buckley Ponds  (EIR Impact 10-5 and 11-1, EIR Table 5-2)	<p>10-5: Between 1970 and 1990, the project resulted in beneficial changes to lakes and ponds, and the creation of new lakes and ponds, with no significant adverse impact on vegetation.</p> <p>11-1: Changes of surface water management practices and increased groundwater pumping have altered the habitats on which wildlife depends. Vegetation changes have been significant in many locations throughout the Valley. Therefore, impacts to certain species of wildlife, which were entirely dependent upon the impacted habitat, can be presumed to be significant.</p>	Under this project, water is provided for a warm-water fishery and waterfowl area.	<p>The dike system forming the Buckley Pond Series was originally constructed in the 1950s to create a water spreading and groundwater recharge area to be used only in above-normal runoff years. In 1968, a cooperative agreement between LADWP and CDFW proposed a habitat improvement project and permanent wildlife habitat area. Work under this agreement began in 1970 when it was implemented as an LADWP Environmental Project. LADWP, CDFW, and California Department of Forestry (CDF) signed onto the joint <i>Habitat Management Plan for the Buckley Pond Series</i> in 1976 that described how the pond series was to be managed.</p> <p>LADWP has conducted significant maintenance in these ponds in recent years. In December 2011, LADWP conducted controlled burns on Rawson Ponds #1, 2, and 3 with assistance from CalFire. Additional controlled burns were conducted on Rawson Pond #1 in December 2012 and on Rawson Pond #2 in January 2014. Following burning, all ponds were cleaned and new inlet/outlet structures installed, and handicap accessible fishing platforms were constructed by the local Lion's Club at each site. Ponds were back in service at the following times: Rawson Pond #3: March 2012; Rawson Pond #1: March 2013; and Rawson Pond #2: April 2014.</p> <p>Water continues to be provided annually to this project. Maintenance occurs as necessary. Project is implemented and ongoing.</p>			X		
11	X	X				Calvert Slough  (EIR Impact 10-5, EIR Table 5-2)	<p>10-5: Between 1970 and 1990, the project resulted in beneficial changes to lakes and ponds, and the creation of new lakes and ponds, with no significant adverse impact on vegetation.</p>	Under this project, water is provided to maintain habitat, small pond, and marsh area near the Los Angeles Aqueduct Intake.	Calvert Slough was originally implemented as an LADWP Environmental Project in the 1970s. Water continues to be provided to this project. Project is implemented and ongoing.			X		

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12	X	X			X	Diaz Lake  (EIR Table 5-2, Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))		As described in the EIR, supplemental water supply is provided to Diaz Lake Recreational Area for this project.  Under the 1997 MOU as one of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group, the Diaz Lake Project provides a secure water supply for Diaz Lake and reduces the dependence on pumping conducted by Inyo County to supply the lake, as was the case with the original project. The primary benefit of the MOU project is reduced pumping by Inyo County in the Bairs-George wellfield to provide water for Diaz Lake.	The Diaz Lake Project was originally implemented as an LADWP Environmental Project in the 1970s. The changes in water supply and accounting for the project under the MOU were implemented in Spring 2012. Please refer to Section 3.2.1 for more information on this and other Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Project is implemented and ongoing.			X			
13	X		X			Eastern California Museum  (EIR Tables 4-3 and 5-3)		This project enhanced the appearance of the Eastern California Museum grounds in Independence. It consists of a small pond, trees, expanded lawn areas, and an irrigation system.	This project was implemented in 1989. Water continues to be provided annually to this project. Project is implemented and ongoing.			X			
14	X	X				Farmer's Pond  (EIR Impact 10-5, 10-18, 11-1, EIR Table 5-2)	10-5: Between 1970 and 1990, the project resulted in beneficial changes to lakes and ponds, and the creation of new lakes and ponds, with no significant adverse impact on vegetation.  10-18: Significant adverse vegetation decrease and change have occurred in the Laws area due to a combination of factors, including abandoned agriculture, groundwater pumping, water spreading in wet years, livestock grazing, and drought.  11-1: Changes of surface water management practices and increased groundwater pumping have altered the habitats on which wildlife depends.	In the 1970s, LADWP started the Farmer's Pond environmental project. Water is provided in fall of each year to offer increased habitat for migrating waterfowl. The project area is two miles north of Bishop.	This project was originally implemented as an LADWP Environmental Project in the 1970s. Water continues to be provided annually to this project in the fall. Project is implemented and ongoing.			X			

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							Vegetation changes have been significant in many locations throughout the Valley. Therefore, impacts to certain species of wildlife, which were entirely dependent upon the impacted habitat, can be presumed to be significant.							
15	X					Fish Springs Hatchery (EIR Impact 10-14)	10-14: Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	No on-site mitigation will be implemented at Fish Springs and Big Blackrock Springs; however, CDFW fish hatcheries at these locations serve as mitigation of a compensatory nature by producing fish that are stocked throughout Inyo County.	The Fish Springs Hatchery was originally constructed in 1952 and was modernized in 1972 and again in 2009. This hatchery produces and distributes rainbow and Eagle Lake trout to Inyo and Mono Counties. Hatchery operations are managed by CDFW. The hatchery is City property and LADWP annually supplies water to the project. Project is implemented and ongoing.			X		
16	X			X		Five Bridges Area Revegetation Project (300 acres; EIR Impact 10-12)	10-12: Vegetation in an area of approximately 300 acres near Five Bridges Road north of Bishop was significantly adversely affected during 1988 because of the operation of the two wells, to supply water to enhancement/mitigation projects.	Water has been spread over the affected area since 1988. By the summer of 1990, revegetation of native species had begun on approximately 80% of the affected area. LADWP and the County are developing a plan to revegetate approximately 60 acres with riparian and meadow vegetation. This plan will be implemented when it has been completed.	Since 1989, LADWP has implemented various efforts to recover native vegetation in the mitigation area through re-irrigating the affected area each growing season, extensive weed treatment to eradicate perennial pepperweed ( <i>Lepidium latifolium</i> ), and development and implementation of a grazing management plan to compliment these efforts. LADWP has also used controlled burns, sprinkler irrigation, seeding and planting of native species to assist in mitigating the original impacts. In 2017, LADWP determined that mitigation for the impacts from groundwater pumping at Five Bridges was complete but committed to continue land management practices and treatment of invasive species in the project area.  The County and LADWP utilized the dispute resolution process to settle disagreements over the W385R pump test and the status of the Five Bridges Mitigation Project in 2017. On June 25, 2018, both parties entered into a Settlement Agreement as resolution to these disputes. Subsequently, at their July 19, 2018 meeting, the Inyo/Los Angeles Technical Group adopted resolutions to (1) adopt a monitoring and management plan for the W385R pump test and (2) amend the 1999 Revegetation Plan to temporarily suspend the provision requiring Wells 385 and 386 be permanently shut down in order to conduct the pump test. At their February 21, 2019 meeting, the Technical Group adopted a			X		

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									Work Plan for the Five Bridges Mitigation Area for the 2019 and 2020 calendar years to coincide with the W385 pump test which occurred December 2019-February 2020. LADWP conducted the work outlined in that plan per agreement with Inyo County. Perennial pepperweed control will continue to be a priority with the formation of a working group (2025) to develop alternative methods of control. Project is implemented and ongoing.					
17					X	Freeman Creek Project  (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			Project was implemented in July 2010 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Water continues to be provided annually to this project. Please refer to Section 3.2.1 for more information on these projects. Project is implemented and ongoing.			X		
18	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)	10-14: Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	The original mitigation measure called for onsite mitigation at the Hines Spring vent and its surroundings. This project was also identified in the 1997 MOU and subject of 2004 and 2010 Stipulations and Orders. Per the MOU Section III.A.3 (Additional Mitigation), a total of 1600 AF of water per year will be supplied by LADWP for the implementation of the on-site mitigation measure at Hines Springs and on-site or off-site mitigation identified in the 1991 EIR for impacts at Fish Springs, Big and Little Seely Springs and Big and Little Blackrock Springs. Under the direction of LADWP and the County, environmental consultants Ecosystem Sciences will recommend reasonable and feasible on-site and/or off site mitigation measures, including the implementation of mitigation at Hines Springs.	Environmental consulting firm, Ecosystem Sciences developed a draft plan for this project that was finalized in October 2005. The MOU Parties found this plan to be inadequate and decided to enter into an ad hoc process to analyze the project at Hines Springs and other potential project areas. The Additional Mitigation Projects Developed by the MOU Ad Hoc Group document was finalized in September 2008 and describes a series of eight mitigation projects to satisfy this 1600AF mitigation commitment of the 1997 MOU. This plan was completed and agreed to by the MOU Parties. CEQA analysis was conducted in Spring 2010 and the projects were adopted by the Board of Water and Power Commissioners in June 2010. Implementation of the projects began shortly thereafter and all were fully implemented by March 2012, per the 2010 Stipulation and Order (Case No: S1CVCV01-29768). Projects are further described in Section 3.2.1. Projects are implemented and ongoing.			X		
19	X				X	Hines Spring South  (9 acres, EIR Impact 10-11)	Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.	Approximately 80 acres of land that lost a significant amount of its native vegetation cover as a result of increased groundwater pumping will be revegetated. The techniques that will be employed to revegetate these lands will be determined through studies that will be conducted by LADWP and the County. These lands will not be permanently irrigated, but will be revegetated with native Owens Valley vegetation not requiring irrigation except	Per the Additional Mitigation Projects Developed by the MOU Ad Hoc Group, the timeline for implementing the Hines Spring South Revegetation Project was extended to three years post implementation of the Additional Mitigation Projects. All of the Additional Mitigation Projects were implemented by Spring 2012. The Revegetation Plan for Hines Spring South is complete and was provided in LADWP's 2015 Annual Owens Valley Report.  The 9-acre enclosure was fenced in 2015 per this plan. Initial response to exclusion of this area was positive as demonstrated by				X	

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						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
								perhaps during its initial establishment. Depending on the amount of rainfall and runoff, successful revegetation of these lands could take a decade or longer. The goal will be to restore as full a native vegetation cover as is feasible, but at a minimum, vegetation cover sufficient to avoid blowing dust will be achieved in that area.	prolific native grasses. Permanent vegetation transects were established and read in 2019. In 2023 the parcel achieved 14.7% cover with 7 native perennial species (goal 35% cover with 4 native perennial species), meeting the composition goal. The site will be considered complete when the cover is 90% and composition is 75% of the stated goal with an 80% confidence limit. The project is implemented but has not yet attained cover, composition, and sustainability goals.					
20					X	Hines Spring Well 355 Project  (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			Project was implemented in January 2012 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Please refer to Section 3.2.1 for more information on these projects. Project is implemented and ongoing.			X		
21					X	Homestead Project  (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			Project was implemented in February 2012 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Please refer to Section 3.2.1 for more information on these projects. Project is implemented and ongoing.			X		
22	X				X	Independence 105 Revegetation Project  (14 acres, EIR Impact 10-13)	Increased groundwater pumping has significantly adversely affected approximately 60 acres of vegetation in the Symmes Shepherd well field area.	A revegetation program will be implemented for these effected areas utilizing native vegetation of the type that has died off. Water may be spread as necessary in these areas to accomplish the revegetation.	This project contains a portion of the 60 acres required for revegetation under EIR Impact 10-13. This 14-acre site was fenced to reduce disturbance in 1999 and permanent vegetation transects were established in 2000. As of 2017, the parcel contained 23% perennial vegetation cover consisting of 3 perennial species, attaining the goals for cover and composition. In 2023 the parcel achieved 22.1% perennial vegetation cover consisting of 3 perennial species, attaining the goals for cover and composition (15% cover and 3 perennial species). The project is complete.	X				
23	X				X	Independence 123 Revegetation Project  (28 acres, EIR Impact 10-13)	Increased groundwater pumping has significantly adversely affected approximately 60 acres of vegetation in the Symmes Shepherd well field area.	A revegetation program will be implemented for these effected areas utilizing native vegetation of the type that has died off. Water may be spread as necessary in these areas to accomplish the revegetation.	This project contains a portion of the 60 acres required for revegetation under EIR Impact 10-13. This 28-acre site was fenced to reduce disturbance in 1999 and permanent vegetation transects were established in 2000. As of 2006, this site had attained 17% cover with 4 native perennial species, attaining the goals for cover and composition (15% cover and 3 perennial species). The project is complete. .	X				

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						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
24	X			X		Independence 131 Revegetation Project  (23 acres, EIR Impact 10-13)	Increased groundwater pumping has significantly adversely affected approximately 60 acres of vegetation in the Symmes Shepherd well field area.	A revegetation program will be implemented for these effected areas utilizing native vegetation of the type that has died off. Water may be spread as necessary in these areas to accomplish the revegetation.	This project contains a portion of the 60 acres required for revegetation under EIR Impact 10-13. This 74.6-acre revegetation site is segmented by Symmes Creek and was fenced to reduce disturbance in 1999. Permanent vegetation transects were established in 2000. Environmental consulting firms Science Applications International Corporation (SAIC) and MWH conducted dryland revegetation studies using various irrigation methods and planting techniques in 2003 and 2005. 25 acres were drill seeded with locally collected seeds in the spring of 2011.  Permanent transects were first read in 2001 for both IND131N and IND131S. IND131N is to the north of Symmes Creek and IND131S is to the south. In 2023, IND131N cover value was 18.5% and composition of 5 native perennial species. IND131S cover value was 11.5% and composition of 7 native perennial species (goal is 17% cover and 4 native perennial species). The site will be considered complete when the cover is 90% and composition is 75% of the stated goal with an 80% confidence limit. This project has been fully implemented but the southern portion has not yet attained cover goals.				X	
25	X		X			Independence Ditch System  (EIR Table 4-3)		This project will provide water to a ditch through Independence. After passing through town, the unused water may supply irrigation water to the Independence Pasturelands and/or Independence Springfield enhancement/mitigation projects.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1987. Water continues to be supplied annually to the project. Project is implemented and ongoing.			X		
26	X		X	X		Independence East Side Regreening Project  (23 acres; EIR Impact 10-11, 12-1, EIR Table 5-3)	10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.  12-1: Significant impacts on air quality resulting from groundwater pumping during the period of 1970 to 1990 have occurred due to vegetation losses.	10-11: In the near future, two enhancement/mitigation projects will be initiated to mitigate areas affected by groundwater pumping adjacent to the towns of Independence (east side regreening project) and Big Pine (northeast regreening project). Each project was originally planned to be approximately 30 acres of irrigated pasture.  12-1: As part of the Independence Pasturelands and Springfield enhancement/mitigation projects, approximately 730 acres of barren or near barren ground have been revegetated with	Installation of the irrigation system for this project occurred in Winter 2013/2014. The Independence East Side Regreening Project was fully implemented in spring 2014. Water is supplied annually to the project for irrigation. Project is implemented and ongoing.			X		

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						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
								either native pasture or alfalfa. This area was affected by groundwater pumping and surface diversions of water.						
27	X		X			Independence Pasturelands and Native Pasturelands  (610 acres (520 acres per EIR Figure 12-2); EIR Impact 12-1, EIR Tables 4-3 and 5-3)	12-1: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	As part of the enhancement/mitigation projects implemented by LADWP and Inyo County since 1985, approximately 942 acres of these abandoned agricultural lands have been revegetated with irrigated pasture or alfalfa. These areas are the Independence Pasture and native pasture lands, the Van Norman and Richards Fields, and the Lone Pine Woodlot adjacent to Lone Pine.	This project was implemented as an LADWP Enhancement/Mitigation Project 1987-1988. Approximately 520 acres are incorporated into the project per Figure 12-2 in the 1991 EIR. Water continues to be provided annually to this project for irrigation. Project is implemented and ongoing.			X		
28	X		X			Independence Roadside Rest Area  (0.5 acres; EIR Tables 4-3 and 5-3)		This project consisted of planting shade and windbreak trees and grass, installation of an irrigation system, and placement of a picnic table on a ½-acre site south of the town of Independence.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1989. Water is provided from the Independence Town Water System through a metered connection and paid for by Inyo County. Project is complete.	X				
29	X		X			Independence Springfield  (286 acres; EIR Impact 10-11, 12-1, EIR Tables 4-3 and 5-3)	10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.  12-1: Significant impacts on air quality resulting from groundwater pumping during the period of 1970 to 1990 have occurred due to vegetation losses.	10-11: As part of the Independence Springfield and Woodlot enhancement/mitigation projects, approximately 317 acres of barren or near-barren ground have been revegetated with either native pasture or alfalfa. This area was affected by groundwater pumping and surface diversions of water.  12-1: As part of the Independence Pasturelands and Springfield enhancement/mitigation projects, approximately 730 acres of barren or near barren ground have been revegetated with either native pasture or alfalfa. This area was affected by groundwater pumping and surface diversions of water.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1988 and irrigates approximately 300 acres. Water continues to be provided annually to the project for irrigation. Project is implemented and ongoing.			X		

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
30	X		X			Independence Woodlot (20 acres; EIR Impact 10-11, EIR Table 4-3)	10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.	As part of the Independence Springfield and Woodlot enhancement/mitigation projects, approximately 317 acres of barren or near-barren ground have been revegetated with either native pasture or alfalfa. This area was affected by groundwater pumping and surface diversions of water.	<p>The Independence Wood Lot was initially planted in 1987. The wood lot was planted at a high density with the intent of thinning to a 12-foot spacing after planting success was determined. Over time, this high density of trees resulted in reduced growth and increased competition. While the hybrid poplar portions of the wood lots have been harvested several times since project implementation, the locust portions of the wood lots had never been harvested until 2015-2016. At that time, LADWP and CalFire conducted a significant thinning effort in both the Lone Pine and Independence Wood Lots resulting in approximately 130 cords of wood harvested and distributed to the Lone Pine Future Farmers of America (FFA), who holds the lease to both wood lots and manages the distribution of wood. In Winter 2016-17, LADWP and CalFire continued thinning the Hybrid Poplar and Black Locust tree portions of both wood lots, resulting in 120 cords of wood harvested and distributed to the Lone Pine FFA. Maintenance of the wood lots continues as needed. Replanting efforts of the harvested portions of the Independence woodlot occurred in spring 2017 with the planting of 675 Hybrid Poplar pole plantings. In 2024 the lot was thinned.</p> <p>Firewood distribution was turned over to the Independence school in 2022.</p> <p>Water is supplied annually to the project for irrigation. Project is implemented and ongoing.</p>			X		
31	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)	Changes of surface water management practices and increased groundwater pumping have altered the habitats on which wildlife depends. Vegetation changes have been significant in many locations throughout the Valley. Therefore, impacts to certain species of wildlife, which were entirely dependent upon the impacted habitat, can be presumed to be significant.	The importance of riparian, marsh and aquatic habitats is recognized for mitigation of the impacts to wildlife that occurred during the 1970 to 1990 period. Wetter habitats support many more species and greater populations of wildlife; therefore, water management to create wet habitats will be used to mitigate the significant adverse impacts of the project.	<p>The Klondike Lake Project was implemented as an LADWP Enhancement/Mitigation Project in 1986. Klondike sustains a year round water supply in a 160-acre formerly seasonal lakebed area providing nesting and feeding areas for waterfowl, and permitting water skiing and other water sports in summer months.</p> <p>Water continues to be provided annually to the project. The estimated water usage for the project was modified in the Big Pine Ditch System MND from 2,200 AF to 1,700 AF, with 1,500 AF allocated for conveyance and lake level maintenance and up to 200 AF allocated for the Klondike South Shore Habitat Area (SSHA) south of the lake. LADWP provides boat inspections for nonnative quagga and zebra mussels at Klondike annually from Memorial Day to Labor Day to ensure that these mussels are not introduced into LA's water system. Project is implemented and ongoing.</p>			X		

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						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
32						Klondike SSHA (Big Pine Ditch System MND)		Per the Big Pine Ditch System MND, up to 200 acre feet of water will be supplied to a habitat area south of Klondike Lake for waterfowl nesting and feeding.	<p>The Klondike South Shore Habitat Area (SSHA) Project was implemented as part of the Big Pine Ditch System Project and MND (2003), as the water supply for the Klondike Lake Project was modified to supply up to 200 AF of water to the SSHA project.</p> <p>A new diversion was installed and implementation of the releases for waterfowl habitat south of the lake began in May 2005. Delivery and measurement of the total allocation of up to 200 AF to the south was initially problematic because of the low hydraulic gradient between the lake and the waterfowl habitat areas as well as sand accumulation in this area. An alternate water release location was utilized starting in 2012.</p> <p>In March 2015, LADWP disked the tules in the habitat area that had resulted from multiple years of flooding throughout the growing season to increase the amount of shallow flooding acreage available for migrants. Water continues to be provided to the project annually as required; 326.83 AF of water was released to the project in WY 2025 (October 1, 2024 – September 30, 2025). Project is implemented and ongoing.</p>			X		

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						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
33				X		<p>LAWS 118/129 Revegetation Project</p> <p>Laws 118 Revegetation Project (19 acre portion, additional to 1991 EIR commitment; Laws Type E Transfer MND/2003 Laws Revegetation Plan) and LAWS 129 Revegetation Project (47 acres, Laws Type E Transfer MND/2003 Laws Revegetation Plan)</p>	<p>Laws 118 per the 2003 Laws Revegetation Plan, this project requires native revegetation of 19-acre portion of LAWS 118 (in addition to acreage required under 1991 EIR) with 10% cover and eight native species.</p> <p>Laws 129 per the 2003 Laws Revegetation Plan, this project requires native revegetation of 47 acres of abandoned agriculture land with 10% cover and eight native species.</p>	<p>The 19-acre portion of Laws 118 is a horseshoe shaped parcel surrounding Laws 129. It has a buried drip irrigation system within the western and eastern sections of the parcel. Approximately 8,000 plants were planted in this parcel from 2008 to 2018. Initial planting <i>is 100% complete</i>.</p> <p>For Laws 129, a drip irrigation system is fully installed at this site. Approximately 26,000 plants were planted in this parcel from 2008 to 2018. Initial planting in this parcel was 100% completed by fall 2015. In the fall of 2018, approximately 6,000 plants were overplanted within the parcel, filling in all vacant emitter locations.</p> <p>In the summer of 2022, 20 transects were established and read for LAW118/129 by LADWP and environmental consultants Stantec Inc. On September 18, 2023, 15 additional transects were added and monitored jointly by LADWP and Inyo County Water Department (ICWD), increasing the total to 35. This addition addressed concerns from ICWD about the coverage of the 19-acre area. In 2025, LADWP and ICWD agreed to merge LAW118 and LAW129 into one parcel, dividing it into 20 equal sections and randomly selecting 20 transects from the existing 35 transects.</p> <p>ICWD monitored the parcel in 2025. Cover was 21.38% with 4 species. Monitoring and revegetation activities will occur in 2026.</p>			X			
34				X		<p>LAWS 27 (Native Seed Farm) (Laws Type E Transfer MND)</p>	<p>Per the Laws Type E Transfer MND (Irrigation Project in the Laws Area, this project requires LADWP to initiate a native seed farm for use on Owens Valley Revegetation projects.</p>	<p>A seed farm was initiated for seed harvest in 2004 with the intent to aid in the implementation of all revegetation projects in the Owens Valley. In the winter of 2022, new buried drip irrigation was installed in the center section of the parcel, just east of the 30-acre ricegrass area. There was no irrigation in this area and it is the last section to be planted in the parcel. In the spring of 2022, approximately 13,000 native plants were planted in this area, two plants per emitter, to fill in the remainder of the parcel.</p> <p>The Seed Farm is currently well established with native shrubs and pasture grass. Commercial seed collectors have collected seed from the Seed Farm and provided seeds to LADWP for revegetation efforts.</p>			X			

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									<p>The 30-acre, western section of the Seed Farm that has been converted to pasture grass and is predominantly made up of sand dropseed (<i>Sporobolus cryptandrus</i>) and Indian ricegrass (<i>Achnatherum hymenoides</i>).</p> <p>There is no specific cover and composition criteria for this site. The project is fully implemented and ongoing. The site is effectively mitigating dust and will continue to be irrigated per the 2003 Plan.</p>					
35				X		<p>LAWS 90 Revegetation Project</p> <p>(101 acres, Laws Type E Transfer MND/2003 Laws Revegetation Plan)</p>	<p>Per the 2003 Laws Revegetation Plan, this project requires native revegetation of 101 acres of abandoned agriculture land with 10% cover and 10 ten native species.</p>	<p>The drip irrigation system is fully installed at this site. Initial planting in this large parcel is 100% complete. Approximately 91,400 plants have been planted in this parcel from 2008 to 2022.</p> <p>In the summer of 2022 transects were established to evaluate the condition of the parcel and to determine if the parcel has met the goals. In 2025, 10 additional transects were randomly sited within the parcel. The random transects and bearings were generated in <i>ArcGIS Pro</i> and had to adhere to the criteria that they did not cross: the 20 existing permanent transects, roads, open areas not planted, or had a bearing that ran down the planted row. All 30 transects were read during the peak of the growing season</p> <p>LADWP and ICWD jointly read the transects in the summer of 2025. Cover was 12.5% with 13 species, meeting the cover and composition goals. LADWP and ICWD are currently <i>considering</i> an amendment to the 2003 Laws Revegetation Plan. No irrigation or other revegetation activities have taken place within the parcel since July 2022. In 2026, the parcel will also be monitored.</p>			X			

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36				X		LAWS 94 Revegetation Project  (40 acres, Laws Type E Transfer MND/2003 Laws Revegetation Plan)	Per the 2003 Laws Revegetation Plan, this project requires native revegetation of 40 acres of abandoned agriculture land with 10% cover and ten native species.	The initial planting for the entire parcel was completed in Fall 2013. This parcel was formerly a combination of buried and aboveground drip irrigation systems; as of spring 2018, LADWP replaced all remaining above ground drip lines with new buried drip irrigation. Approximately 38,000 plants have been planted in this parcel from 2008 to 2019. LADWP seeded the (former) above ground drip portion in 2015/2016 but had little success with germination. In the spring of 2019, approximately 15,000 native plants were overplanted at this site. Initial planting across all 40 acres is 100% complete.  In the summer of 2022 transects were established to evaluate the condition of the parcel and to determine if the parcel has met the goals.  LADWP and ICWD jointly read the transects in the summer of 2025. Cover was 8.6% with 11 species. Monitoring and revegetation activities will occur in 2026.			X			
37				X		LAWS 95 Revegetation Project  (46 acres, Laws Type E Transfer MND/2003 Laws Revegetation Plan)	Per the 2003 Laws Revegetation Plan, this project requires native revegetation of 46 acres of abandoned agriculture land with 10% cover and ten native species.	The initial planting for the parcel was completed in Fall 2013. This parcel was formerly a combination of buried and aboveground drip irrigation systems; as of spring 2018, LADWP replaced all remaining above ground drip lines with new buried drip irrigation.  Approximately 43,500 plants have been planted in this parcel from 2008 to 2019. LADWP seeded the above ground drip portion in 2015/2016 but had little success with germination. In the fall of 2019, approximately 9,000 native plants were overplanted at this site. Initial planting across all 46 acres is 100% complete.  In the summer of 2022 transects were established to evaluate the condition of the parcel and to determine if the parcel has met the goals.  LADWP and ICWD jointly read the transects in the summer of 2025. Cover was 7.4% with 12 species. Monitoring and revegetation activities will occur in 2026.			X			

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38	X			X		Laws Area Revegetation Project (LAWS118)  (140 acres; EIR Impact 10-18)	10-18: Significant adverse vegetation decrease and change have occurred in the Laws area due to a combination of factors, including abandoned agriculture, groundwater pumping, water spreading in wet years, livestock grazing, and drought.	Approximately 140 acres will be revegetated within the Laws area, which has lost all or part of its vegetation cover due to increased groundwater pumping or to abandonment of irrigation operations to supply the second aqueduct.	The site was fenced to reduce disturbance in 1998. Permanent transects were established in 1999. Dryland revegetation studies examining various planting and watering techniques were conducted in a portion of LAWS 118 by environmental consulting firms SAIC and MWH in 2003 and 2004. In 2004, the above ground drip irrigation system was expanded and seed was planted at all emitters. The above-ground irrigation system was moved to a new area in 2005 and seed was planted at the new emitters at that time. In 2005, MWH conducted a soil microbial study at the site. In Spring 2011, 18 acres were seeded with locally collected seeds. In 2012, a buried drip system was installed at this site over approximately 30 acres. In the fall of 2018, approximately 11,000 plants were planted within the 30 acres of drip irrigation. New fencing was installed in 2013 on the west side of the project area along the new boundary with the Cashbaugh Lease established in the Laws Type E transfer. Approximately 46 acres was drill seeded during Winter 2015/2016. In the summer of 2020, buried drip irrigation was expanded to the west to include a barren area adjacent to Laws Poleta Road. Approximately 17,000 plants were planted in this section in the fall of 2021.  Permanent vegetation transects were first read in 1999. In 2023 the cover value was 27.9% with a composition of 19 native perennial species, meeting both the cover and composition goals (11.5% cover with 11 native perennial species). LADWP's data indicates that compliance criteria have been met. Discussions are underway with Inyo County to confirm these findings.	X				
39	X		X			Laws Historical Museum Pasturelands  (21+15 acres; EIR Impact 10-18, EIR Table 5-3)	Significant adverse vegetation decrease and change have occurred in the Laws area due to a combination of factors, including abandoned agriculture, groundwater pumping, water spreading in wet years, livestock grazing, and drought.	In the mid-1980s, LADWP and the County implemented the Laws-Poleta Pasture Land, Laws Museum, and McNally Ponds enhancement/mitigation projects in the Laws area totaling approximately 541 acres of pasture land.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1990. This project provides a regular water supply to improve the native vegetation on a 21-acre parcel, establish irrigated pasture on 15 acres and establish windbreak trees, all adjacent to the museum.  Water continues to be provided annually to this project for irrigation. Project is implemented and ongoing.			X		

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40	X		X			Laws/Poleta Native Pasture  (216 acres; EIR Impact 10-18, EIR Tables 4-3 and 5-3)	Significant adverse vegetation decrease and change have occurred in the Laws area due to a combination of factors, including abandoned agriculture, groundwater pumping, water spreading in wet years, livestock grazing, and drought.	In the mid-1980s, LADWP and The County implemented the Laws-Poleta Pasture Land, Laws Museum, and McNally Ponds enhancement/mitigation projects in the Laws area totaling approximately 541 acres of pasture land.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1988. This project provides water for irrigation of 220 acres of sparsely vegetated land to reestablish native vegetation on abandoned pasture lands and increase livestock grazing capabilities.  Water continues to be provided annually to this project for irrigation. Project is implemented and ongoing.			X		
41	X	X				Little Blackrock Springs  (EIR Impact 10-14, EIR Table 5-2)	Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	LADWP will continue to supply water from Division Creek to the site of the former pond at Little Blackrock Springs. The marsh vegetation at this site will thus be maintained.	This project was implemented as an LADWP Environmental Project in the 1970s. Water is supplied from Division Creek to maintain the marsh vegetation as required. Project is implemented and ongoing.			X		
42	X		X			Lone Pine East Side Regreening  (11 acres; EIR Impact 10-16, EIR Table 5-3)	10-16: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	A field of approximately seven acres along the Whitney Portal Road in Lone Pine, and a field of approximately 11 acres north of Lone Pine and east of Highway 395, have been converted to irrigated pasture as part of the Lone Pine Regreening enhancement/mitigation projects.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1990. This project was implemented to enhance the aesthetics of abandoned agricultural or pasture lands in areas around the towns of Big Pine, Independence, and Lone Pine. Water is supplied from LADWP facilities to promote and maintain vegetation.  Water continues to be provided annually to this project for irrigation. Project is implemented and ongoing.			X		
43	X		X			Lone Pine-North Lone Pine Clean Up  (EIR Table 4-3)		This project consisted of clearing unsightly, diseased or dead trees and cleaning up refuse around the community of Lone Pine.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1989 to improve the aesthetics of a 23-acre area north of Lone Pine east of Highway 395. This project is complete.	X				

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44	X		X			Lone Pine Riparian Park  (320 acres, EIR Tables 4-3 and 5-3)		Provide a continuous water supply to a reestablished ditch running through Lone Pine Town Park and then easterly to the Lone Pine Woodlot Project. Water not used by this project or the Woodlot Field project could flow to the historic Lone Pine Creek Channel east of Lone Pine and returned to the Owens River Channel.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1987. This project supplies water through a historic ditch to the Lone Pine Riparian Park, the Lone Pine Wood Lot, and approximately 320 acres of reestablished pasturelands in Richards and Van Norman Fields.  Water continues to be provided annually to this project for irrigation as required. Project is implemented and ongoing.			X		
45	X		X			Lone Pine Sports Complex  (EIR Table 5-3)		This project consists of a sports complex that includes a playground for Lo-Inyo School, soccer fields, softball/baseball fields, and parking and picnic area over approximately 10 acres.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1990. This project converted vacant City property to an outdoor sports complex consisting of baseball fields, soccer fields, parking, picnic, and park areas. Project is complete.	X				
46	X		X			Lone Pine West Side Regreening  (8 acres; EIR Impact 10-16, EIR Tables 4-3 and 5-3)	10-16: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	A field of approximately seven acres along the Whitney Portal Road in Lone Pine, and a field of approximately 11 acres north of Lone Pine and east of Highway 395, have been converted to irrigated pasture as part of the Lone Pine Regreening enhancement/mitigation projects.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1990. This project was implemented to enhance the aesthetics of abandoned agricultural or pasture lands in areas around the towns of Big Pine, Independence, and Lone Pine.  Water is supplied annually from LADWP facilities to promote and maintain vegetation. Project is implemented and ongoing.			X		
47	X		X			Lone Pine Woodlot  (12 acres; EIR Impact 10-11, EIR Table 4-3)	10-11: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	As part of the enhancement/mitigation projects implemented by LADWP and the County since 1985, approximately 942 acres of these abandoned agricultural lands have been revegetated with irrigated pasture or alfalfa. These areas are the Independence Pasture and native pasture lands, the Van Norman and Richards Fields, and the Lone Pine Woodlot adjacent to Lone Pine.	The Lone Pine Wood Lot was initially planted in 1987. The wood lot was planted at a high density with the intent of thinning to a 12-foot spacing after planting success was determined. Over time, this high density of trees resulted in reduced growth and increased competition. While the hybrid poplar portions of the wood lots have been harvested several times since project implementation, the locust portions of the wood lots had never been harvested until 2015-2016. At that time, LADWP and CalFire conducted a significant thinning effort in both the Lone Pine and Independence Wood Lots resulting in approximately 130 cords of wood harvested and distributed to the Lone FFA, who holds the lease to both wood lots and manages the distribution of wood. In Winter 2017-18, LADWP and CalFire planted 825 Hybrid Poplar trees in the Poplar section of the Lone Pine Wood Lot. The trees were planted in areas where there were spaces from trees not re-sprouting. The lot was thinned in 2024 and maintenance will continue as needed.			X		

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									Firewood distribution was turned over to the Lone Pine school in 2022.  Water is supplied annually to the project for irrigation. Project is implemented and ongoing.					
48	X	X	X		X	LORP Project (60 miles, perhaps more than 1,000 acres)/ Lower Owens Rewatering Project; EIR Impacts 10-14, 10-17, 10-20; EIR Tables 4-3 and 5-3, 1997 MOU Section II)	Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	Although not all springs and associated riparian and meadow vegetation will receive on-site mitigation, the Lower Owens River Project will provide mitigation of a compensatory nature. This project will rewater over 50 miles of the river channel allowing for restoration of riparian vegetation along the river. This project also will result in the creation of several new ponds along the river and will provide the continuation of existing lakes associated with the project. The project will restore large areas of wetland and meadow vegetation, perhaps exceeding 1,000 acres adjacent to the river and in its delta. In comparison, the area of riparian and meadow vegetation that has been lost and will not be restored because of the elimination of spring flow due to groundwater pumping is estimated to be less than 100 acres.	Flows were initiated in the Lower Owens River Project in December 2006. All four elements of the LORP are functioning and are being adaptively managed. Monitoring is ongoing and water is annually supplied to the project as required. For more information on the monitoring and management of the LORP, refer to LADWP and ICWD's LORP Annual Report. Project is implemented and ongoing.			X		
49	X		X			McNally Ponds and Native Pasturelands (300 acres pasture, 60 acres ponds; EIR Impact 10-5 and 10-18, EIR Tables 4-3 and 5-3)	10-5: Between 1970 and 1990, the project resulted in beneficial changes to lakes and ponds, and the creation of new lakes and ponds, with no significant adverse impact on vegetation. 10-18: Significant adverse vegetation decrease and change have occurred in the Laws area due to a combination of factors, including abandoned agriculture, groundwater pumping, water spreading in wet years, livestock grazing, and drought.	In the mid-1980s, LADWP and the County implemented the Laws-Poleta Pasture Land, Laws Museum, and McNally Ponds enhancement/mitigation projects in the Laws area totaling approximately 541 acres of pasture land.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1986-1987. When in operation, this project provides water for 300 acres during the spring and summer months to mitigate and sustain vegetation, and to provide water to 60 acres of ponds during the fall months for waterfowl habitat. The Standing Committee agreed in 1991 to reduce the water commitment to the McNally Ponds Project because of dry conditions. In most normal and below-normal runoff years since that time, the Standing Committee has reduced water releases to this project. In years of abundant runoff the project receives its full allotment of water. In drier years the McNally Canals are not operated. The Water Agreement states that LADWP shall operate the canals in accordance with its practices from 1970. There is an alternate water supply source when wells are in ON status. This project was supplied with water in 2017 and 2023 due to the high runoff conditions and water spreading in the Laws Area. Project is implemented and ongoing			X		

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									with water supplied to the project in years where the McNally Canals are in operation or the associated wells are in ON status. Project is implemented and ongoing.					
50	X	X	X			Millpond Recreation Area  (EIR Impact 10-5, EIR Table 5-2 and 5-3)	Between 1970 and 1990, the project resulted in beneficial changes to lakes and ponds, and the creation of new lakes and ponds, with no significant adverse impact on vegetation.	This project was first implemented as an LADWP Environmental Project and required water to be provided to the pond as the recreation area either by creek flow or a well at the site. Millpond is also an Enhancement Mitigation Project that has required LADWP to provide funds to purchase energy to operate the recreation area's sprinkler system that waters 18 acres of the community park including two softball fields.	This project is managed by the Inyo County Parks and Recreation. LADWP continues to provide water and funds for power annually to this project. Project is implemented and ongoing.			X		
51	X	X				Olancha-Cartago Irrigated Fields  (EIR Impact 10-16)	Approximately 1,080 acres of formerly irrigated lands, had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	Irrigated lands in Owens Valley (including Olancha-Cartago area) in existence during the 1981-82 runoff year or that have been irrigated since then, will continue to be irrigated in the future, except perhaps in very dry years. (Reductions in very dry years must be agreed upon in advance by LADWP and the Inyo County Board of Supervisors).	These lands in the Olancha-Cartago area continue to be irrigated annually as required under the Water Agreement.			X		
52					X	Owens Valley Land Management Plan  (MOU Section III.B)		The City of Los Angeles retains land holdings in the Owens Valley primarily to ensure protection of both surface and groundwater resources, and to enable sustained water supply to meet the needs of the citizens of Los Angeles. As financial and personnel resources become available, but not later than 5 years after discharge of the writ, DWP will commence the preparation of management plans for Los Angeles-owned, non-urban lands within the portion of the Owens River watershed located in Inyo County not included in the LORP Planning Area. Within the Management Area, DWP, in consultation with the Parties and others, will identify and prioritize for plan development, those areas where problems exist from the effects of livestock grazing and other land uses. The Parties will have the opportunity to review and comment on a written description of the areas identified, and the reasons for their prioritization, before plan development. The	LADWP's OVLMP was completed in 2010. The OVLMP contains guidance on grazing management of City lands, as well as recreation, fire, cultural resources, commercial uses, and flow management. A Mitigated Negative Declaration was prepared and circulated with the plan which was adopted by the Board of Water and Power Commissioners in June 2010. Implementation of fencing and recreational management measures were complete in early 2011. City lands outside the LORP Planning Area are currently being managed under this plan. See Section 3.2.3 for more information.			X		

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
							<p>first level of priority will be given to riparian areas, irrigated meadows and sensitive plant or animal habitats. The plans will use the work done and underway in the Long Valley and Upper Owens River areas as a model where appropriate. Opportunity for Party, agency and public review of the proposed plans will be provided. The process will comply with applicable provisions of CEQA.</p> <p>As with the LORP Plan described above, the management plans will consider multiple resource values, and will provide for management based upon holistic management principles. While providing for the primary purpose for which Los Angeles owns the lands, including the protection of water resources utilized by the citizens of Los Angeles, the plans will also provide for the continuation of sustainable uses (including recreation, livestock grazing, agriculture, and other activities) will promote biodiversity and a healthy ecosystem, and will consider the enhancement of Threatened and Endangered Species habitats. Habitat conservation plans for Threatened and Endangered Species will be incorporated if and where appropriate. Plans will include an implementation schedule for the purpose of addressing the problems identified in the planning areas, and a monitoring/reporting program. The plans will be prepared under the direction of Consultants and all plans will be completed within approximately 10 years of the discharge of the writ. As plans become final, they will be presented to the Board of Water and Power Commissioners for approval and implementation as expeditiously as possible in accordance with the schedule set forth in the plan.</p>							
53					X	<p>North of Mazourka Canyon Road Project</p> <p>(Additional Mitigation Projects Developed by the</p>		<p>Project was implemented in December 2011 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Please refer to Section 3.2.1 for more information on these projects. Project is implemented and ongoing.</p>			X			

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
						MOU Ad Hoc Group (MOU Section III.A.3))								
54	X					Reinhackle Spring (EIR Impact 10-14)	10-14: Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused significant adverse impacts to vegetation at several of these spring areas.	When it was determined in the late 1980s that groundwater pumping was affecting the flow from Reinhackle Spring, pumping from certain wells in the area was discontinued and the spring flow increased. No significant adverse impacts on vegetation in this area have resulted from the reduced flow. At Reinhackle Spring, groundwater pumping from wells that affect the spring flow will be managed so that flows from the spring will not be significantly reduced compared to flows under prevailing natural conditions. In addition, all of the provisions for protecting springs, described in impact 10-15 and contained in the Water Agreement and the Green Book, will be applied equally to Reinhackle Spring.	Spring flows are being monitored continually. The flow followed the typical seasonal pattern of reaching a peak flow in winter and a low flow in the spring. A geochemistry study of flow in Reinhackle Spring was conducted in 2003 as a cooperative study by LADWP, consulting firm MWH, and ICWD, which concluded that water from Reinhackle Spring is similar in origin to the Los Angeles Aqueduct and dissimilar to the deep aquifer samples and up gradient shallow aquifer wells. An operational test was conducted in Bairs Georges Wellfield to study the response of the spring flow to groundwater pumping by active wells in the wellfield and the flow in the Los Angeles Aqueduct (March 2011). Results show that the flow in Reinhackle Spring is affected mainly by the water levels in the shallow aquifer west of the spring. Groundwater pumping in the Bairs Georges Wellfield could affect the flow in the spring only to the extent that it affects water levels in the shallow aquifer west of the spring. LADWP has developed a monitoring and operational plan for Bairs Georges Wellfield that has been submitted to ICWD for comment. Project is implemented and ongoing.			X		
55	X		X			Richards Fields (160 acres; EIR Impact 10-16, EIR Table 4-3)	10-16: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	As part of the enhancement/mitigation projects implemented by LADWP and the County since 1985, approximately 942 acres of these abandoned agricultural lands have been revegetated with irrigated pasture or alfalfa. These areas are the Independence Pasture and native pasture lands, the Van Norman and Richards Fields, and the Lone Pine Woodlot adjacent to Lone Pine.	This project was implemented as a LADWP Enhancement/Mitigation Project in 1987. Water continues to be provided annually to the project for irrigation. Project is implemented and ongoing.			X		
56	X	X				Saunders Pond (EIR Impact 10-5, EIR Table 5-2)	10-5: Between 1970 and 1990, the project resulted in beneficial changes to lakes and ponds, and the creation of new lakes and ponds, with no significant adverse impact on vegetation.	Under this project, water is provided for a warm-water fishery and waterfowl area.	The dike system forming the Buckley Pond Series was originally constructed in the 1950s to create a water spreading and groundwater recharge area to be used only in above normal years. In 1968, a cooperative agreement between LADWP and CDFG proposed a habitat improvement project and permanent wildlife habitat area. Work on Saunders Pond was complete in 1971. LADWP, CDFG, and CDF signed onto the joint Habitat			X		

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
									Management Plan for the Buckley Pond Series in 1976 that described how the pond series was to be managed. More recently, LADWP burned Saunders Pond in spring 2016, removed aquatic vegetation, and resumed flows to the pond in fall 2016. The local Lion's Club installed a handicap accessible fishing platform/dock on the south end of the pond in summer 2016. Water continues to be provided annually to the project. Project is implemented and ongoing.					
57	X		X			Shepherd Creek Alfalfa Field (198 acres; EIR Impact 10-11, 12-1, EIR Tables 4-3 and 5-3)	<p>10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.</p> <p>12-1: Significant impacts on air quality resulting from groundwater pumping during the period of 1970 to 1990 have occurred due to vegetation losses.</p>	<p>10-11: Under the Shepherd Creek enhancement/mitigation project, approximately 198 acres of poorly vegetated land has been converted to alfalfa. This area was affected by groundwater pumping and abandonment of irrigation. In addition, an area of approximately 60 acres to the east of the existing project area on the opposite side of U.S. Highway 395 is poorly vegetated. If the density of the native cover in this area does not naturally increase, the existing enhancement/mitigation project may be expanded to include this additional area.</p> <p>12-1: Under the Shepherd Creek enhancement/mitigation project, approximately 200 acres of poorly vegetated land has been converted to alfalfa.</p>	<p>This project was implemented as an LADWP Enhancement/Mitigation Project in 1986. The Shepherd Creek Alfalfa Field Project has been revegetated with alfalfa that is sprinkler irrigated and wind break trees.</p> <p>Water continues to be provided annually to the project for irrigation. Project is implemented and ongoing.</p>			X		
58	X		X			Shepherd Creek Potential (60 acres; EIR Impact 10-11, 12-1, EIR Table 5-3)	<p>10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.</p> <p>12-1: Significant impacts on air quality resulting from groundwater pumping during the period of 1970 to 1990 have occurred due to vegetation losses.</p>	<p>10-11: Under the Shepherd Creek enhancement/mitigation project, approximately 198 acres of poorly vegetated land has been converted to alfalfa. This area was affected by groundwater pumping and abandonment of irrigation. In addition, an area of approximately 60 acres to the east of the existing project area on the opposite side of U.S. Highway 395 is poorly vegetated. If the density of the native cover in this area does not naturally increase, the existing enhancement/mitigation project may be expanded to include this additional area.</p>	<p>The Shepherd Creek Potential Project was evaluated and natural increases in the density of native cover have occurred making the site comparable to baseline conditions in adjacent undisturbed parcels. Therefore, the goals for this potential project, as stated in the EIR, have been met. Project is complete.</p>	X				

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	<b>Table 3.3 LADWP MITIGATION AND MONITORING</b>					Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date	Status					
59	X					Steward Ranch (EIR Impact 9-14)	9-14: LADWP pumping between 1970 and 1990 in the Big Pine area contributed to lowered water levels in the wells of Steward Ranch and resulted in an adverse economic effect. It is expected that LADWP will continue to pump from this area in the future. The proposed mitigation measure would reduce this impact to less-than significant.	Because groundwater pumping in the Big Pine well field was contributing to a lowering of groundwater levels at Steward Ranch, one of two wells became inoperable. LADWP reached agreement with the ranch owners to permanently mitigate the lowered groundwater levels that have existed since 1972.	The mitigation efforts are complete. LADWP continues to compensate the ranch owners for added power costs of pumping water from a greater depth. Project is implemented and ongoing.			X			
60	X			X		Tinemaha 54 Revegetation Project (EIR Impact 10-11)	10-11: Fluctuations in water tables due to groundwater pumping have caused approximately 655 acres of groundwater dependent vegetation to die off. Loss of vegetation cover has occurred on these lands.	Approximately 80 acres of land that lost a significant amount of its native vegetation cover as a result of increased groundwater pumping will be revegetated. The techniques that will be employed to revegetate these lands will be determined through studies that will be conducted by LADWP and the County. These lands will not be permanently irrigated, but will be revegetated with native Owens Valley vegetation not requiring irrigation except perhaps during its initial establishment. Depending on the amount of rainfall and runoff, successful revegetation of these lands could take a decade or longer. The goal will be to restore as full a native vegetation cover as is feasible, but at a minimum, vegetation cover sufficient to avoid blowing dust will be achieved in that area.	Project implementation is complete. The 0.4 acre area has been fenced, planted with 108 grass plants and drip irrigated between 1999 and 2004 to encourage plant establishment.  The road through the middle of the site was removed and reclaimed as well during this planting process. Plantings will be periodically monitored.  Permanent transects were first read in 1999. In 2022 the cover value was 0.8% with 4 native perennial species (33% cover goal with 3 native perennial species). The site will be considered complete when the cover is 90% and composition is 75% of the stated goal with an 80% confidence limit. This project has been fully implemented but has not yet attained cover goals.				X		
61	X		X			Tree Planting along Roadways (EIR Table 4-3)		This project consisted of planting new trees and maintaining new and existing trees along roadways within the towns of Laws, Big Pine, Independence, and Lone Pine.	The goal of this project was to provide shade and greenways in Owens Valley communities to mitigate trees lost since the 1970s due to a reduction in surface water irrigation, higher water costs, age, disease, etc. LADWP was responsible for purchasing and planting the trees and replacement once within two years if needed.  This project was implemented in Laws, Independence and Lone Pine as an LADWP Enhancement/Mitigation Project in 1988. Additional planting occurred in Big Pine in 1992. This project resulted in 14 trees planted in Laws, approximately 130 trees in Big Pine (Arizona cypress), 84 in Independence, and 77 in Lone	X					

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
									Pine.  Ongoing irrigation is the responsibility of the adjacent property owner. Project is complete.					
62	X	X				Tule Elk Field  (EIR Table 5-2)		Under this project, water is provided to a field that is heavily used in summer by Tule elk, near U.S. Highway 395 and Tinemaha Reservoir.	This project was implemented as an LADWP Environmental Project in the 1970's to enhance/expand elk feeding grounds in the Owens Valley. Water continues to be provided annually to this project for irrigation. This project is implemented and ongoing.			X		
63	X		X			Van Norman Fields  (170 acres; EIR Impact 10-16, EIR Table 4-3)	10-16: Approximately 1,080 acres of formerly irrigated lands had not successfully revegetated following the abandonment of agriculture. This was a significant adverse impact because these lands had a loss of vegetation and were the source of blowing dust.	As part of the enhancement/mitigation projects implemented by LADWP and the County since 1985, approximately 942 acres of these abandoned agricultural lands have been revegetated with irrigated pasture or alfalfa. These areas are the Independence Pasture and native pasture lands, the Van Norman and Richards Fields, and the Lone Pine Woodlot adjacent to Lone Pine.	This project was implemented as an LADWP Enhancement/Mitigation Project in 1987. A portion of the project could not be irrigated due to topography. Additionally, Well 390 met the end of its service life and was replaced with Well 425 in 2014.  The project was modified by the Standing Committee April 22, 2014 to include 10 acres for the Lone Pine High School Farm. The agreed upon water allotment for the modified project is approximately 2.8 AF/acre.  Water continues to be provided annually to the project for irrigation. Project is implemented and ongoing.			X		
64					X	Warren Lake Project  (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			Project was implemented in April 2011 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. The Warren Lake Project is implemented and ongoing as needed; it serves to balance the annual 1600 acre-foot water commitment for this provision of the MOU. Please refer to Section 3.2.1 for more information on these projects. Project is implemented and ongoing.			X		

Reporting No.	1991 EIR	1991 EIR Environmental Project (1970-1984)	1991 EIR E/M Project (1985-present)	Revegetation Project	1997 MOU	Table 3.3 LADWP MITIGATION AND MONITORING				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
						Project Title	Impact (Where Relevant)	Measure/Provision	Progress to Date					
65					X	Well 368 Project  (Additional Mitigation Projects Developed by the MOU Ad Hoc Group (MOU Section III.A.3))			Project was implemented in February 2012 as part of the Additional Mitigation Projects Developed by the MOU Ad Hoc Group. Please refer to Section 3.2.1 for more information on these projects. Project is implemented and ongoing.			X		
66					X	Yellow-billed Cuckoo (YBC) Habitat Enhancement Plans  (MOU Section III.A.1)		Consultants will conduct an evaluation of the condition of YBC Habitat in the riparian woodland areas of Hogback and Baker Creeks. Based on that evaluation, Consultants will develop, as they deem warranted, YBC Habitat Enhancement Plans for these areas. Each will identify reasonable and feasible actions or projects to maintain and/or improve the habitat of the YBC. In developing the plans, the Consultants will consider the recommendations for these areas that were identified in the Distribution of Breeding riparian birds in Owens Valley, Inyo County, California (Laymon and Williams, 1994) and will confer with DWP, the lessee for each area and the Parties.	Environmental consultants Ecosystem Sciences completed a YBC Habitat Enhancement Plan in April 2005. LADWP released a Draft EIR in January 2006. The MOU Parties and others expressed displeasure with the Consultant’s project. The MOU Parties and the lessees for the Baker Creek and Hogback Creek areas entered into negotiations with LADWP staff to develop another alternative for the YBC Habitat Plan.  The Ad Hoc YBC Habitat Enhancement Plan was completed and a Mitigated Negative Declaration was released for public review in 2010. The Los Angeles Board of Water and Power Commissioners approved the project on January 19, 2010. Required initial plantings and replacement plantings have been fully implemented on schedule per the plan. Please see Section 3.2.4 for a progress report on this project.			X		

### 3.2.1. Additional Mitigation Projects Developed by the MOU Ad Hoc Group

#### Introduction

Section III.A.3. Additional Mitigation of the 1997 MOU describes LADWP's commitment to supply 1,600 acre-feet (AF) of water per year for:

- 1) the implementation of the on-site mitigation measure at Hines Spring identified in the 1991 EIR, and
- 2) the implementation of on and/or off-site mitigation in addition to that identified in the 1991 EIR for impacts that occurred at Fish Springs, Big and Little Blackrock Springs, and Big and Little Seely Springs.

The Second Amendment of Amended Stipulation and Order *Case No. S1CVCV01-29768* was executed on March 8, 2010, by the Superior Court of California, the County. This order accepts the eight projects described in the Additional Mitigation Projects Developed by the MOU *Ad Hoc* Group (Additional Mitigation Projects) document as mitigation for impacts identified above and establishes a two-year timeline for their implementation. The projects are named according to their locations: Freeman Creek, Warren Lake, Hines Spring Well 355, Hines Spring Aberdeen Ditch, North of Mazourka Canyon Road, Homestead, Well 368, and Diaz Lake. LADWP completed an Initial Study for the Additional Mitigation Projects and prepared a Mitigated Negative Declaration (MND) and released it for public review March 23 - April 26, 2010. The final MND, Mitigation Monitoring and Reporting Program, and proposed implementation schedule were approved by the City of Los Angeles Board of Water and Power Commissioners (Board) on June 1, 2010. A Notice of Determination was filed with the the County Clerk on June 2, 2010. LADWP began implementing the projects shortly thereafter and implemented all eight Additional Mitigation Projects by March 8, 2012, as required in the Stipulation and Order.

#### Additional Mitigation Projects Annual Monitoring Report

LADWP conducted the required monitoring described in the Additional Mitigation Projects document for five years post implementation and performed a five-year evaluation of the projects in 2017. This evaluation was provided in LADWP's 2017 Annual Owens Valley Report, and described implementation, monitoring data, and recommendations for the future management of each project where relevant. Many of the initial monitoring efforts were discontinued following this evaluation.

Flow monitoring for the projects is still conducted monthly per the Additional Mitigation Project document. Table 3.4 shows flow data recorded for each of the projects from April 1, 2025, through March 31, 2026. During this time, LADWP provided 1,649 acre-feet of water to the Additional Mitigation Projects.

**Table 3.4. Additional Mitigation Projects Developed by the MOU Ad Hoc Group  
Annual Water Accounting in Acre-feet (April 1, 2025 - March 31, 2026)**

Additional Mitigation Projects Developed by the MOU Ad Hoc Group Annual Accounting in Acre Feet (April 1, 2025-March 31, 2026)												
2025-2026	Freeman Creek (Average*) (2054)	Freeman Creek Actual (2054)	Warren Lake (2173)	Hines Well 355 (W355)	Aberdeen Ditch (400)	North of Mazourka (F418)	North of Mazourka (404)	Homestead T775 (F421)	Homestead Well (F419)	Well 368 (F420)	Diaz Lake (86)	Total
April	20	41	0	14	7	13	5	7	21	13	103	205
May	19	31	0	14	8	14	3	8	22	13	40	140
June	14	16	0	13	7	13	3	7	22	13	99	190
July	13	11	0	13	8	13	3	8	22	13	0	93
August	10	11	0	11	9	13	2	8	22	13	0	88
September	13	15	0	7	10	12	3	7	21	12	6	91
October	22	34	6	2	4	14	3	5	22	13	0	90
November	22	37	57	0	13	14	3	10	21	12	0	153
December	23	46	49	6	11	14	3	10	22	13	0	151
January	23	48	19	12	7	15	3	7	22	13	0	121
February	18	44	61	12	6	14	3	6	20	12	0	152
March	18	46	78	11	7	15	3	8	22	14	0	176
<b>Total</b>						162	35	91	260			1649
<b>Project Total</b>	215	381	270	116	97	197		351		155	248	
<b>Annual Target AF</b>	215*	215	0	240	145	300		300		150	250	1600
<b>Monthly Target AF</b>	18	18	0	20	12	25		25		13		133
*Freeman Creek will be recorded as 215 AF/year based on long term average regardless of varying flow reads.												
**Amount in excess of project allotment may not be carried over to future years.												

### 3.2.2. Irrigation Project in the Laws Area (Laws Type E Transfer)

#### Laws 2003 Revegetation Plan

The 2003 Mitigated Negative Declaration (MND) for the “Irrigation Project in the Laws Area”, prepared pursuant to California Environmental Quality Act (CEQA), includes a revegetation plan (The Revegetation Plan for *Lands Removed from Irrigation, Laws Parcels 90, 95, and 129 and Abandoned Agricultural Land Parcel 94*), (the Plan) that establishes specific vegetation goals to restore native vegetation on City of Los Angeles (City) property that was formerly irrigated agricultural land. The goals stated in the Plan are: 10% native perennial vegetation cover, composed of at least 10 different native species (including one native grass) for LAW090, 094, 095 and 10% native perennial vegetation cover, composed of at least eight different native species (including one native grass) for LAW129 and a portion of LAW118.

#### Monitoring

On June 9 and 10, 2025 revegetation transects for Laws 090, 094, and 095 were jointly monitored by LADWP and ICWD. On July 14, 2025, the revegetation transects for Laws 118/129 was solely monitored by ICWD. Please refer to the 2024 Annual Owens Valley Report for monitoring methods and transect locations.

**Results**

Table 3.5 details the results of the 2025 monitoring in the context of the Plan. Laws 90 is the only revegetation parcels to meet all the goals established in the Plan (see below).

**Table 3.5. Parcel Number, Goals, and Monitoring Values.**

<b>Parcel Number</b>	<b>Target Perennial Cover (%)</b>	<b>Absolute Perennial Cover (%)</b>	<b>Target Composition (Number of Species)</b>	<b>Composition (Number of Species)</b>	<b>Additional Criteria</b>
090	10	12.5	11	13	No transect under 2% cover, 6 species hit at least 3 times, 13 species in the parcel including a grass
094	10	8.6	11	11	No transect under 2% cover, 5 species hit at least 2 times, 11 species in the parcel including a grass
095	10	7.4	11	12	No transect under 2% cover, 4 species hit at least 2 times, 12 species in the parcel including a grass
118/129	10	21.38	9	4	Transect 10 under 2% cover, 4 species hit at least 2 times, 4 species in the parcel

### **Discussion/Future Work**

LADWP and ICWD are currently considering a potential amendment to the 2003 Plan to address changes that have occurred over the span of the project and developments in their understanding of site conditions. Once complete, the draft will be brought to the Technical Group for final approval and undergo CEQA review. Further, monitoring will occur at all revegetation parcels in the summer of 2026. Lastly, because LAW094, LAW095, and LAW118/129 have not met the goals defined in the Plan, revegetation activities will resume in 2026.

### **3.2.3 Owens Valley Land Management Plan (OVLMP)**

#### **Introduction**

Section II.B of the 1997 MOU describes the requirement for a land management plan for City non-urban lands in the Owens River Watershed in the County. The 1997 MOU states that LADWP shall continue to protect water resources used by the citizens of Los Angeles while providing for the continuation of sustainable uses such as recreation, livestock grazing, agriculture, and other activities. In doing so, LADWP shall promote biodiversity and healthy ecosystems, and address situations or problems that occur from the effects of various land uses on City property. The 1997 MOU states that priority is to be given to riparian areas, irrigated meadows, and sensitive plant and animal habitats.

Subsequently, LADWP developed the OVLMP (LADWP and Ecosystem Sciences, 2010) to fulfill this requirement of the 1997 MOU and guide management of the City's lands in the Owens Valley. The OVLMP consists of 10 chapters that describe current conditions and future management of grazing, riverine riparian ecosystems, recreation, cultural resources, fire, commercial uses, threatened and endangered species, and areas of special management concern. The fundamental role of resource management is to assess and evaluate the effects of existing land and water use practices and recommend flow management and land management improvements if necessary.

#### **CEQA Process for the OVLMP**

An Initial Study and Mitigated Negative Declaration (LADWP, 2010) was prepared for the OVLMP in March 2010. After review of the comments received and based on the information in the Initial Study, LADWP determined that with adoption of mitigation measures, implementation of the OVLMP would not have a significant impact on the environment. The final MND and Mitigation Monitoring and Reporting Program were approved by the City of Los Angeles Board of Water and Power Commissioners on June 1, 2010. A Notice of Determination was filed with the Inyo County Clerk on June 2, 2010.

#### **3.2.3.1 OVLMP Grazing Management Monitoring Report**

##### **Introduction**

The land use component of the OVLMP is composed of project elements related to livestock grazing management. Under the land management program, the intensity, location, and duration of grazing is managed through the establishment of riparian pastures, forage utilization rates, and prescribed grazing periods (described in Section 3.3 Owens Valley Land Management Plan, 2010). Other actions include protection of rare plant populations, establishment of off-river watering sources (to reduce use of the river and off-river ponds for livestock watering), irrigated pasture condition, utilization, and range trend monitoring to ensure that grazing rates within all leases maintain the long-term productivity of the forage base.

Grazing management plans developed modified grazing practices in riparian and upland areas on LADWP leases to support OVLMP goals. The leases contained in the Owens Valley Report are listed in Table 3.6 below. Maps detailing the locations of each of these leases can be found in the OVLMP. Detailed description of each lease can also be found in reports prior to 2023 as well as in the OVLMP.

In 2023, changes were made to the Grazing Management Monitoring Report to consolidate data and remove repetitive formatting. As a result, lease overviews are no longer be presented. This information can be found in the OVLMP. All leases will continue to be monitored and reported upon annually for utilization, irrigated pasture conditions, supplemental feeding, and fencing. One third of leases will continue to be monitored and reported upon annually for range trend. Monitoring data will be presented going back five years for utilization and irrigated pasture monitoring. Range trend data will be presented for the transects monitored during the previous year and will display the full record of data.

**Table 3.1. Ranch Lease Numbers and Names**

RL #	Ranch Name		RL #	Ranch Name		RL #	Ranch Name	
I-401	Brockman Ranch Lease		I-435	3V Ranch Lease		I-483	Round Valley Ranch Lease	
I-402	U Bar Ranch Lease		I-438	Big Pine Canal Lease		I-487	LI Bar Ranch Lease	
I-404, 413	Quarter Circle B Ranch Lease		I-439	Rafter DD Ranch Lease		I-490	Archie Adjunct	
I-406, 489	Fort Independence Ranch Lease		I-452	Lone Pine Dairy Lease		I-489	Georges Creek Parcel	
I-407	Coloseum Ranch Lease		I-453	Reata Ranch Lease		I-489	Island Ranch Lease	
I-408	Eight Mile Ranch Lease		I-416, 454, 455	Independence Lease		I-490	Delta Ranch Lease	
I-411	Cashbaugh Ranch Lease		I-456	Lone Pine Ranch Lease		I-491	Twin Lakes Ranch Lease	
I-412, 451, 500	CT Ranch Lease		I-460	Rainbow Pack Outfit Lease		I-491, 499	Four J Ranch Lease	
I-420	Rockin DM Ranch Lease		I-461	ST Ranch Lease		I-492	Reinhackle Ranch Lease	
I-424	Mandich Ranch Lease		I-462	Horseshoe Bar Ranch Lease		I-493	Rockin' C Ranch Lease	
I-426	Frontier Pack Lease		I-464	Three Corner Round Ranch Lease		I-495	Mount Whitney Pack Lease	
I-427	Olancha Creek Adjunct		I-475	Intake Ranch Lease		I-497	Warm Springs Ranch Lease	
I-428	Blackrock Ranch Lease		I-475	Baker Road Ranch Lease		I-498	Pine Creek Ranch	
I-428A	Homeplace Adjunct		I-479	Aberdeen Pack Lease				
I-430	Thibaut Ranch Lease		I-480	Horse Shoe Ranch Lease				

## Overview of Monitoring and Assessment Program

Monitoring is conducted at all irrigated pastures and at key areas within riparian and upland management areas. Areas not identified as irrigated pasture, riparian management areas, or springs and seeps are considered upland management areas. Monitoring and assessment of key sites in riparian and upland management areas includes utilization and range trend monitoring.

This report presents data collected during various periods typically beginning in 2007. All leases will be monitored annually for utilization, irrigated pasture conditions, supplemental feeding, and fencing. For range trend monitoring each lease will generally be monitored every three years unless a significant change has occurred such as a fire or a major change in management.

A description of monitoring methods, data compilation and analysis techniques can be found in Section 9.4 of the OVLMP (2010). Descriptions of the range trend monitoring sites can be found in Annual Reports prior to 2023.

Because of the high resource value associated with riparian areas on City property in the Owens Valley, the majority of the utilization and range trend monitoring plots are either located on moist floodplain or saline meadow sites in close proximity to the Owens River.

Utilization is compliance monitoring and involves determining whether the utilization guidelines set forth in the grazing plans are being adhered to. Following implementation of the grazing management plans, the utilization standard for riparian management areas is 40%. The utilization standard for upland areas is 65% if grazing occurs during the plant dormancy season. The standard for upland areas is 50% if grazing occurs during the active plant growing period; however, if the pasture is completely rested for a minimum of 60 continuous days during the latter part of the active stage to allow seed set, allowable forage utilization is 65%.

These standards are not expected to be met precisely every year because of the influence of annual climatic variation, livestock distribution and the inherent variability associated with techniques for estimating utilization. Rather, these levels should be reached over an average of several years. If utilization levels are consistently 10% or more above desired limits during this period, adjustments should be implemented (Holecheck and Galt, 2000; Smith *et al.*, 2016).

An additional driver for the 40% utilization rate on riparian pastures in the northern portion of the Owens Valley are grazing requirements as they relate to the federally listed Southwestern Willow Flycatcher (*Empidonax traillii extimus*). Within the Middle Owens River management area, beginning from just north of Tinemaha Reservoir to Pleasant Valley and adjacent Horton Slough, LADWP and the USFWS, developed a Conservation Strategy designed to increase the endangered Southwestern Willow Flycatcher habitat in the Owens Valley. This strategy specifies a 40% utilization limit along the river with livestock grazing permitted between October and May of each year.

## Utilization Monitoring

Monitoring methodologies are fully described in Section 9.4.1 of the OVLMP (2010). Utilization is compliance monitoring and involves determining whether the utilization guidelines set forth in the grazing plans are being adhered to. Similar to precipitation data, utilization data alone cannot be used to assess ecological condition or trend. Utilization data is used to assist in interpreting changes in vegetative and soil attributes collected from other trend monitoring methods.

Utilization monitoring is conducted annually. Permanent utilization transects have been established in upland and riparian areas of pastures within the MORP, LORP, and areas outside these two project locations. An emphasis has been placed on establishing utilization monitoring sites within riparian management areas. Each monitoring site is visited prior to any grazing in order to collect ungrazed plant heights for the season. Sites are visited again approximately mid-way through the grazing period (mid-season) and again at the conclusion of the grazing period (end-of-season).

Utilization estimates are conducted on all range trend transects if there is an adequate amount of the key forage species - alkali sacaton (*Sporobolus airoides*) and saltgrass (*Distichlis spicata*). There are additional utilization transects not associated with range trend sites. These are designated as spatial utilization transects and will be read annually as long as they represent typical use in a pasture. If they fail to be representative (e.g. fire, flooding, and change in grazing patterns) they will be temporarily or permanently abandoned.

Watershed Resources staff updates each lessee with their midseason results if measurements are close to or exceeding utilization standards (40% or 65%). In either case the lessee is instructed to move livestock. All lessees are informed on end of season utilization results for each year. This allows LADWP and the lessees to communicate and make grazing management changes as needed to meet land management goals.

Target stubble heights have been calculated for each transect and pasture on a given lease. The lessee is notified of the set utilization standards and corresponding pasture, or field associated with either riparian (40%), or upland (65%) standards. If requested by the lessee, field visits will occur to assess utilization on a particular field. If not requested, Watershed Resources staff adhere to the monitoring schedule previously mentioned. To calculate target stubble heights, ungrazed plant heights are collected after the end of the growing season to allow the plants to reach maximum production before the grazing season begins. The ungrazed heights are then averaged by species and transect in order to calculate the stubble heights that will meet the utilization standards for each field. The resulting calculated stubble heights are based on the same height/weight curves used in the mid and end of season utilization calculations.

## **Irrigated Pasture Monitoring**

Irrigated areas are classified as any portion of the lease where the lessee receives an irrigation allotment based on Type-E vegetation classification. LADWP and the lessee jointly determine irrigated pasture conditions using the Natural Resource Conservation Service (NRCS) Guide to Pasture Condition Scoring (Cosgrove et al., 2001). This protocol was designed to optimize plant and livestock productivity while minimizing detrimental effects to soil or water resources. Irrigated pastures do not have a utilization standard.

Pasture condition scoring involves the visual evaluation of 10 indicators each having five environmental conditions (Cosgrove et al., 2001). Each indicator is rated separately, and the scores are combined into an overall score for the pasture. The overall score for a pasture can then be divided by the total possible score to give a percent rating (overall score ÷ total possible score x 100 = percent rating). Not all 10 indicators may be appropriate for use in every pasture. In this case, using less than 10 indicators will reduce the possible score, but the percent rating will still be comparable. All irrigated pastures within the Owens Valley are monitored using the same protocols and timing interval (every third year). All irrigated pastures that score 80 percent or greater are considered to be in good to excellent vegetation condition and are not subject to any changes in grazing management. Any irrigated field or pasture scoring less than 80 percent will receive, in consultation with the lessee, changes in management prescriptions (i.e., changes in forage utilization, livestock numbers, season, or duration of use) and will be monitored annually until pasture scoring meets or exceeds 80%.

## **Range Trend Monitoring**

Range trend monitoring involves the quantitative sampling of the following attributes: frequency of all plant species, canopy cover estimates for herbaceous plant species, line intercept sampling for shrub canopy cover, estimates for ground cover, shrub density, and age classification of shrubs. Photo documentation of the site conditions is included as part of range trend monitoring.

Range trend monitoring at permanent transects provides quantitative data to determine the state of monitoring sites relative to baseline conditions and how a given site compares to the desired plant community. The desired plant community can be one of several plant communities that may occupy a site or one that has been identified through a management plan to best meet the plan's objective for the site. The desired plant community may be described as dynamic, changing through time, or within a range of variability (Bedell, 1998).

From 2007 to 2022, all range trend transects were compared to their representative ecological site conditions. Departures from desired conditions largely followed climatic patterns from year to year. Some transects have changed dramatically, however in these cases the changes were driven by expansion of marsh in the LORP or by impacts caused by flooding or wildfire. It is important to note that the reference plant community is a conceptual model intended to help managers gauge how a site compares to what

potentially could be found on similar sites. To expect any existing location to identically match the described community would be erroneous. Estimating how similar a given site is to its potential described in the ecological site description is useful when conducting an inventory across an area. However, now that repeat monitoring data are available for all monitoring sites (the majority of transects have 20 or more years of data), changes over time compared to the natural variability within, is a more effective approach to assessing the trend of each particular key area. This is because comparisons are made directly to the site and not between the key area and a reference plant community in an ecological site description, which ultimately has no physical existence. Given the breadth of data collected to date, site potential comparisons will no longer be the focus of this report and will be replaced by long-term trend analysis. This is not to say that site potential won't be considered in the future, however for the purposes of this report they will no longer serve as the primary metric for data analysis and display purposes.

Because frequency data is sensitive to plant densities and dispersion, frequency is an effective method for monitoring and documenting changes in plant communities (Mueller Dombois and Ellenberg, 1974; Smith *et al.*, 1986; Elzinga, Salzer *et al.*, 1988; BLM, 1996; Heywood and DeBacker, 2007). For this reason, frequency data will be the primary means for evaluating trend. If present on a transect shrub cover will also be presented.

Range trend analysis on the LORP leases began in 2002. In response to the potential critical habitat designation and subsequent MOU with the USFWS concerning the Southwestern Willow Flycatcher, rangeland analysis expanded to include the Middle Owens River areas beginning in 2007. On transects with a longer history of monitoring, trends appear to be static with no obvious trajectories as each year captures and extends what appears to be the normal range of variability. The majority of range trend sites are situated on moist flood plain or saline meadow ecological sites. These sites are naturally sub-irrigated and less influenced by annual fluctuations in precipitation when compared to the more xeric ecological sites such as saline bottom or sodic sites. In general, perennial grass and forb communities on the mesic sites are resilient to both moderate and heavy grazing, particularly if grazing occurs during the dormant season which is the case for most LADWP grazing leases.

### 3.2.3.2 2024 Grazing Management Monitoring Data

Figures containing summarized data for utilization, irrigated pasture conditions, and range trend for each pasture/field/transect can be found in **Appendices** at the end of this section.

#### Utilization

At the lease level, grazing utilization in 2025 was below grazing standards (40% Riparian, 65% Upland) on all leases. At the transect/pasture level, RLI-483 exceeded riparian standards at two locations, MEND\_04 and MEND\_05. The East Side Riparian Field was grazed to 41% utilization, while only one transect within the East Side River Field was grazed to 41% utilization. The overall grazing utilization for all RLI-483 fields

was 21%. Two transects in RLI-491 exceeded the riparian standards, TWINLAKES\_03 at 42% utilization and BLKROC\_RIP\_08 at 52% utilization. Both of these transects had a lower utilization than observed in 2024. Additionally, all pasture utilization averages in RLI-491 were within the riparian standards. Since grazing pressure across all fields and pastures was low in 2025, no changes in grazing management are recommended at this time. Utilization values are listed in Appendix Four (4).

In 2025, forage growth was still benefiting from the record precipitation year in 2023 and subsequent precipitation in 2024, which was considered an average water year. Damage caused by flooding and sustained inundation on the floodplains still limited forage availability in the riparian pastures within some leases located in the LORP. This was due to low gradients and flows that reached over 800cfs. This eliminated forage in numerous riparian pastures along the river due to silt coverage and weeds. The resulting effect was livestock movement with higher grazing activity in upper elevation areas within riparian pastures and uplands. Other areas that sustained flood damage in 2023 were starting to rebound in 2025.

### **Irrigated Pastures**

Monitoring of all irrigated pastures was conducted during the summer of 2023. All leases are scheduled for assessment in 2026. Irrigated pastures on RLI-479, RLI-483, and RLI-495 that did not rate above 80% in 2024 were re-evaluated in 2025. Irrigated pasture scores are listed in Appendix Five (5).

RLI-479 changed ownership in 2022. During the transition between owners, active irrigation had ceased resulting in scores dropping below 80%. After irrigation requirements were discussed with the lessee, irrigation practices resumed in the spring of 2024. In 2025, all pastures were actively irrigated throughout the growing season and rested from use. Although closely monitored, it was determined all pastures would need one more year before a second evaluation could be made. There should be a sufficient abundance of forage species present for evaluation in 2026.

The Big Pine Field, RLI-483, scored below 80% in 2023 and 2025 due to insufficient irrigation and undesirable species. LADWP Watershed Resources staff contacted the lessee in the spring of 2024 to develop a management plan to improve conditions. Although the field is improving, additional work will be required to bring this pasture into compliance. A follow-up meeting will be conducted in the spring of 2026 to explore additional options to advance recovery.

RLI-404, 413, RLI-439, RLI-453, RLI-493 were monitored outside of the normal schedule due to historical scores consistently hovering in the low 80%. Although 80% and above is acceptable, spot checks were performed to ensure all pastures remained in compliance. Scores recorded in 2025 were all above 80% and were comparable to prior years.

Pastures in RLI-495 were also evaluated outside of the normal schedule due to an observed decline in 2025. Both the east and west Diaz pastures scored 70% due to

spot grazing, presence of undesirable forage species, lower plant cover of desirable plant species, and lower presence of legume. LADWP Watershed Resources staff contacted the lessee to develop a management plan to improve their pasture irrigation score. During the meeting it was determined both pastures were not irrigated until late summer due to lack of lessee staffing. Pasture conditions are expected to rebound in 2026 with the resumption of active irrigation management. A follow-up site visit with the lease foreman was scheduled to cooccur with the June 2026 pasture score assessment.

### Range Trend

In 2025, Range Trend transects were monitored on the following leases: Blackrock (RLI-428), Thibaut (RLI-430), Big Pine Canal (RLI-438), Islands (RLI-489), Delta (RLI-490), and Reinhackle (RLI-492).

Riparian fields along the LORP river channel are showing signs of recovery from the extensive flooding in 2023, while a few areas show signs of flood damage. DISP (*Distichlis spicata*, saltgrass) and SPAI (*Sporobolus airoides*, alkali sacaton) vigor was generally good as leases benefited from sufficient precipitation in recent years. Range trend frequency and cover graphs are found in Appendix Six (6).

Of the Blackrock transects surveyed in 2025, DISP frequencies were generally stable or within the natural range of variability between 2002-2016. From 2016-2025, the Blackrock transects show a high degree of interannual variability likely driven by and recovering from the high runoff years in 2016 and 2023. Transects with the largest changes each year have shrub cover expanding or collapsing with DISP responding inversely. Meanwhile, SPAI frequencies were more stable throughout the monitoring program. Dominant shrub cover included ATTO (*Atriplex torreyi*, Torrey's saltbush) and ERNA10 (*Ericameria nauseosa*, rabbitbrush). Total shrub cover among all sites is trending down over the period of record and has never exceeded 6%. Unfortunately, between 2019 and 2025 TARA (*Tamarix ramosissima*, saltcedar) is beginning to appear.

The DISP frequency was variable on Thibaut\_06, while the other three Thibaut transects showed less variability. Thibaut\_05 showed an increase from 2020-2025, likely in response to the precipitation in 2023 and 2024. SPAI was only detected on Thibaut\_06, and the frequency remained under 5% for the length of the monitoring period. Shrub cover at Thibaut\_04 was reduced to zero when the ATTO stand in the area was flooded out in 2023. Shrub cover has remained low at all other transects.

The frequency of SPAI on ISLAND\_06 shows a >40% decline over the monitoring period. Meanwhile the frequency of DISP on ISLAND\_06 has trended upwards during the same period. All other transects observed in 2025 on the Islands lease remain within the natural range of variability. Shrub cover across all transects remains low for the period of record. Shrub cover on Islands\_08 was reduced to zero percent between 2011 and 2014 due to wildfire and has remained shrub free to present.

DISP frequency on the Delta lease (RLI-490) showed a slight decline over the monitoring period, with the exception of Delta\_07, which has higher interannual variability and did not exhibit a clear trend. SPAI frequency on Delta\_07 was 28% in 2025, where SPAI had not been observed on that transect during previous monitoring years. The shrub cover on the Delta transects remain low across the period of record never exceeding 4% and are generally declining at all monitoring locations.

The Silver Fire partially burned the Reinhackle Ranch lease (RLI-492) in March 2025 including the section of Owens River paralleling Route 6 and associated pastures. Lacey\_05, Lacey\_06, and Lacey\_08 burned over with the latter two responding favorably post fire in DISP frequency. SPAI showed an increase between 2022-2025. This increase is likely a response from the fire as well as the previous wet years. The 2025 shrub cover was lower in all transects except Lacey\_08.

### **Supplemental Feeding**

Supplemental feed is used on all LADWP leases. There are various types of supplements that are used by lessees which include hay, loose minerals, cake blocks, molasses tubs, liquid molasses, and feed pellets. However, the main supplemental feeds that are used are liquid molasses and hay. The purpose of supplemental feed is to improve and maintain body condition scores of lactating cattle during the cold winter months to assure cattle will be in peak reproductive health in the spring when it's time to breed. This is a common management practice for all the lessees.

Variations in this management practice change by the type of feed chosen and the locations where it is distributed for livestock. These decisions are made solely by the lessees and effect the livestock distribution across their lease. There were no changes in supplementation in 2025.

### **Fencing**

Fencing is necessary on all leases to contain and control the movement of livestock. They are an important tool in grazing management regarding adherence to upland and riparian grazing prescriptions. They define lease boundaries and seldom change in location. All lessees continually maintain and repair fencing on their leases. New fence lines are seldom constructed and are only constructed to improve grazing management or an operating structure's ability to process cattle.

There was no new fencing constructed in 2025.

### **Summary and Conclusion**

In 2025, except for a few transect locations, utilization on all leases was largely below allowable standards. Irrigated pasture scoring is scheduled for all pastures in 2026. For pastures that were in noncompliance in 2025, Watershed Resources will closely monitor and provide feedback to lessees to aid in recovery. Overall, forage species frequencies remained within the range of historic variability in 2025 with deviations driven by

favorable precipitation and runoff in recent years and recovery from extensive flooding in 2023.

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### 3.2.3.3 Land Management Appendices

**Land Management Appendix 4. End of Season Grazing Utilization by Lease and Pasture, 2021-2025.** Values presented are percent (%). Transects highlighted in tan represent range trend transects. All other transects are used for utilization only. Not all transects are used annually. NF=No forage species present.

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
Aberdeen	479	<b>Aberdeen Lease Upland Average</b>			<b>8</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>3</b>
		Hines Spring Field	ABERDEEN_30	Upland	21	51			
			HINES_SPRING_02	Upland	1	13	9	Flood	2
			HINES_SPRING_03	Upland	0			0	0
			<b>Hines Spring Field Average</b>		<b>7</b>	<b>32</b>	<b>9</b>	<b>0</b>	<b>1</b>
		Pipeline Field	ABERDEEN_33	Upland	9		0	2	11
			PIPELINE_02	Upland	9		0	0	0
			PIPELINE_03	Upland		3	0	0	6
			<b>Pipeline Field Average</b>		<b>9</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>6</b>
		Big Pine Canal	438	<b>Big Pine Canal Lease Riparian Average</b>			<b>30</b>	<b>Burn</b>	<b>14</b>
North 40	YRIB_04			Riparian	41	Fire	22	7	0
	YRIB_06			Riparian	31	Fire	27	9	12
	<b>North 40 Average</b>			<b>36</b>	<b>Fire</b>	<b>25</b>	<b>8</b>	<b>6</b>	
South 40	YRIB_01			Riparian	13	Fire			
	YRIB_02			Riparian	30	Fire	4	0	0
	YRIB_03			Riparian	NR	Fire			
	YRIB_05			Riparian	28	Fire	4	0	1
<b>South 40 Average</b>		<b>24</b>	<b>Fire</b>	<b>4</b>	<b>0</b>	<b>1</b>			
Blackrock	428	<b>Blackrock Lease Upland Average</b>			<b>11</b>	<b>13</b>	<b>6</b>	<b>3</b>	<b>1</b>
		<b>Blackrock Lease Riparian Average</b>			<b>14</b>	<b>11</b>	<b>1</b>	<b>2</b>	<b>16</b>
		Horse Holding	BLKROC_09	Upland	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>
		Locust Field	BLKROC_06	Upland	<b>7</b>	<b>11</b>	<b>20</b>	<b>7</b>	<b>1</b>

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
		North Riparian Field	BLKROC_13	Riparian	9	10	0	5	18
			BLKROC_22	Riparian	19		0		
			<b>North Riparian Field Average</b>		<b>14</b>	<b>10</b>	<b>0</b>	<b>5</b>	<b>18</b>
		Reservation Field	BLKROC_02	Upland	53			0	0
			BLKROC_03	Upland	4		0	3	0
			BLKROC_44	Upland	22		7		0
			BLKROC_49	Upland	2	0	0	0	
			BLKROC_51	Upland	23		9	0	4
			RESERVATION_06	Upland	3	11			
		<b>Reservation Field Average</b>		<b>18</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>1</b>	
		Reservation Riparian Field	BLKROC_15	Riparian	NF	NF	NF	NF	NF
			BLKROC_17	Riparian	NF	NF	NF	NF	NF
			<b>Reservation Riparian Field Average</b>		<b>NF</b>	<b>NF</b>	<b>NF</b>	<b>NF</b>	<b>NF</b>
		Robinson Field	BLKROC_04	Upland	35	22	12	9	0
			ROBINSON_02	Upland	13		6	3	0
			<b>Robinson Field Average</b>		<b>24</b>	<b>22</b>	<b>9</b>	<b>6</b>	<b>0</b>
		Russell Field	BLKROC_05	Upland	1	10	13	12	10
			RUSSELL_02	Upland	6		8	8	0
			<b>Russell Field Average</b>		<b>4</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>5</b>
		South Riparian Field	BLKROC_23	Riparian	8	3	0	0	17
		Springer Field	BLKROC_08	Upland					
		West Field	WRINKLE_02	Upland	31	11	0	7	0
		White Meadow Field	BLKROC_01	Upland	9	0	8	0	0
			BLKROC_39	Upland	4	0		0	
			WHITEMEADOW_03	Upland	23	0	Flood		
			WHITEMEADOW_04	Upland	0	0	Flood	0	0
			<b>White Meadow Field Average</b>		<b>9</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>
		White Meadow Riparian Field	BLKROC_10	Riparian	NF	NF	NF	NF	NF

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
			BLKROC_11	Riparian	22	26	0	5	10
			BLKROC_14	Riparian	NF	NF	NF	NF	NF
			WMRIP_T1	Riparian					
			WMRIP_T2	Riparian					
			WMRIP_T4	Riparian		17			
			WMRIP_T5	Riparian				1	10
			<b>White Meadow Riparian Field Average</b>		<b>22</b>	<b>22</b>	<b>0</b>	<b>3</b>	<b>10</b>
		Winterton Exclosure	WHITEMEADOW_05	Upland	<b>6</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>
		Wrinkle Field	BLKROC_07	Upland	3	12	12	0	0
			WRINKLE_03	Upland			0		
			<b>Wrinkle Field Average</b>		<b>3</b>	<b>12</b>	<b>6</b>	<b>0</b>	<b>0</b>
		Wrinkle Riparian Field	BLKROC_18	Riparian		23	0	0	39
			BLKROC_19	Riparian	11	0	8	0	14
			BLKROC_20	Riparian			0	0	12
			BLKROC_21	Riparian		10		0	17
<b>Wrinkle Riparian Field Average</b>			<b>11</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>21</b>		
Cashbaugh	411	<b>Cashbaugh Lease Upland Average</b>			<b>0</b>	<b>Burn</b>		<b>0</b>	<b>0</b>
		<b>Cashbaugh Lease Riparian Average</b>			<b>12</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>5</b>
		Bishop Creek Field	CASHBA_02	Riparian	3	3	2	5	
			CASHBA_04	Riparian	34	19	13	23	0
			CASHBA_05	Riparian	15		13	10	0
			CASHBA_06	Riparian	5	11	12	0	0
			CASHBA_09	Riparian	5	9	6	8	0
			<b>Bishop Creek Field Average</b>		<b>12</b>	<b>11</b>	<b>9</b>	<b>9</b>	<b>0</b>
		Ears Field	CASHBA_25	Upland	<b>0</b>	<b>Fire</b>		<b>0</b>	<b>0</b>
		Ears Field	CASHBA_19	Riparian	0	Fire	0	0	0
CASHBA_21	Riparian			Fire	0		0		

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025	
			CASHBA_22	Riparian	0	Fire	0	0	0	
			<b>Ears Field Average</b>			<b>0</b>	<b>Fire</b>	<b>0</b>	<b>0</b>	<b>0</b>
			East of the River Field	CASHBA_16	Riparian	0	Fire	0	23	2
		CASHBA_24		Riparian		Fire	4	2	10	
		CASHBA_26		Riparian	0	Fire	0	2	8	
		CASHBA_27		Riparian	0	Fire		9	1	
		<b>East of the River Field Average</b>			<b>0</b>	<b>Fire</b>	<b>1</b>	<b>9</b>	<b>5</b>	
		Laws River Field	CASHBA_03	Riparian			Flood		17	
			CASHBA_07	Riparian		0	0	18	0	
			CASHBA_08	Riparian		0	0	6	0	
			<b>Laws River Field Average</b>				<b>0</b>	<b>0</b>	<b>12</b>	<b>6</b>
		Slough Pasture	CASHBA_17	Riparian	9	Fire	0	11	3	
			CASHBA_18	Riparian	0	Fire	0	5	4	
			CASHBA_23	Riparian	8	Fire	0	7	0	
			<b>Slough Pasture Average</b>			<b>6</b>	<b>Fire</b>	<b>0</b>	<b>8</b>	<b>2</b>
		Warm Springs Holding Field	CASHBA_15	Riparian	<b>10</b>	<b>Fire</b>	<b>26</b>	<b>12</b>	<b>24</b>	
		White Mtn Field	CASHBA_12	Riparian	55	Fire	28	11	0	
			CASHBA_14	Riparian	27	Fire	10	31	0	
			<b>White Mtn Field Average</b>			<b>41</b>	<b>Fire</b>	<b>19</b>	<b>21</b>	<b>0</b>
		Coliseum	407	<b>Coliseum Lease Upland Average</b>			<b>44</b>		<b>9</b>	<b>0</b>
Movie Field	COLOSEUM_01			Upland			0	0	0	
	COLOSEUM_02			Upland	13				0	
	<b>Movie Field Average</b>			<b>13</b>		<b>0</b>	<b>0</b>	<b>0</b>		
Northeast Pasture	NORTHEAST_01			Upland	<b>52</b>		<b>0</b>	<b>0</b>	<b>0</b>	
Southeast Pasture	COLOSEUM_T1			Upland	68		22		9	
	COLOSEUM_T2			Upland	81		17	0	4	
	COLOSEUM_T3	Upland				0				

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
			COLOSEUM_T4	Upland			12	0	
			COLOSEUM_T5	Upland					
			COLOSEUM_38	Upland	73				
			<b>Southeast Pasture Average</b>		<b>74</b>		<b>17</b>	<b>0</b>	<b>4</b>
Delta	490	<b>Delta Lease Upland Average</b>					<b>Flood</b>		<b>FD</b>
		<b>Delta Lease Riparian Average</b>			<b>13</b>	<b>12</b>	<b>Flood</b>	<b>21</b>	<b>6</b>
		Bolin Field	BOLIN_02	Upland			Flood	FD	FD
		Main Delta	DELTA_UP_01	Upland			Flood	FD	FD
		Main Delta	DELTA_01	Riparian	13	2	Flood	14	3
			DELTA_03	Riparian	18	0	Flood	18	9
			DELTA_04	Riparian	13	10	Flood	31	20
			DELTA_05	Riparian		13	Flood		0
			DELTA_06	Riparian			Flood		
		DELTA_07	Riparian	7	35	Flood		0	
<b>Main Delta Average</b>			<b>13</b>	<b>12</b>	<b>Flood</b>	<b>21</b>	<b>6</b>		
Eight Mile	408	<b>Eight Mile Lease Upland Average</b>							
		South Field	8_MILE_02	Upland					
			8_MILE_03	Upland					
		<b>South Field Average</b>							
Independence	416 & 454	<b>Independence Upland Average</b>					<b>0</b>		<b>0</b>
		<b>Independence Riparian Average</b>			<b>3</b>	<b>28</b>	<b>Flood</b>	<b>0</b>	<b>0</b>
	416	Manzanar Field	INDEP_65	Upland			<b>0</b>	<b>0</b>	<b>0</b>
	454	South River Field	4J_02	Riparian	2	42	Flood	0	0
			4J_03	Riparian	7	14	Flood	0	0
			4J_04	Riparian	0		Flood	0	0
	<b>South River Field Average</b>			<b>3</b>	<b>28</b>	<b>Flood</b>	<b>0</b>	<b>0</b>	

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
Intake	475	<b>Intake Lease Riparian Average</b>					0	0	0
		East Intake	STEWART_01	Riparian			0	0	0
		Intake Field	STEWART_02	Riparian			0	0	0
Islands	489	<b>Islands Lease Upland Average</b>							
		<b>Islands Lease Riparian Average</b>			23	24	13	10	5
		Bull Field	ISLAND_03	Upland					
		Carasco Riparian Field	ISLAND_06	Riparian		26	Flood		5
		Carasco South	ISLAND_05	Upland					
		Depot Riparian Field	ISLAND_08	Riparian	20		0	1	6
			ISLAND_09	Riparian	17	42	75	4	5
			RIVERFIELD_07	Riparian	36	27	Flood	1	0
			RIVERFIELD_08	Riparian		15	Flood		3
			RIVERFIELD_09	Riparian	24	44	0	6	9
			RIVERFIELD_12	Riparian	17	7	Flood	FD	FD
			<b>Depot Riparian Field Average</b>			23	27	25	3
		Reinhackle Field	ISLAND_04	Upland					
		River Field	ISLAND_10	Riparian	44	8	Flood		8
			ISLAND_11	Riparian	4	0	Flood	0	0
			ISLAND_14	Riparian		49	0	35	
			<b>River Field Average</b>			24	19	0	18
		South Field	ISLAND_02	Upland					
			ISLAND_59	Upland	NF	NF	NF	NF	NF
			SOUTHFIELD_02	Upland					
<b>South Field Average</b>									
Lone Pine	456	<b>Lone Pine Lease Upland Average</b>			4		Flood		FD
		<b>Lone Pine Lease Riparian Average</b>			26	46	55	30	18

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
		Johnson Pasture	LONEPINE_05	Upland	4		Flood	FD	FD
		River Pasture	LONEPINE_01	Riparian	32	43	Flood	40	17
			LONEPINE_02	Riparian	31	51	Flood	35	17
			LONEPINE_03	Riparian	24	48	Flood		16
			LONEPINE_04	Riparian	20	49	55	8	23
			LONEPINE_07	Riparian	21	23	Flood	38	14
			LONEPINE_08	Riparian		60	Flood		20
		<b>River Pasture Average</b>				<b>26</b>	<b>46</b>	<b>55</b>	<b>30</b>
Lubkin	489	<b>Lubkin Lease Upland Average</b>			<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>
		Lubkin	LUBKIN_01	Upland	0		0	0	0
Reinhackle	492	<b>Reinhackle Lease Upland Average</b>			<b>11</b>	<b>14</b>	<b>3</b>	<b>4</b>	<b>Fire</b>
		<b>Reinhackle Lease Riparian Average</b>			<b>15</b>	<b>12</b>	<b>11</b>	<b>7</b>	<b>Fire</b>
		Laws Holding Field	LACEY_03	Upland		12	6	3	Fire
			LACEY_05	Upland	11	16	0	4	Fire
			<b>Laws Holding Field Average</b>			<b>11</b>	<b>14</b>	<b>3</b>	<b>4</b>
		Laws Holding Riparian	LACEY_08	Riparian	14	29	Flood	0	Fire
		Triangle Field	LACEY_01	Riparian	17		0		
			LACEY_02	Riparian	19	18	7	0	
			LACEY_04	Riparian		0	0		
			LACEY_06	Riparian	0	18	10	16	Fire
LACEY_07	Riparian		25	13	39	5			
<b>Triangle Field Average</b>				<b>15</b>	<b>12</b>	<b>11</b>	<b>7</b>	<b>Fire</b>	
Round Valley	483	<b>Round Valley Lease Riparian Average</b>			<b>10</b>	<b>23</b>	<b>31</b>	<b>25</b>	<b>21</b>
		East Side Riparian	MEND_04	Riparian	0	37	70	19	41
		East Side River Field	MEND_05	Riparian	10	41	54	19	41
			MEND_06	Riparian	25	29	25	23	26
			MEND_07	Riparian		30	25	11	19

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025	
			MEND_08	Riparian		0	0		0	
			<b>East Side River Field Average</b>			<b>18</b>	<b>25</b>	<b>26</b>	<b>18</b>	<b>22</b>
			Hole Riparian	MEND_12	Riparian	<b>0</b>	<b>Fire</b>	<b>34</b>	<b>25</b>	<b>11</b>
		River Riparian	MEND_03	Riparian	50	Fire	19	22	6	
			MEND_09	Riparian	0	Fire	7	2	0	
			MEND_10	Riparian	11	Fire	13	1	8	
			MEND_11	Riparian	24	Fire	20	30	5	
			<b>River Riparian Average</b>			<b>21</b>	<b>Fire</b>	<b>15</b>	<b>14</b>	<b>5</b>
		Zurich Riparian	MEND_02	Riparian	<b>10</b>	<b>6</b>	<b>11</b>	<b>50</b>	<b>26</b>	
		ST	461	<b>ST Lease Upland Average</b>				<b>8</b>	<b>23</b>	<b>0</b>
<b>ST Lease Riparian Average</b>				<b>23</b>	<b>8</b>	<b>13</b>	<b>5</b>	<b>5</b>		
Calvert Slough Pasture	CALVERT_02			Upland						
	CALVERT_03			Upland						
	CALVERT_04			Upland		8				
	TATUM_29			Upland			23	0	0	
	<b>Calvert Slough Pasture Average</b>				<b>8</b>	<b>23</b>	<b>0</b>	<b>0</b>		
Calvert Slough Pasture	TATUM_11			Riparian						
	TATUM_13			Riparian			14	0	0	
	<b>Calvert Slough Pasture Average</b>					<b>14</b>	<b>0</b>	<b>0</b>		
Charlie Butte Field	TATUM_10			Riparian	43	3	37	0	0	
East River Field	TATUM_07			Riparian	0	0		0	0	
	TATUM_08			Riparian	28	11	14	6	22	
	TATUM_09			Riparian			0			
	TATUM_12			Riparian	27	16	14	13	16	
	TATUM_14			Riparian	18	0	21	15	14	
	<b>East River Field Average</b>			<b>18</b>	<b>7</b>	<b>12</b>	<b>9</b>	<b>10</b>		
North Horton Slough Riparian	TATUM_02			Riparian	18	1	0	1	0	

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025	
		Northeast McCumber Riparian	TATUM_01	Riparian	16	2	0	6	0	
		Northwest McCumber Riparian	TATUM_04	Riparian	38	0	Flood	11	2	
		South Horton Slough Riparian	TATUM_06	Riparian	12	2	11	16	15	
		Southeast McCumber Riparian	TATUM_03	Riparian	0	31	22	6	4	
		Southwest McCumber Riparian	TATUM_05	Riparian	9	30	22	5	18	
		West River Field	TATUM_15	Riparian	52	0	0	0	0	
Thibaut	430	<b>Thibaut Lease Upland Average</b>			<b>12</b>	<b>2</b>	<b>13</b>	<b>8</b>	<b>9</b>	
		<b>Thibaut Lease Riparian Average</b>								
		Rare Plant Management Area	RAREPLANT_02	Upland						
			RAREPLANT_03	Upland						
			THIBAUT_02	Upland	5	4	17	8	3	
			<b>Rare Plant Management Area Average</b>			<b>5</b>	<b>4</b>	<b>17</b>	<b>8</b>	<b>3</b>
		Thibaut Field	THIBAUT_03	Upland	0	1	7	22	0	
			THIBAUT_08	Upland		0	0	0		
			THIBAUT_09	Upland		0	0		0	
			THIBAUTFIELD_02	Upland	5					
			THIBAUTFIELD_03	Upland	33	0	4	0	0	
			THIBAUTFIELD_04	Upland	1	0	10	0		
			<b>Thibaut Field Average</b>			<b>10</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>0</b>
		Thibaut Riparian	THIBAUT_04	Riparian	NF	NF	NF	NF	NF	
			THIBAUT_05	Riparian	NF	NF	NF	NF	NF	
			THIBAUT_07	Riparian	NF	NF	NF	NF	NF	
			<b>Thibaut Riparian Average</b>			<b>NF</b>	<b>NF</b>	<b>NF</b>	<b>NF</b>	<b>NF</b>
		Waterfowl Management Area	THIBAUT_01B	Upland	21		19	9	25	
			WATERFOWL_02	Upland						
			WATERFOWL_03	Upland		2				
			WATERFOWL_04	Upland						

Lease Name	RL	Pasture Name	Transect name	Prescription	2021	2022	2023	2024	2025
			WATERFOWL_05	Upland					
			<b>Waterfowl Management Area Average</b>		<b>21</b>	<b>2</b>	<b>19</b>	<b>9</b>	<b>25</b>
Whitney	495	<b>Whitney Lease Upland Average</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
		Tuttle Field	TUTTLE_01	Upland			0	0	0
			TUTTLEFIELD_02	Upland					
Twin Lakes	491	<b>Twin Lakes Lease Upland Average</b>			<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
		<b>Twin Lakes Riparian Average</b>			<b>13</b>	<b>11</b>	<b>0</b>	<b>35</b>	<b>20</b>
		Lower Blackrock Field	BLKROC_37	Upland	12		0		
			BLKROC_FIELD_04	Upland			0		0
			TWINLAKES_02	Upland	0	0		0	0
			<b>Lower Blackrock Field Average</b>			<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>
		Lower Blackrock Riparian Field	BLKROC_RIP_07	Riparian		19	0	42	29
			TWINLAKES_03	Riparian		2	Flood	49	42
			TWINLAKES_04	Riparian			Flood		
			TWINLAKES_06	Riparian			Flood		0
		<b>Lower Blackrock Riparian Field Average</b>				<b>11</b>	<b>0</b>	<b>46</b>	<b>24</b>
		Upper Blackrock Field	BLKROC_RIP_05	Riparian	19		Flood	6	20
			BLKROC_RIP_06	Riparian	4	4	Flood	6	36
			BLKROC_RIP_08	Riparian		29	Flood	83	52
			INTAKE_01	Riparian	15	0	Flood	4	32
<b>Upper Blackrock Field Average</b>			<b>13</b>	<b>11</b>	<b>Flood</b>	<b>25</b>	<b>35</b>		
Warm Springs	497	<b>Warm Springs Lease Riparian Average</b>			<b>7</b>	<b>Burn</b>	<b>Flood</b>	<b>6</b>	<b>0</b>
		River Field	CASHBA_10	Riparian		Fire	Flood	0	0
			CASHBA_11	Riparian	6	Fire	Flood	0	0
			CASHBA_13	Riparian	8	Fire	Flood	19	0

## Land Management Appendix 5. Irrigated Pasture Scores (2021-2025)

Lease ID	Pasture	2021	2022	2023	2024	2025
<b>Brockman RLI-401</b>						
	# 8	X	X	94	X	X
	# 7	X	X	94	X	X
	# 5	X	X	94	X	X
	# 3	X	X	82	X	X
	# 2	X	X	94	X	X
	# 4	X	X	94	X	X
	# 1	X	X	82	X	X
	# 6	X	X	94	X	X
	# 9	X	X	94	X	X
<b>U-Bar RLI- 402</b>						
	Highway North	X	X	96	X	X
	Highway South	X	X	96	X	X
	Upper North 40	X	X	92	X	X
	Upper Middle	X	X	92	X	X
	Lower Middle	X	X	92	X	X
	Bull	X	X	92	X	X
<b>Eight Mile RLI- 408</b>						
	House Pasture	X	X	92	X	X
	Pivot			92	X	X
<b>Cashbaugh RLI- 411</b>						
	Bull Pasture	X	X	92	X	X
	Horse Pasture	X	X	80	X	X
	Old Bull Pasture	X	X	92	X	X
	Lower Pasture	X	X	92	X	X
	Middle Pasture	X	X	92	X	X
	Upper Pasture	X	X	92	X	X
	Sheep Pasture	X	X	92	X	X
	Winters	X	X	80	X	X
	Lake Pasture	X	X	84	X	X
	Williams Pasture	X	X	84	X	X
	Horse	X	X	80	X	X
	Symons	X	X	92	X	X
<b>Quarter B RLI- 404,413</b>						
	Riata Pasture	X	X	80	X	80
	Mummy West	X	X	80	X	80
	Otey Pasture	X	X	82	X	80
<b>All Five RLI-416</b>						
	Spring Field	X	X	92	X	X
	Right & Left Hand	X	X	92	X	X
	Far	X	X	92	X	X
	Airport	X	X	82	X	X
	Arena	X	X	92	X	X
<b>Rockin D-M RLI- 420</b>						
	Whistler	X	X	86		X
<b>Mandich RLI-424</b>						
	West Schober	X	X	82	X	X
	East Schober	X	X	92	X	X

Lease ID	Pasture	2021	2022	2023	2024	2025
	North Horse	X	X	92	X	X
	South Horse	X	X	92	X	X
	Heifer Pasture	X	X	92	X	X
	Jack In The Box	X	X	92	X	X
	Sheep Pasture	X	X	92	X	X
	East 80	X	X	92	X	X
	West 80	X	X	92	X	X
<b>Olancha Cr RLI-427</b>						
	Esta 1	X	X	92	X	X
	Esta 2	X	X	92	X	X
	Esta 3	X	X	92	X	X
	Esta 4	X	X	92	X	X
	Oesta 1	X	X	80	X	X
	Oesta 2	X	X	92	X	X
<b>Blackrock RLI-428</b>						
<b>Homeplace RLI-428</b>	L Pasture	X	X	92	X	X
	Hay Pasture	X	X	92	X	X
	E Stud Pasture	X	X	92	X	X
	W Stud Pasture	X	X	92	X	X
	Store Pasture	X	X	88	X	X
	Woven Wire	X	X	92	X	X
<b>Thibaut RLI- 430</b>						
	Water Fowl Area	X	X	80	X	X
<b>3-V RLI- 435</b>						
	Swamp	X	X	88	X	X
	Front	X	X	88	X	X
	Horse/Little	X	X	88	X	X
	Little	X	X	88	X	X
<b>Big Pine Canal RLI-438</b>						
	Alfalfa 2	X	X	94	X	X
	Alfalfa 1	X	X	94	X	X
	Alfalfa 3	X	X	94	X	X
	Heifer	X	X	94	X	X
	South Meadow	X	X	94	X	X
	Horse Pasture	X	X	94	X	X
	4C	X	X	94	X	X
	Canal	X	X	94	X	X
	Baker	X	X	94	X	X
	Sanger Meadow	X	X	Snow	X	X
	Cow Creek	X	X	Snow	X	X
<b>RLI-439</b>						
	Mare Pasture	X	X	86	X	80
	Pasture 1	X	X	80	X	80
	Pasture 2	X	X	72	X	80
<b>RLI-426</b>						
	Archy	X	X	82	X	X
	Corral Holding	X	X	82	X	X
	South Archy	X	X	82	X	X
	Schober	X	X	82	X	X
	South Schober	X	X	82	X	X

Lease ID	Pasture	2021	2022	2023	2024	2025
<b>RLI-445</b>						
	#3 Pasture	X	X	82	X	X
	#2 Pasture	X	X	82	X	X
	#1 Pasture	X	X	82	X	X
	#4 Pasture	X	X	82	X	X
<b>C-T RLI-451</b>						
<b>Chance</b>	Upper Pond	X	X	94	X	X
	Locust	X	X	94	X	X
	Iron Gate	X	X	94	X	X
	80 Pasture	X	X	94	X	X
	80 Pasture	X	X	94	X	X
	Below Hay Stack	X	X	94	X	X
	Hay Stack	X	X	94	X	X
	Rock Pasture	X	X	94	X	X
	Holding Pasture	X	X	94	X	X
	Below House	X	X	94	X	X
	Stink Ant	X	X	94	X	X
	Pasture # 4	X	X	94	X	X
	Derick Pasture	X	X	94	X	X
	Pond Pasture	X	X	94	X	X
	Lowest South	X	X	94	X	X
	Lower Middle	X	X	94	X	X
	Wahlene Pasture	X	X	94	X	X
	2nd Pasture	X	X	94	X	X
	Iris Pasture	X	X	94	X	X
	Long Pasture	X	X	94	X	X
	Horse Pasture	X	X	96	X	X
<b>Schober</b>	Front Pasture	X	X	94	X	X
	Alfalfa Pasture	X	X	94	X	X
	Pine Cr Rd Post	X	X	94	X	X
	4 Pasture	X	X	94	X	X
	A Pasture	X	X	94	X	X
	B Pasture	X	X	94	X	X
	40 Acre Pasture	X	X	94	X	X
	F Pasture	X	X	94	X	X
	Lou's Pasture	X	X	94	X	X
	Highway Pasture	X	X	94	X	X
	Bull Pasture	X	X	94	X	X
	Orchard Pasture	X	X	94	X	X
	G Pasture	X	X	94	X	X
	E Pasture	X	X	94	X	X
<b>Dairy RLI- 452</b>						
	Calving	X	X	92	X	X
	Oystye	X	X	92	X	X
	Golf Field	X	X	92	X	X
	Middle Back	X	X	92	X	X
	North Back	X	X	92	X	X
<b>Reata RLI-453</b>						
	North Riata	X	X	80	X	84
	South Mummy	X	X	80	X	84

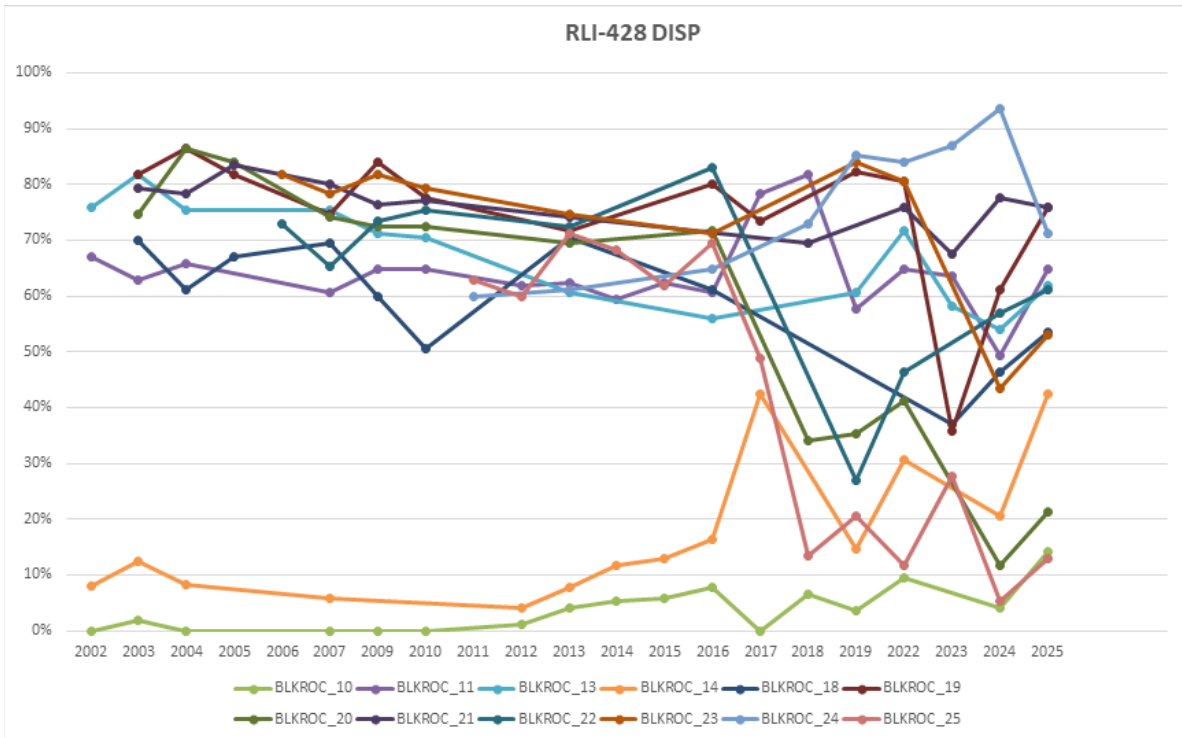
Lease ID	Pasture	2021	2022	2023	2024	2025
	Bishop Creek	X	X	80	X	84
	South Reata	X	X	94	X	84
	North Mummy	X	X	80	X	84
<b>All 5 RLI-455</b>						
	Ranch Pasture 1	X	X	94	X	X
	Ranch Pasture 3	X	X	92	X	X
	Ranch Pasture 2	X	X	92	X	X
	South Pasture	X	X	92	X	X
	Horse Field	X	X	92	X	X
	Elk Field	X	X	92	X	X
	North Feedlot	X	X	92	X	X
	NW Feedlot	X	X	92	X	X
<b>Lone Pine RLI- 456</b>						
	Edwards	X	X	92	X	X
	Richards	X	X	92	X	X
	Van Norman	X	X	92	X	X
	Old Place	X	X	88	X	X
	Smith	X	X	92	X	X
	Miller	X	X	92	X	X
<b>Rainbow Pack RLI- 460</b>						
	Brockman	X	X	82	X	X
<b>S-T RLI- 461</b>						
	N Highland	X	X	90	X	X
	S Highland	X	X	84	X	X
	N Y Road	X	X	96	X	X
	S Y Road	X	X	96	X	X
	Bogie Field	X	X	96	X	X
	Steward	X	X	80	X	X
	North Horse	X	X	96	X	X
	West Horse	X	X	96	X	X
	Wanacott	X	X	80	X	X
	Horse Trap	X	X	96	X	X
	Mare Pasture	X	X	96	X	X
	Front Pasture	X	X	96	X	X
	Swamp Pasture	X	X	82	X	X
	Castaway	X	X	82	X	X
	Calvert Slough	X	X	92	X	X
<b>Horseshoe Bar RLI-462</b>						
	West Pasture	X	X	84	X	X
	Front Pasture	X	X	84	X	X
<b>Intake RLI-475</b>						
	North Highway	X	X	94	X	X
	South Highway	X	X	94	X	X
	West County	X	X	94	X	X
	East County	X	X	94	X	X
	West Poplar	X	X	94	X	X
	East Poplar	X	X	94	X	X
	Fuller Meadow	X	X	94	X	X
	Salk	X	X	94	X	X
<b>Aberdeen RLI- 479</b>						

Lease ID	Pasture	2021	2022	2023	2024	2025
	One Acre	X	X	68	68	X
	North	X	X	68	68	X
	Middle	X	X	68	68	X
	South	X	X	68	68	X
	Hay stack	X	X	68	68	X
<b>Round Valley RLI-483</b>						
	Big Stockley	X	X	92	X	X
	Heifer	X	X	92	X	X
	Little Stockley	X	X	92	X	X
	Outside	X	X	92	X	X
	Sheep	X	X	92	X	X
	Bull	X	X	92	X	X
	Horse	X	X	92	X	X
	Triangle	X	X	92	X	X
	Georges	X	X	92	X	X
	40 Acres	X	X	92	X	X
	Freeway	X	X	92	X	X
	Tonys	X	X	92	X	X
	Rock House	X	X	92	X	X
	Steer	X	X	92	X	X
	Canal Pasture	X	X	92	X	X
	Big Pine Field	X	X	72	X	76
	Little Pasture	X	X	92	X	X
	Wells Meadow	X	X	92	X	X
	McGee Pasture	X	X	92	X	X
	Birch Pasture	X	X	92	X	X
	Horse Pasture	X	X	92	X	X
<b>L-I Bar RLI- 487</b>						
	Sheep/Horse	X	X	96	X	X
	Hess Pasture	X	X	96	X	X
	West Line	X	X	96	X	X
<b>Islands RLI-489</b>						
	Zucco	X	X	96	X	X
	D&D	X	X	96	X	X
	Bardoff	X	X	96	X	X
	Plot	X	X	96	X	X
	Heifer Heaven	X	X	96	X	X
	Garden	X	X	96	X	X
	Orchard	X	X	96	X	X
	Pampa	X	X	96	X	X
	Cane	X	X	96	X	X
	L&L	X	X	96	X	X
	Willow	X	X	96	X	X
	Clover	X	X	96	X	X
	Horse Heaven	X	X	96	X	X
	Hectare	X	X	96	X	X
	Desert	X	X	96	X	X
	Olive Pasture	X	X	96	X	X
	Georges	X	X	96	X	X
	B and D	X	X	96	X	X

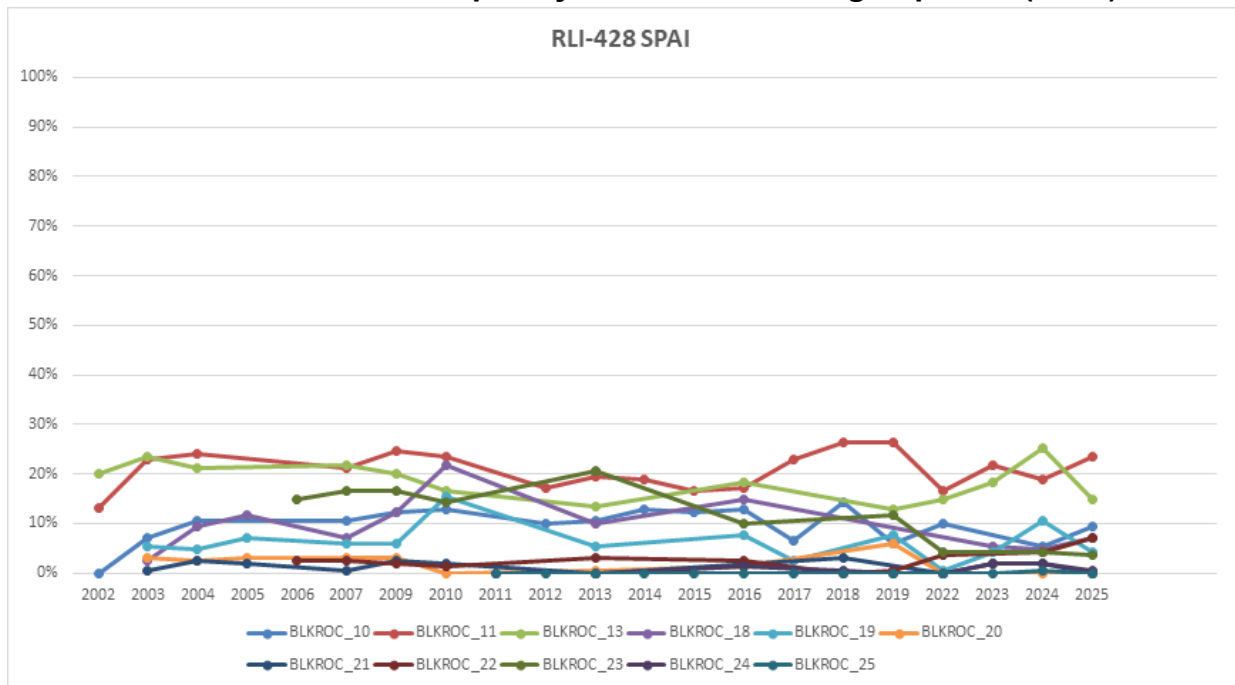
Lease ID	Pasture	2021	2022	2023	2024	2025
	Carasco North	X	X	94	X	X
	Lake Field	X	X	92	X	X
	Archie	X	X	92	X	X
<b>Four J RLI- 491</b>						
	Front Pasture	X	X	88	X	X
	Triangle	X	X	98	X	X
	West Holding	X	X	88	X	X
	Holding Field	X	X	88	X	X
	Hessian	X	X	96	X	X
	Fish Springs	X	X	82	X	X
	Tinemaha	X	X	90	X	X
Baker	Main Meadow	X	X	96	X	X
Cottonwoods	Main Meadow	X	X	94	X	X
<b>Reinhackle RLI- 492</b>						
	South Pasture	X	X	94	X	X
	West Pasture	X	X	94	X	X
	East Pasture	X	X	94	X	X
	Horse Pasture	X	X	94	X	X
<b>C- J RLI-493</b>						
	Rain Gun	X	X	80	X	80
	Little Horse	X	X	82	X	80
<b>Pine Cr RLI- 494</b>						
	Highway Pasture	X	X	82	X	X
<b>Mount Whitney RLI- 495</b>						
	ED Pasture	X	X	80	X	70
	WD Pasture	X	X	80	X	70
<b>Warm Springs RLI- 497</b>						
	Waterson North	X	X	92	X	X
	Waterson South	X	X	92	X	X
	Calving Pasture	X	X	92	X	X
	New Alfalfa	X	X	92	X	X
	Old Alfalfa	X	X	92	X	X
<b>Pine Cr RLI-498</b>						
	Pine Cr. Pasture	X	X	96	X	X
	Corral Pasture	X	X	96	X	X
	Triangle Pasture	X	X	96	X	X
	Little Trap	X	X	96	X	X
	Behind Corral	X	X	96	X	X
	40 Acres	X	X	96	X	X
	Horse Field	X	X	96	X	X
	Bull	X	X	96	X	X
	New Field	X	X	96	X	X
<b>Laws RLI- 499</b>						
	Silver Canyon	X	X	96	X	X
	Middle Pasture	X	X	96	X	X
	Jean Blank	X	X	94	X	X
	Wiper Pivots	X	X	96	X	X
	Full Pivot N	X	X	96	X	X
	Full Pivot S	X	X	96	X	X
	Mitigation	X	X	88	X	X

Lease ID	Pasture	2021	2022	2023	2024	2025
<b>C-T RLI- 500</b>						
	South 80	X	X	90	X	X
	North 40	X	X	92	X	X
	Trailer Park	X	X	94	X	X

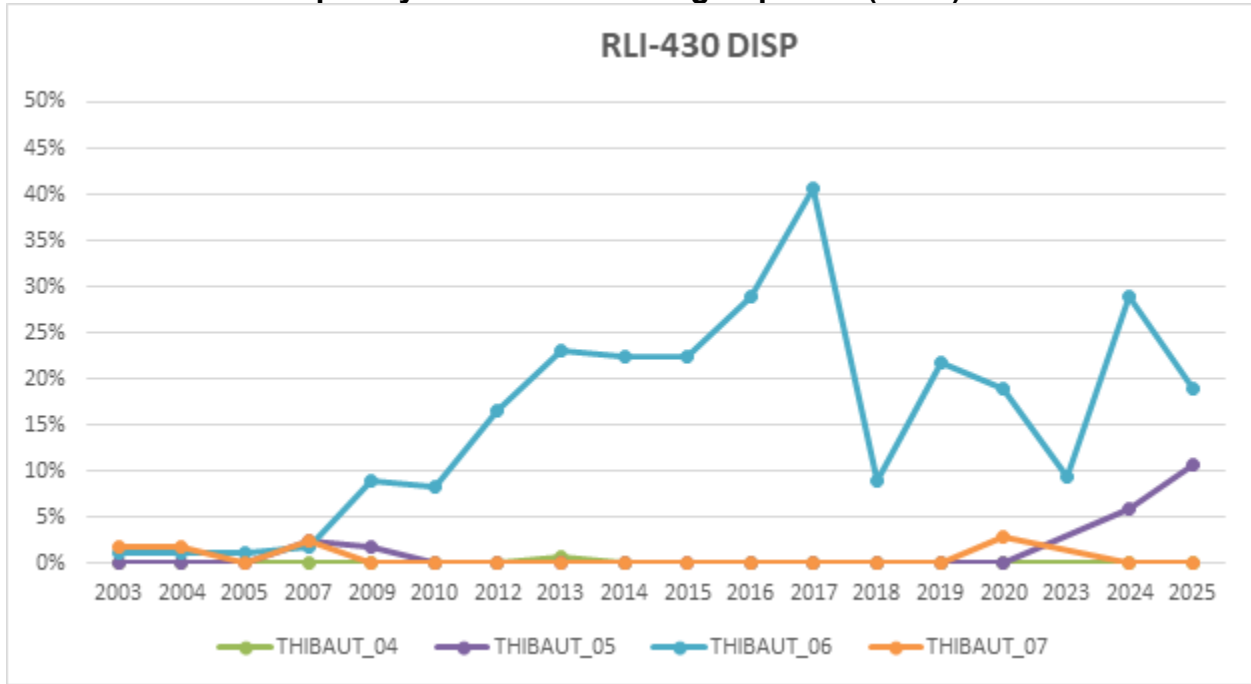
**Land Management Appendix 6. Range Trend Graphs (All Available Data)**  
**Blackrock RLI-428 Frequency of Dominant Forage Species (DISP)**



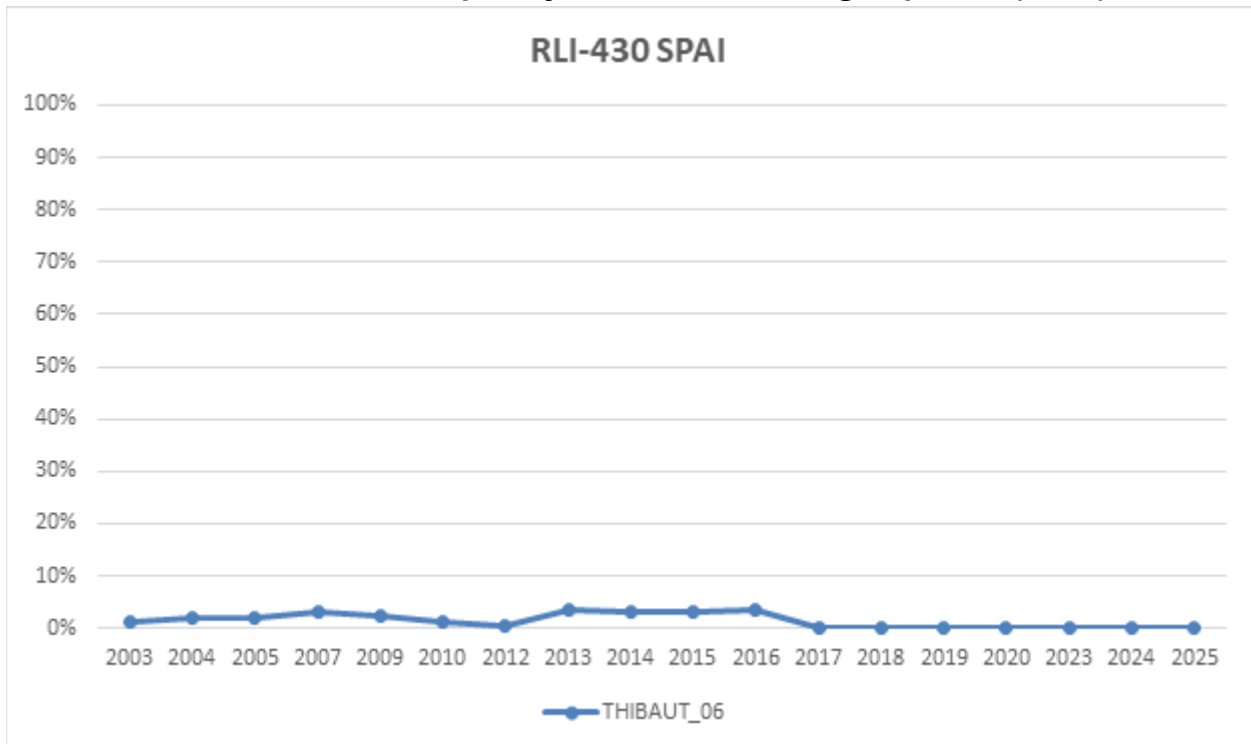
**Blackrock RLI-428 Frequency of Dominant Forage Species (SPAI)**



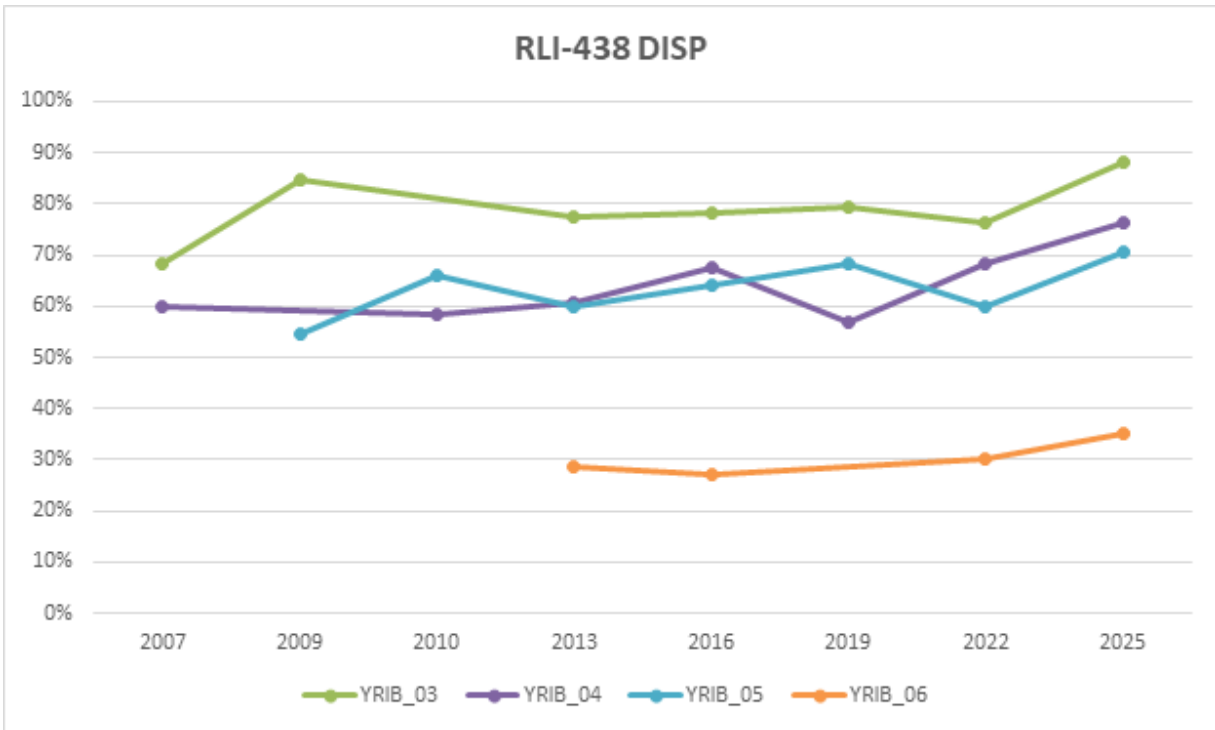
**Thibaut RLI-430 Frequency of Dominant Forage Species (DISP)**



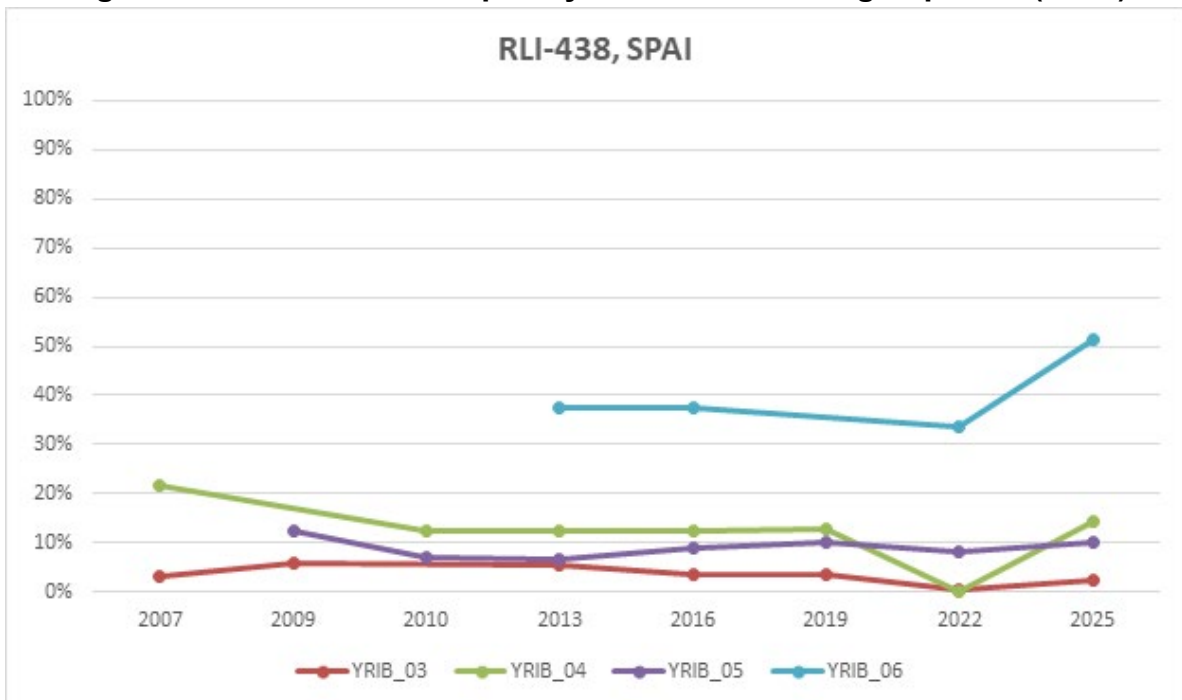
**Thibaut RLI-430 Frequency of Dominant Forage Species (SPAI)**



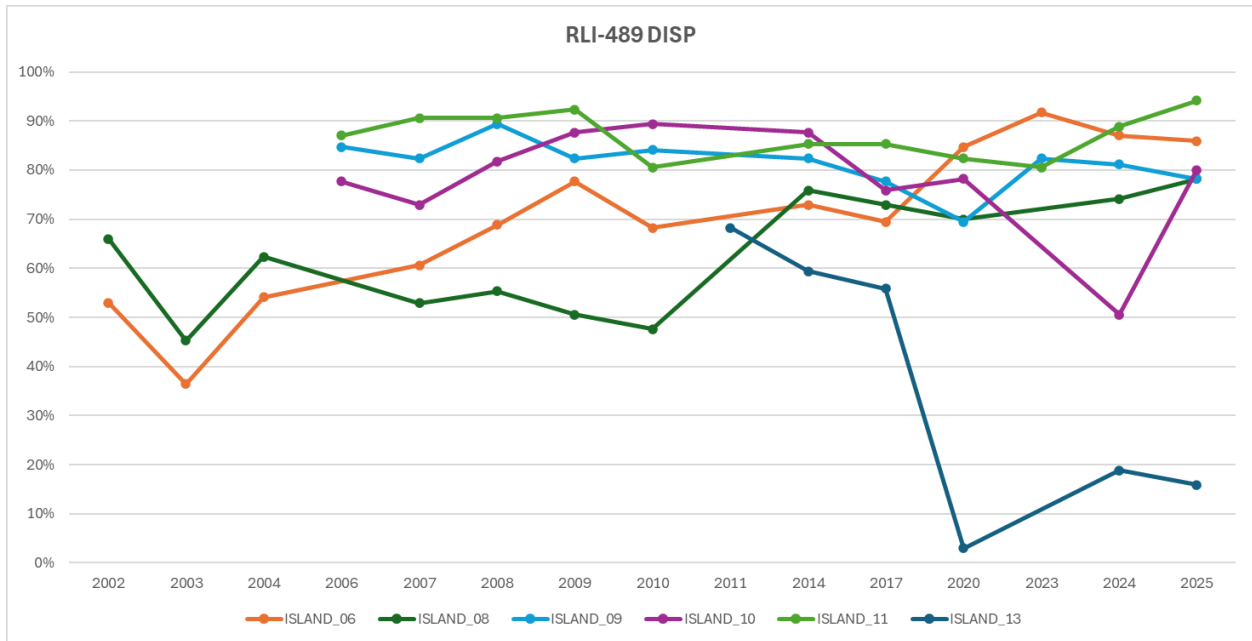
**Big Pine Canal RLI-438 Frequency of Dominant Forage Species (DISP)**



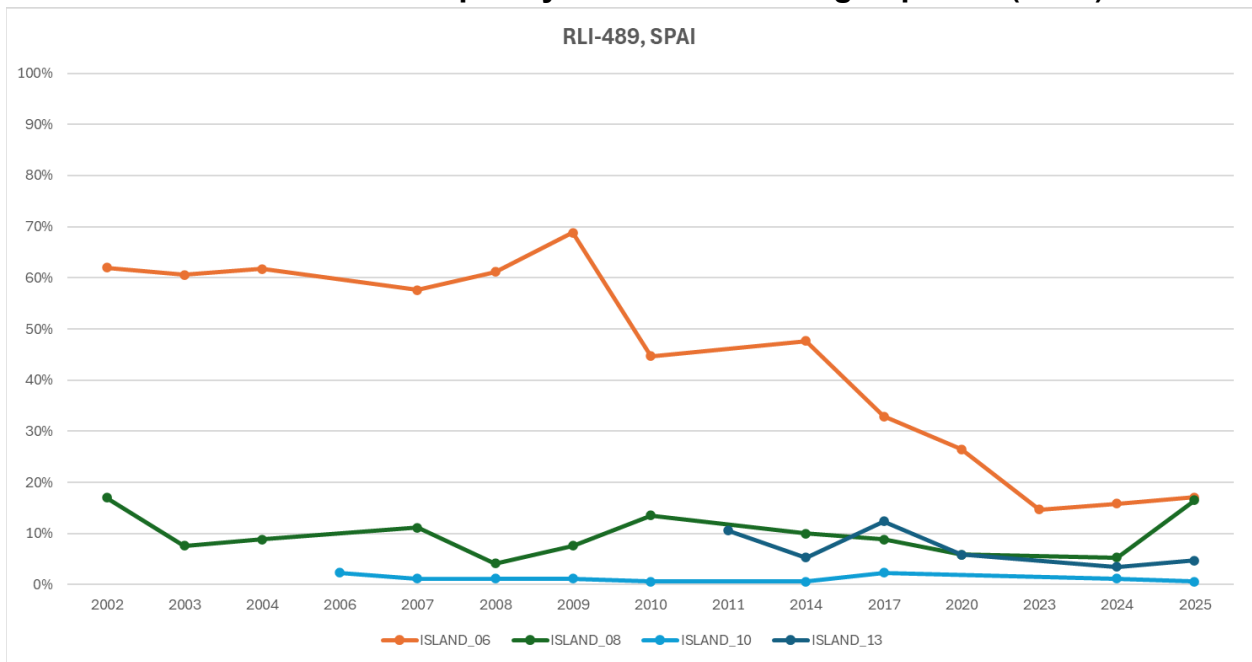
**Big Pine Canal RLI-438 Frequency of Dominant Forage Species (SPAI)**



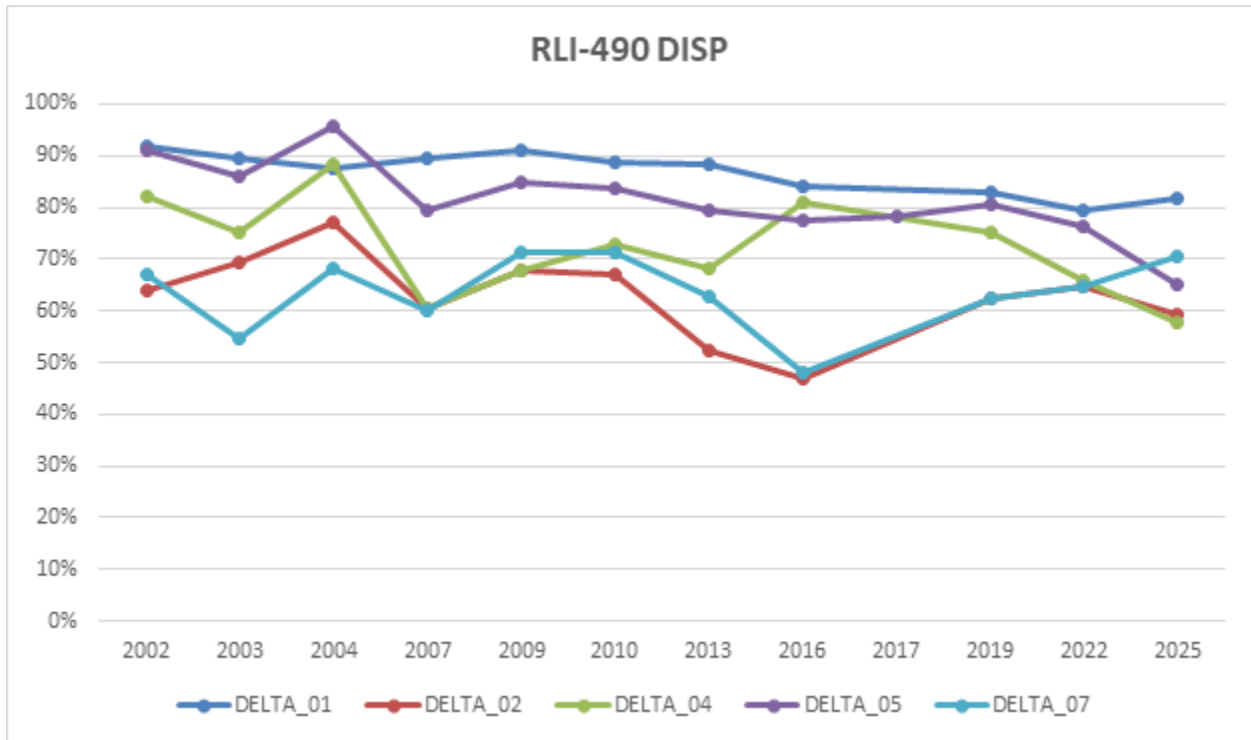
### Islands RLI-489 Frequency of Dominant Forage Species (DISP)



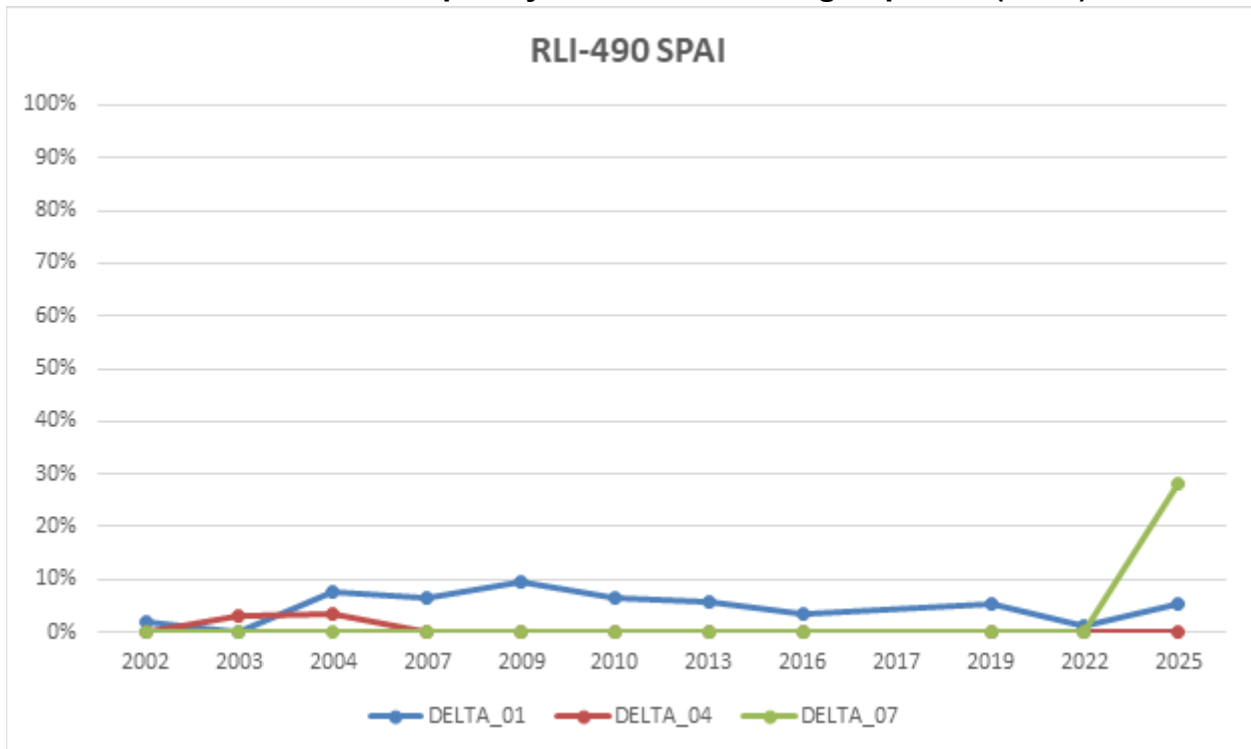
### Islands RLI-489 Frequency of Dominant Forage Species (SPAI)



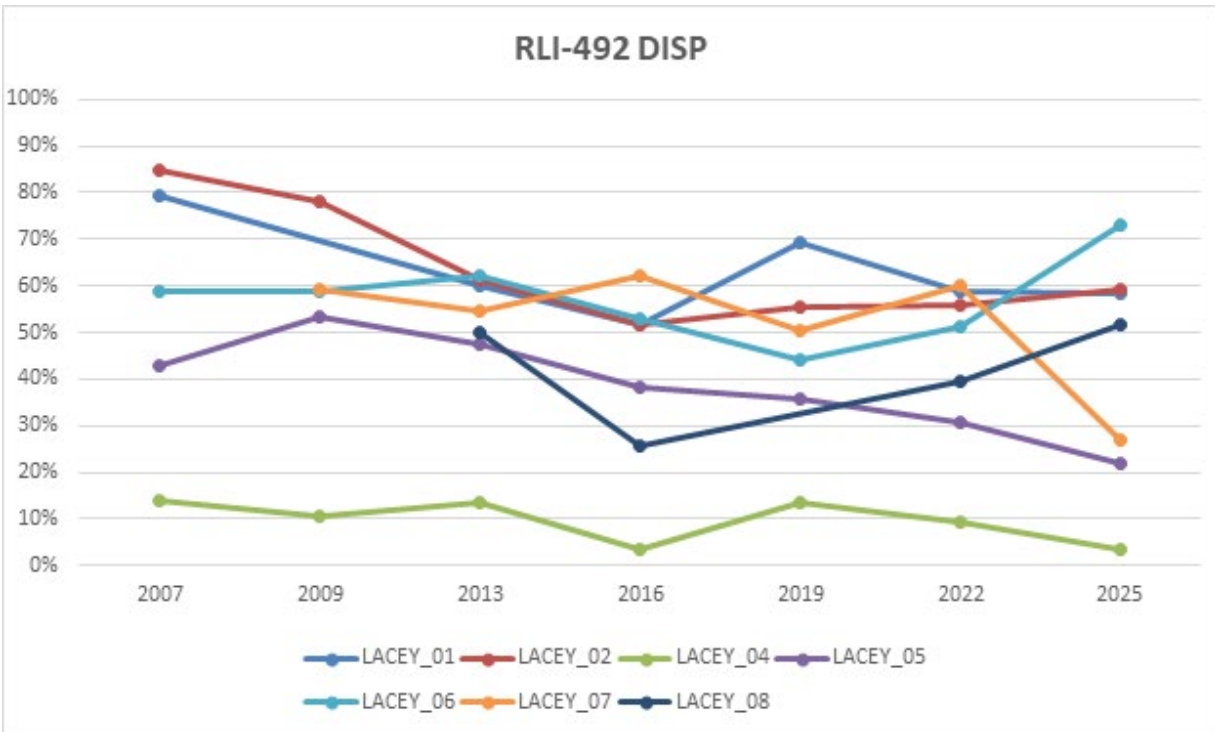
**Delta RLI-490 Frequency of Dominant Forage Species (DISP)**



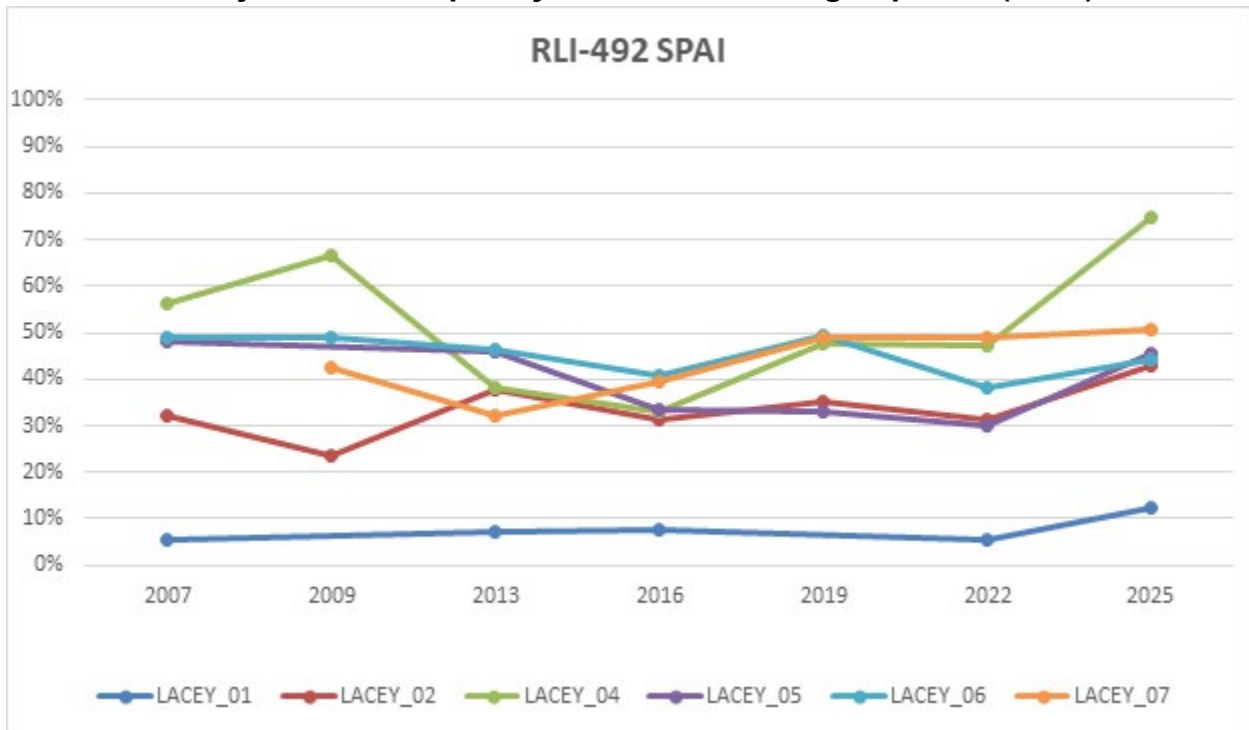
**Delta RLI-490 Frequency of Dominant Forage Species (SPAI)**



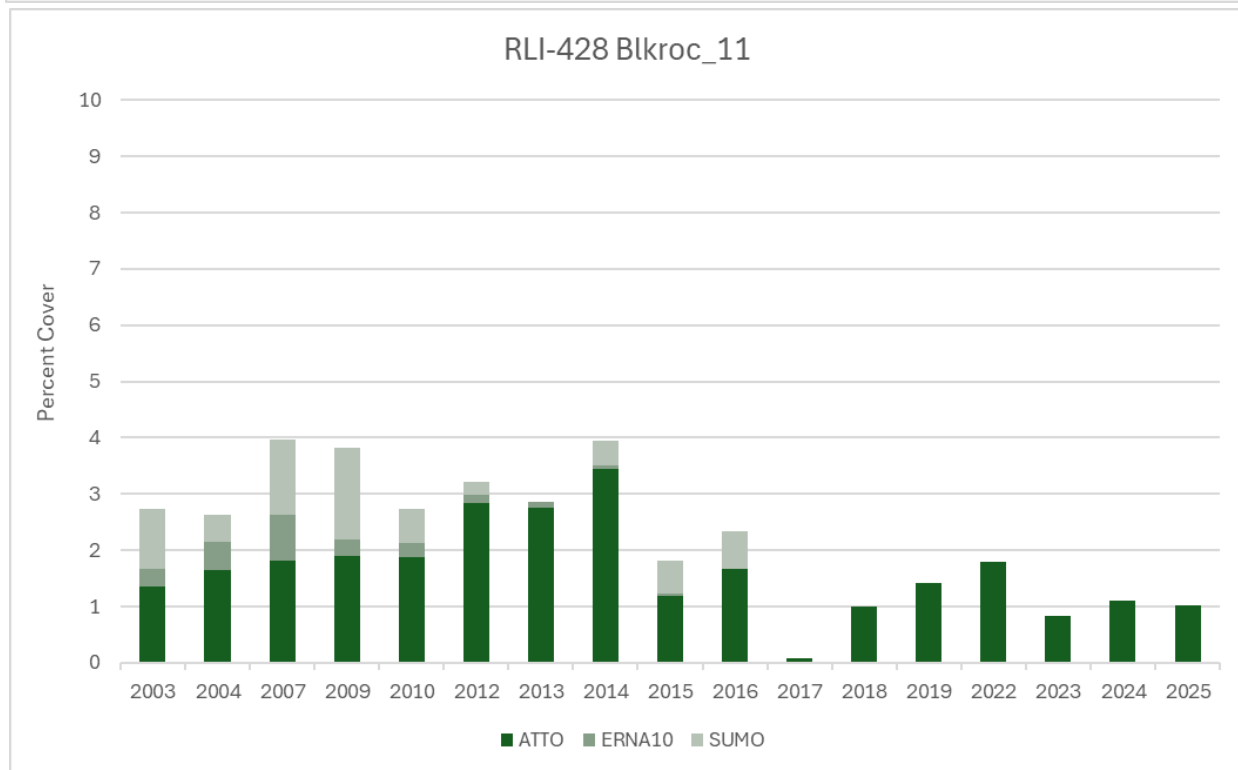
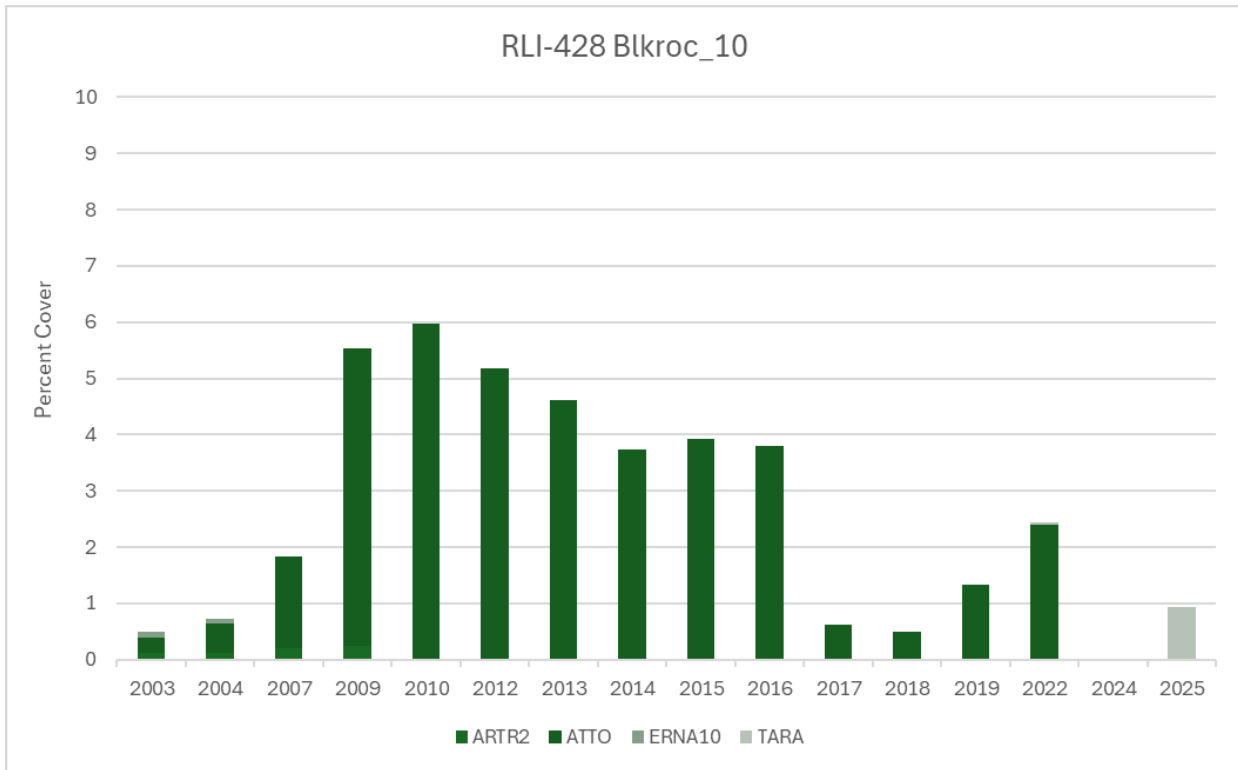
### Lacey RLI-492 Frequency of Dominant Forage Species (DISP)

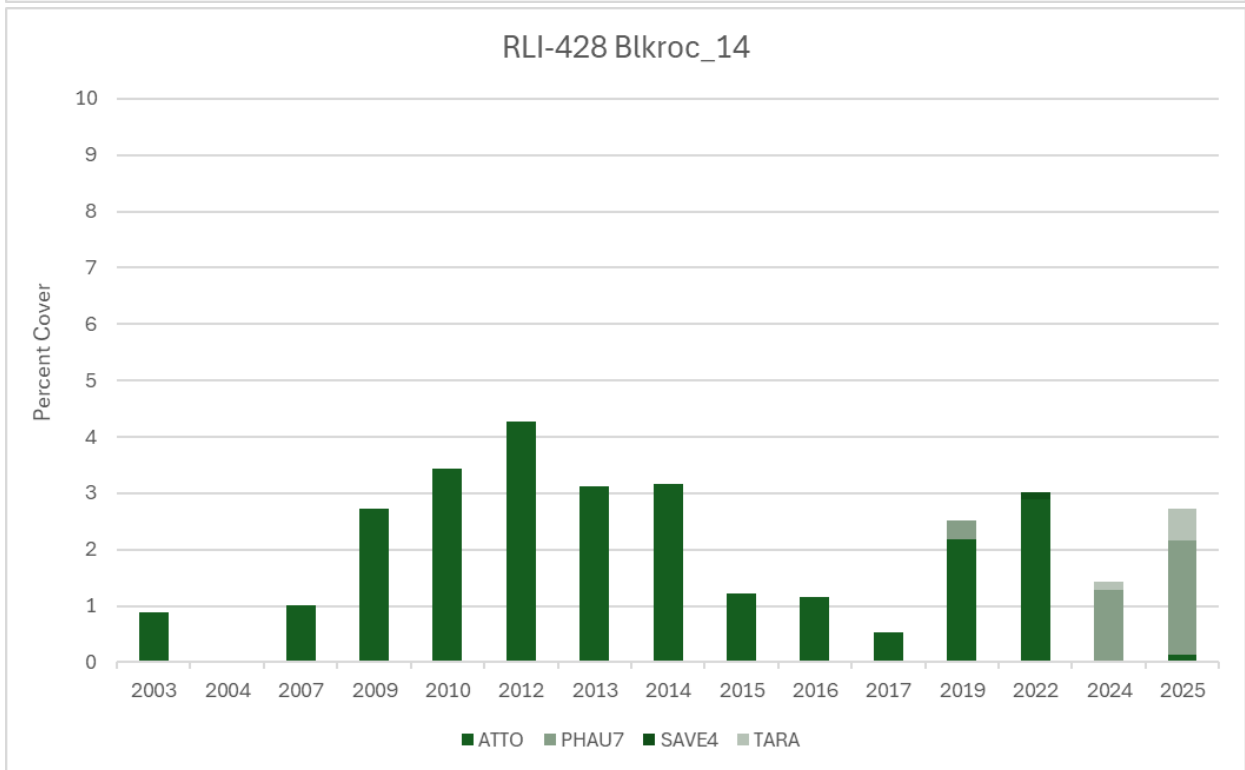
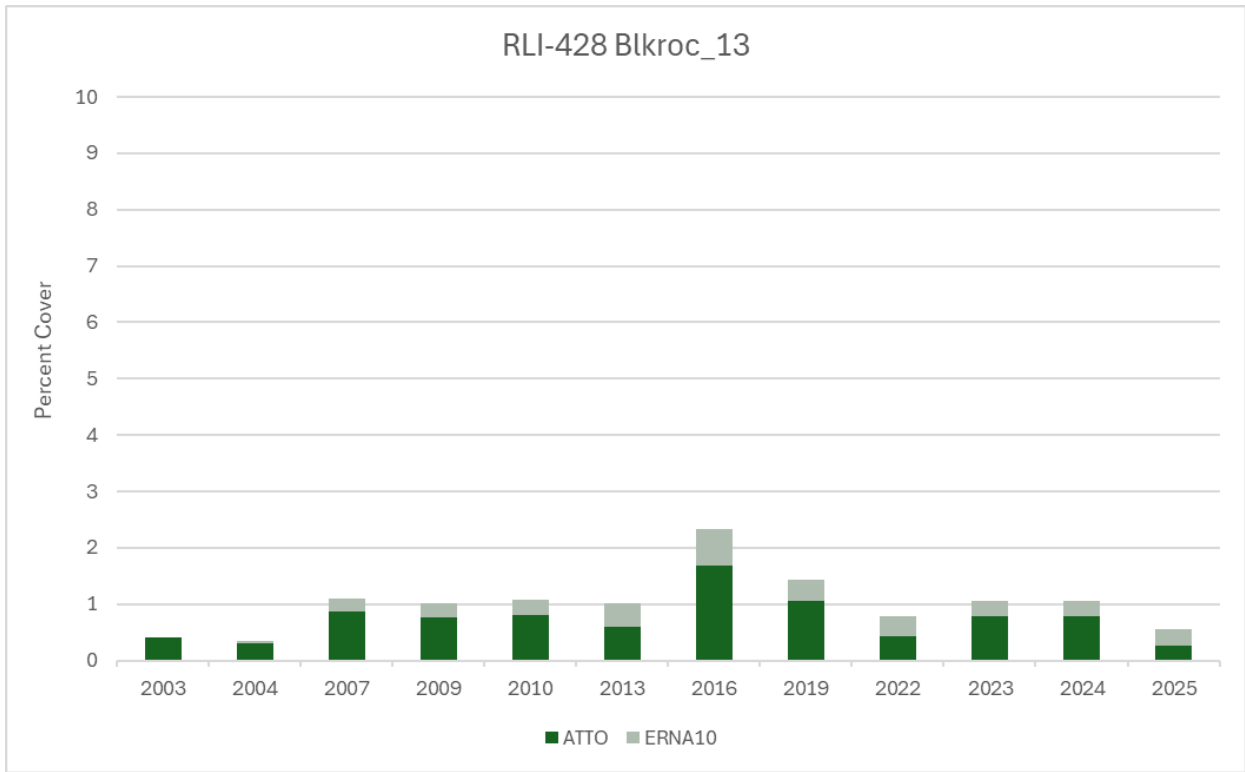


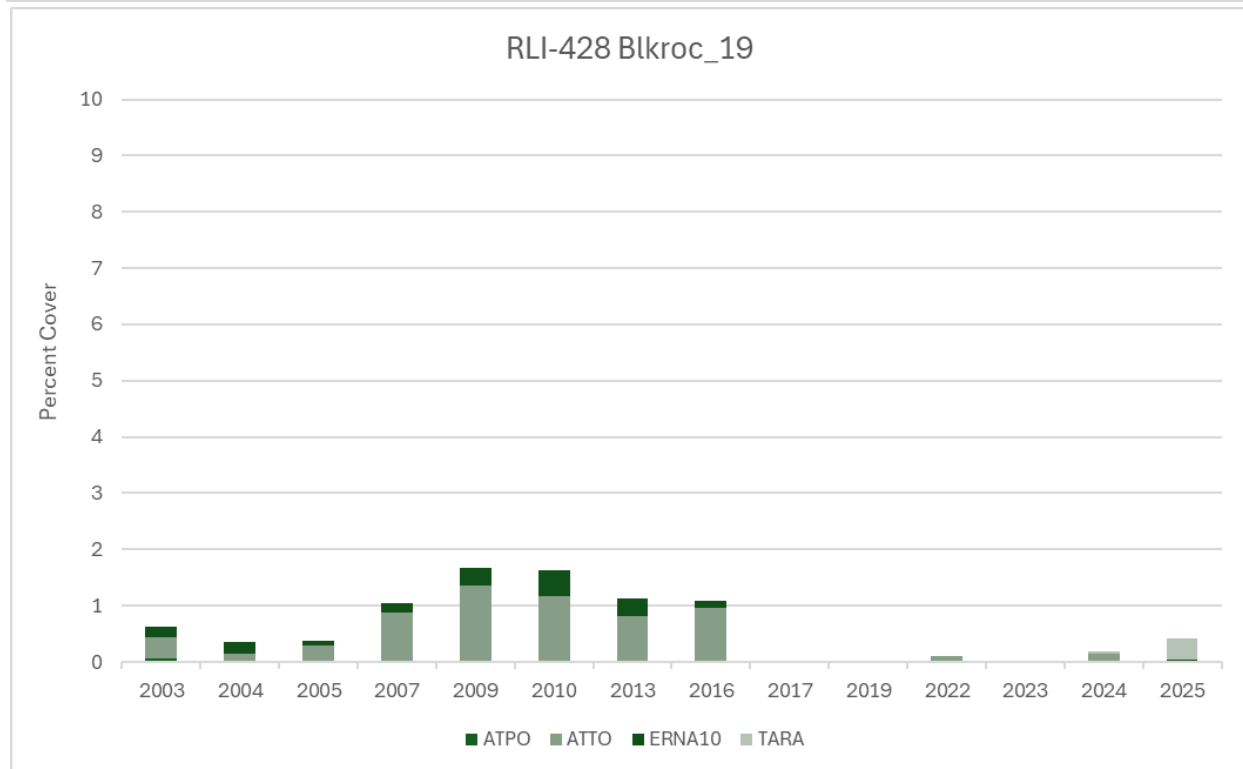
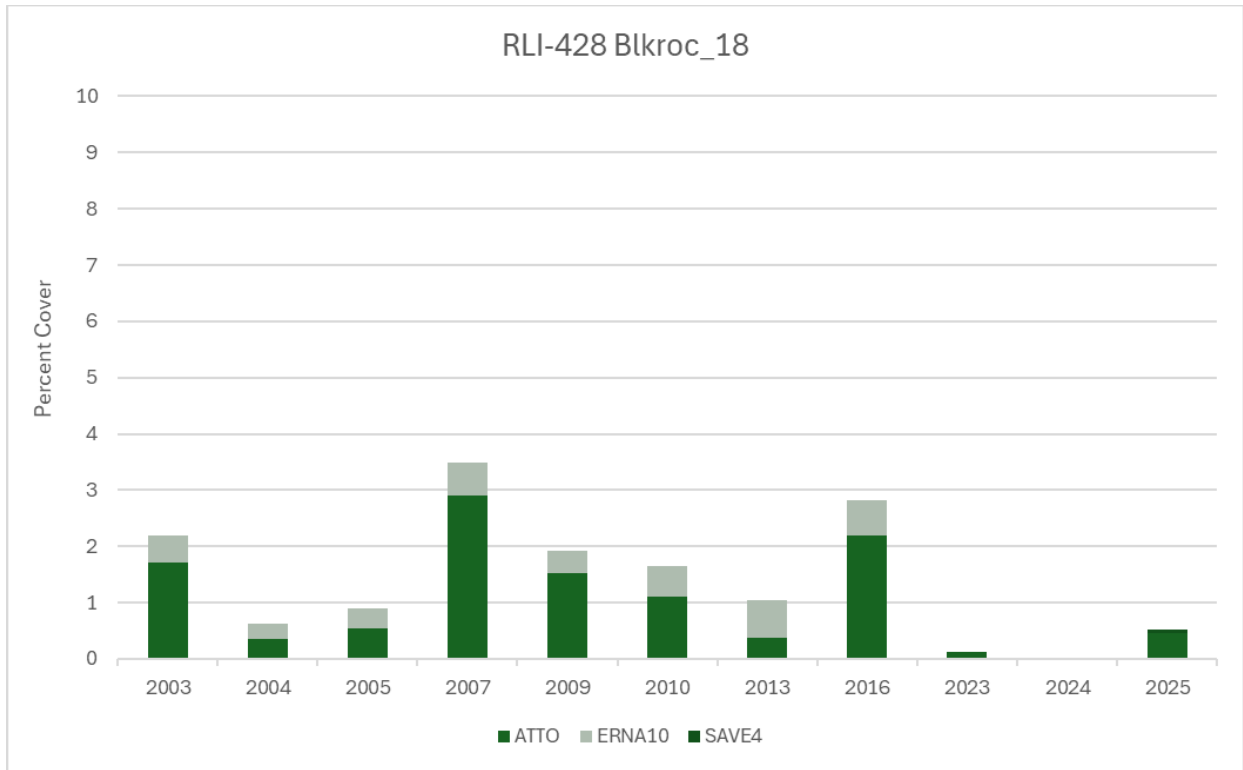
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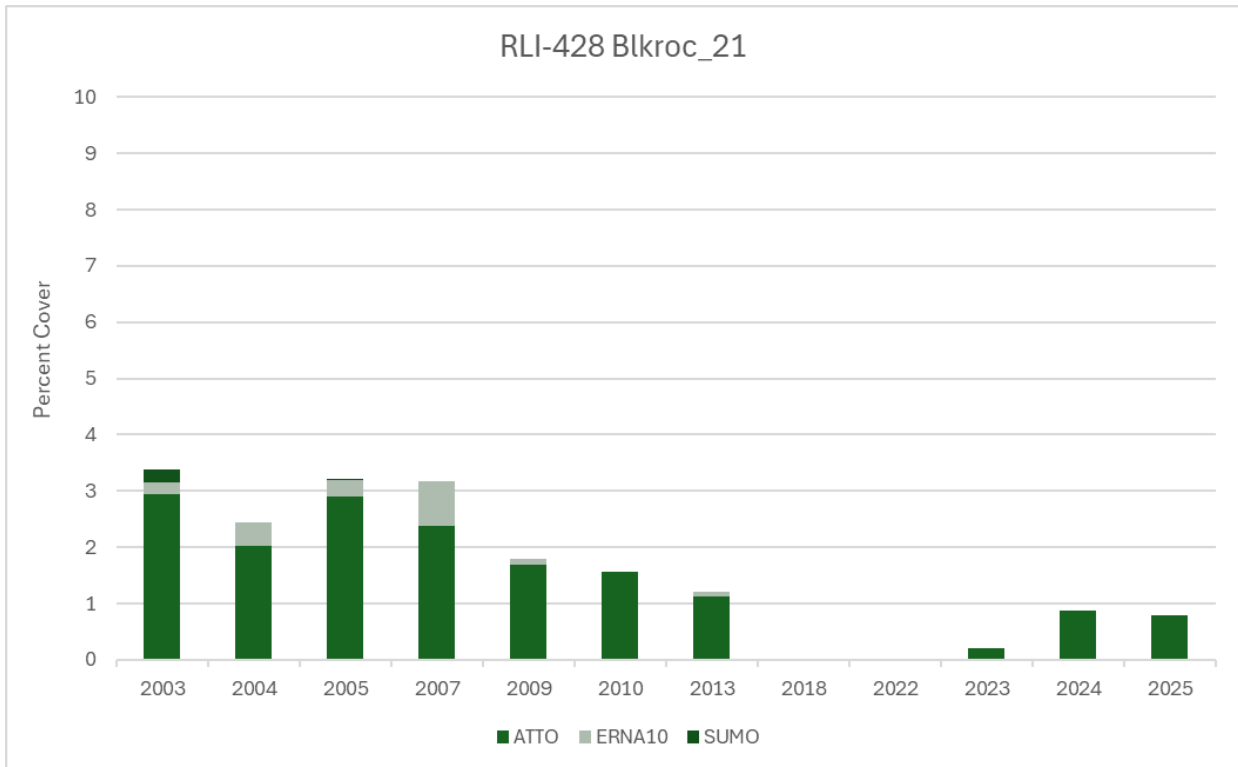
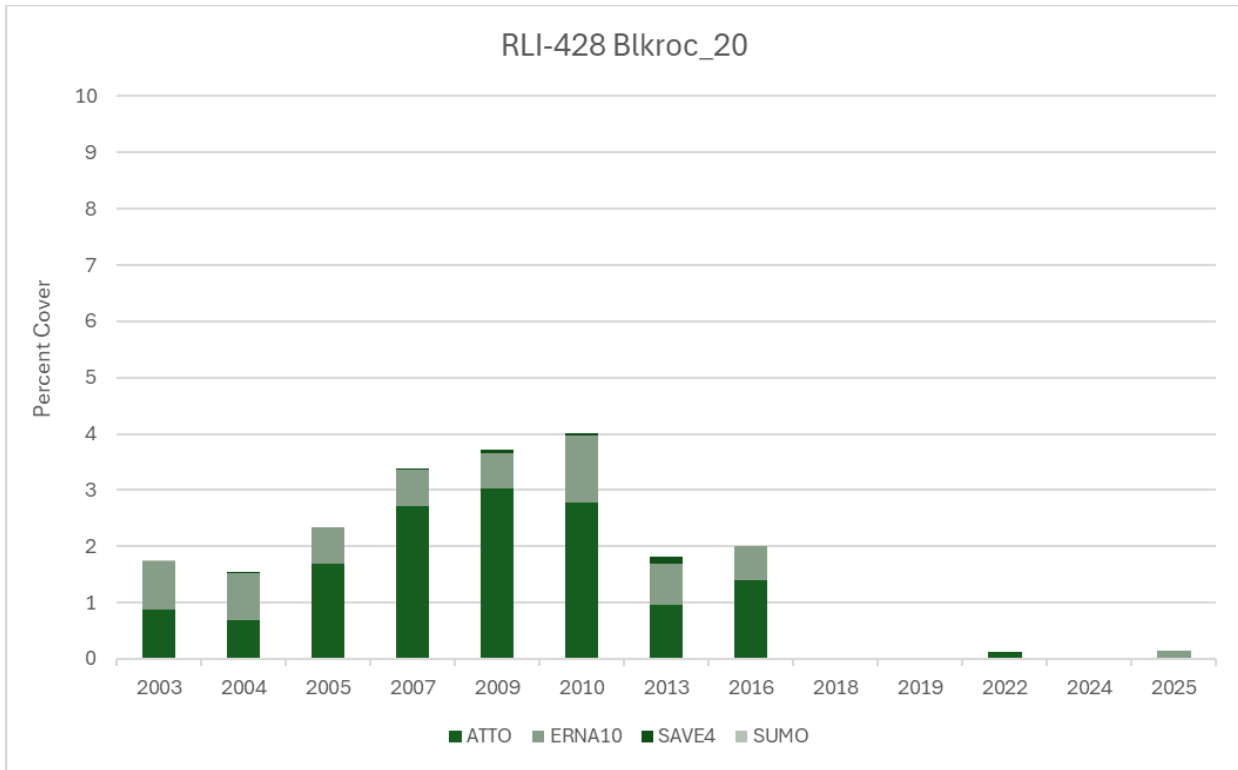


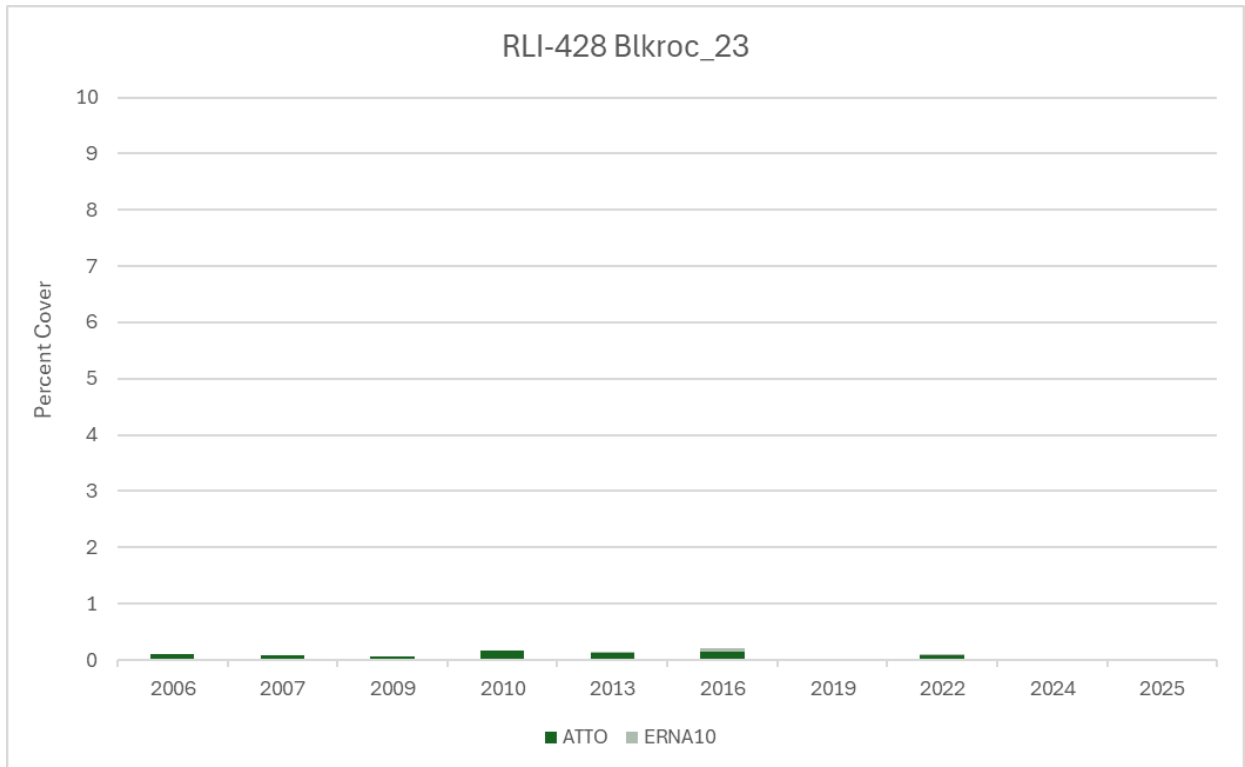
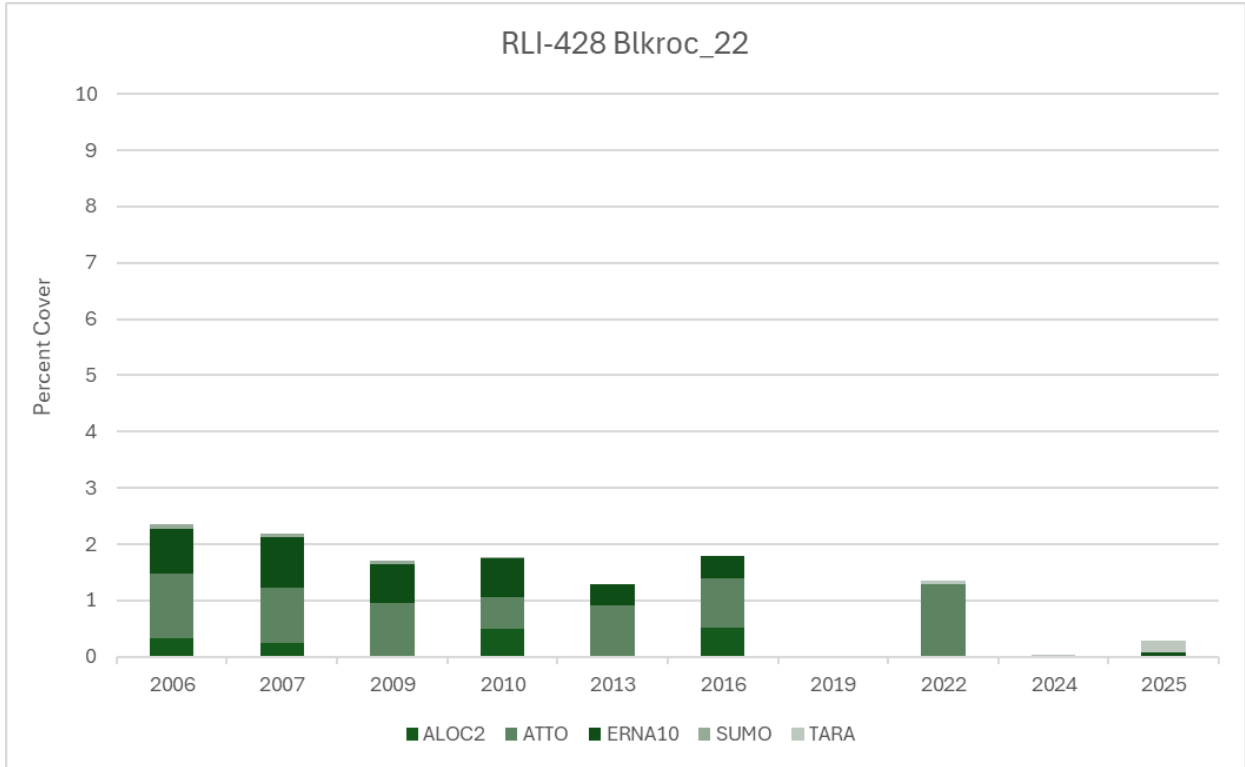
**Blackrock RLI-428 Shrub Cover Species (line intercept)**

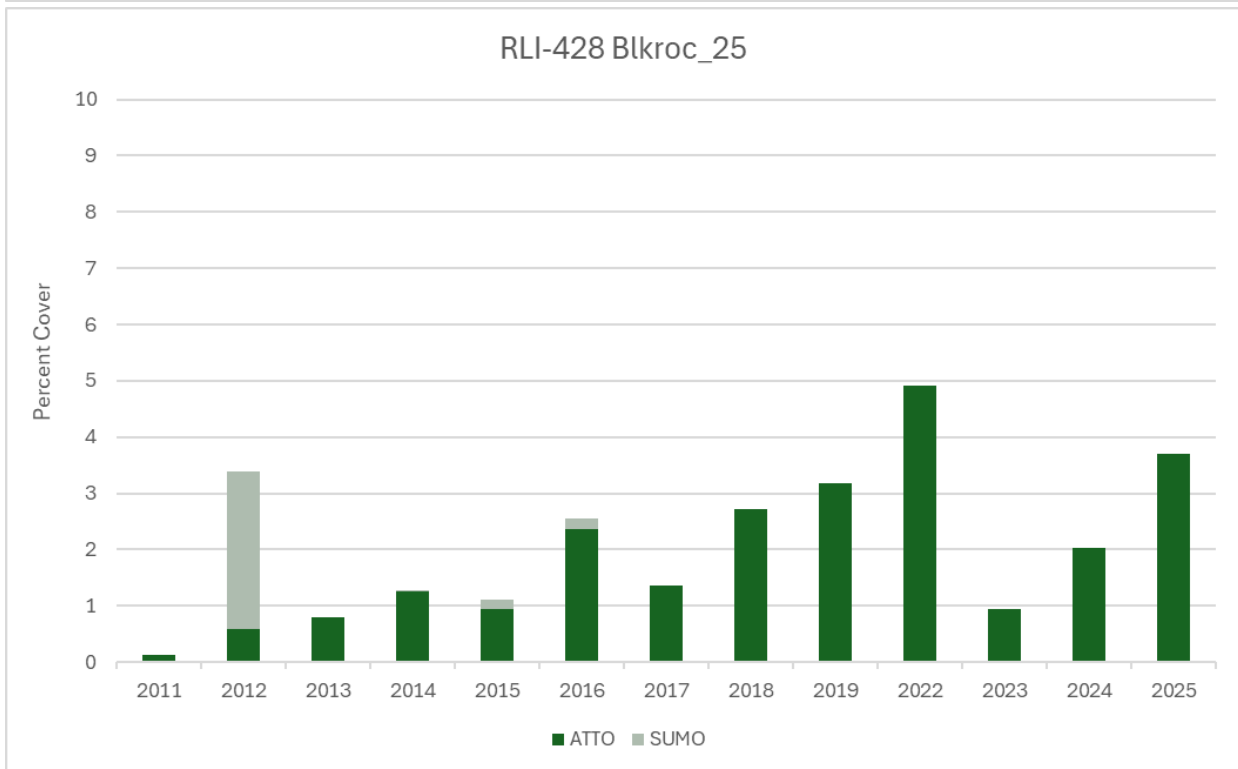
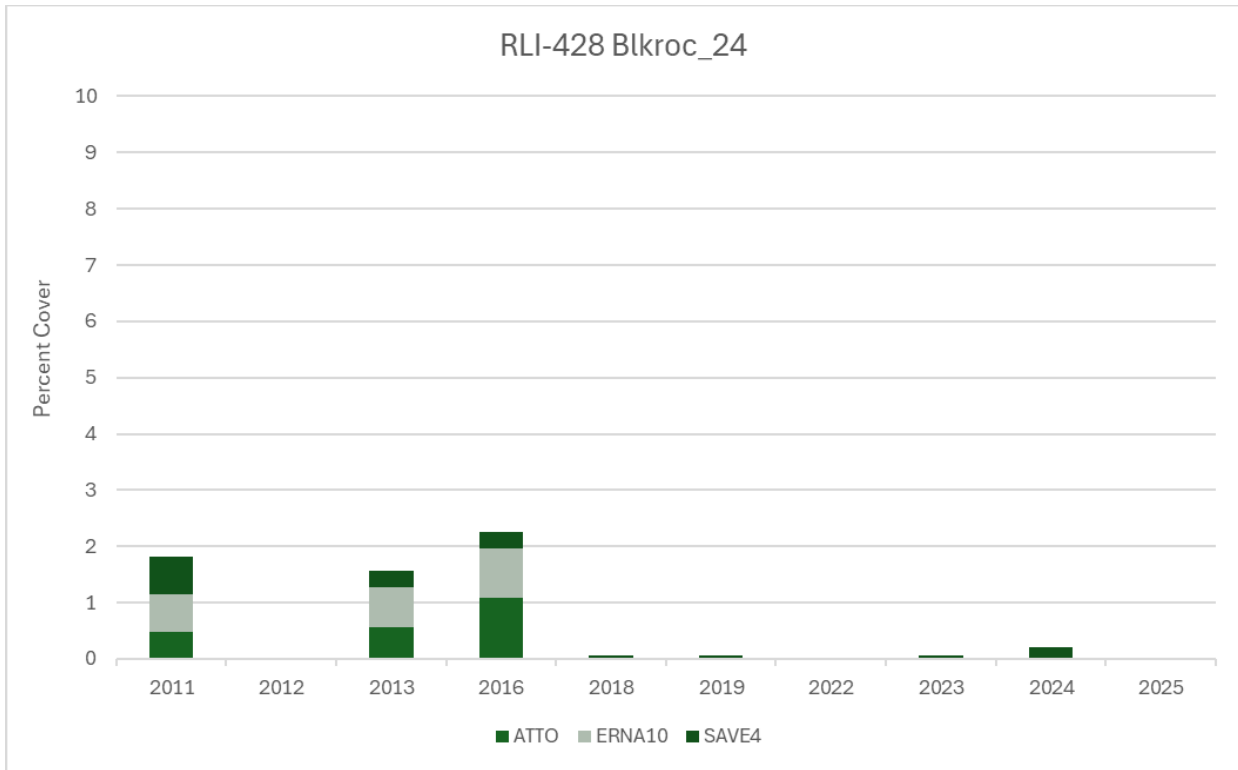




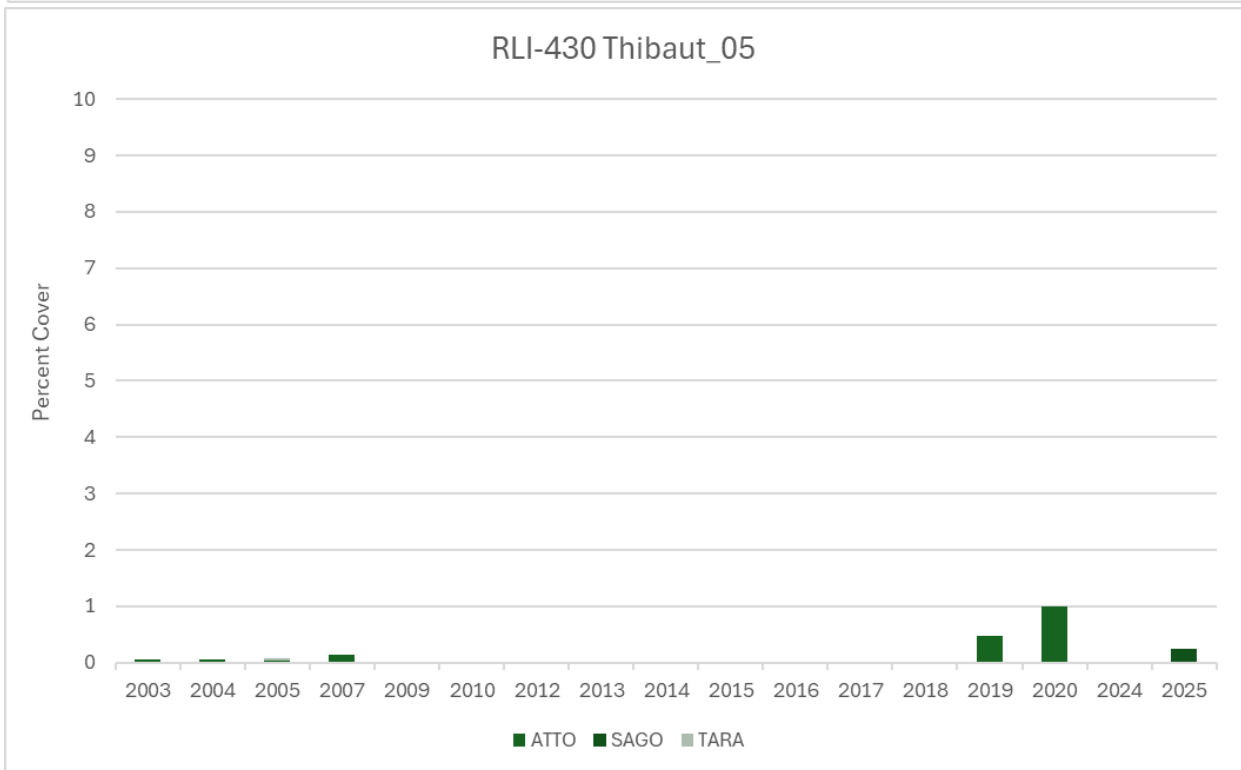
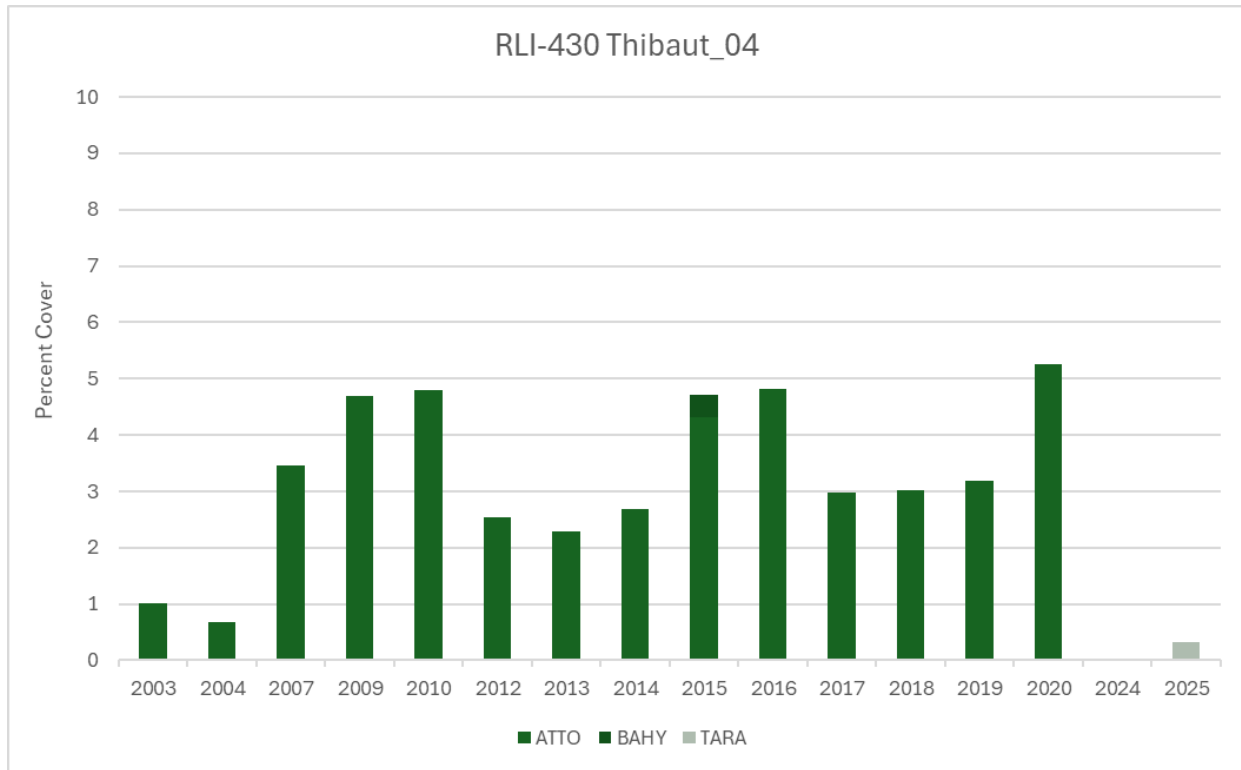


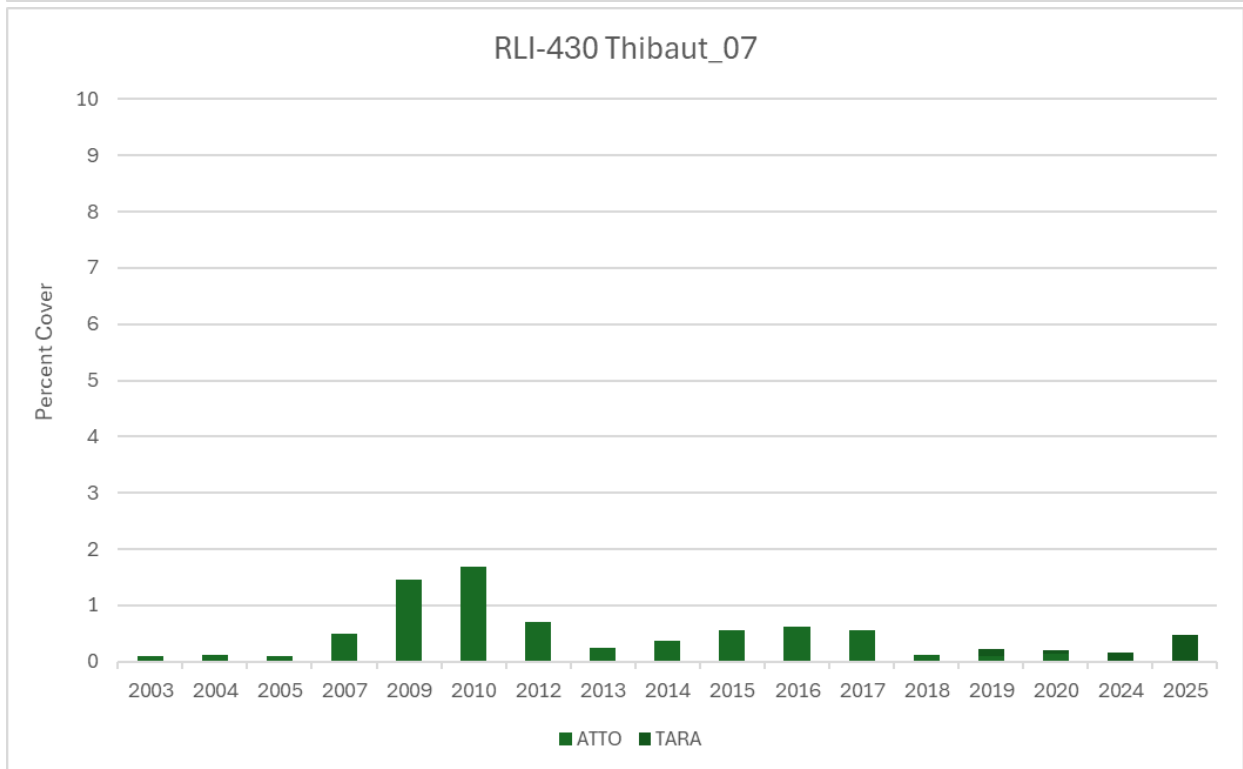
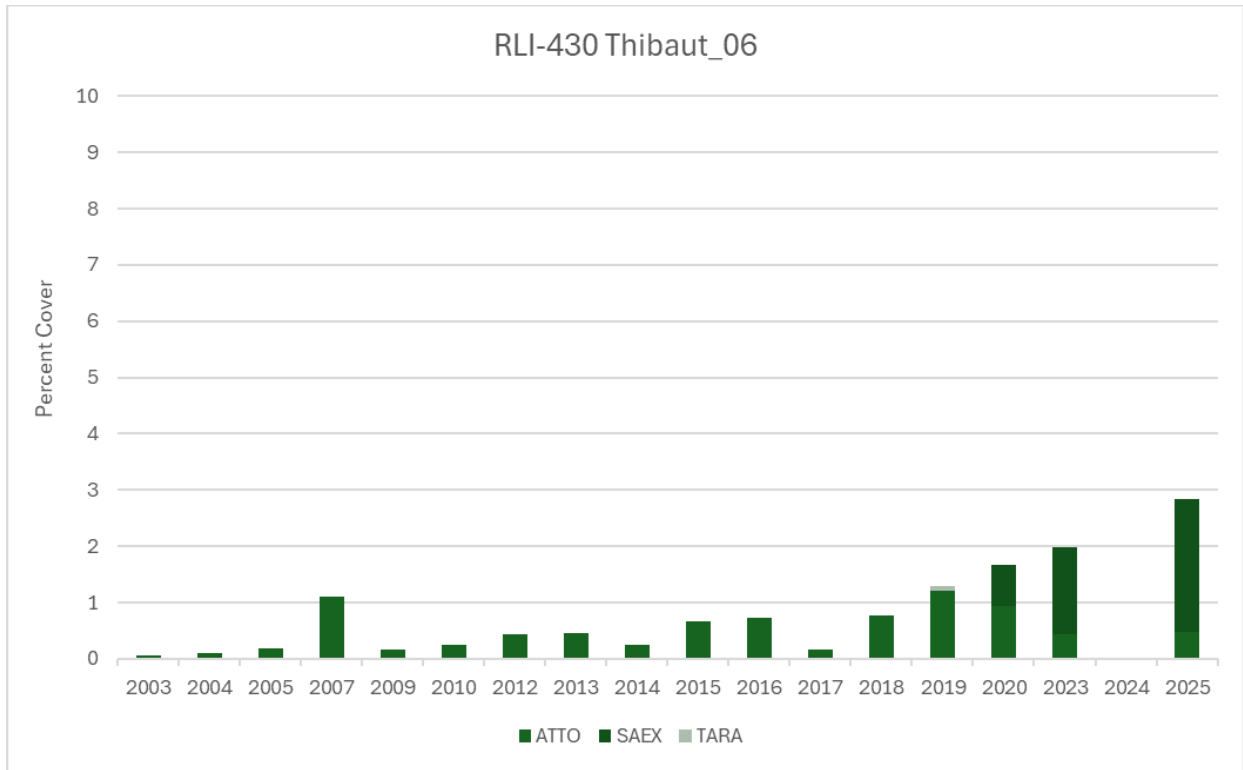




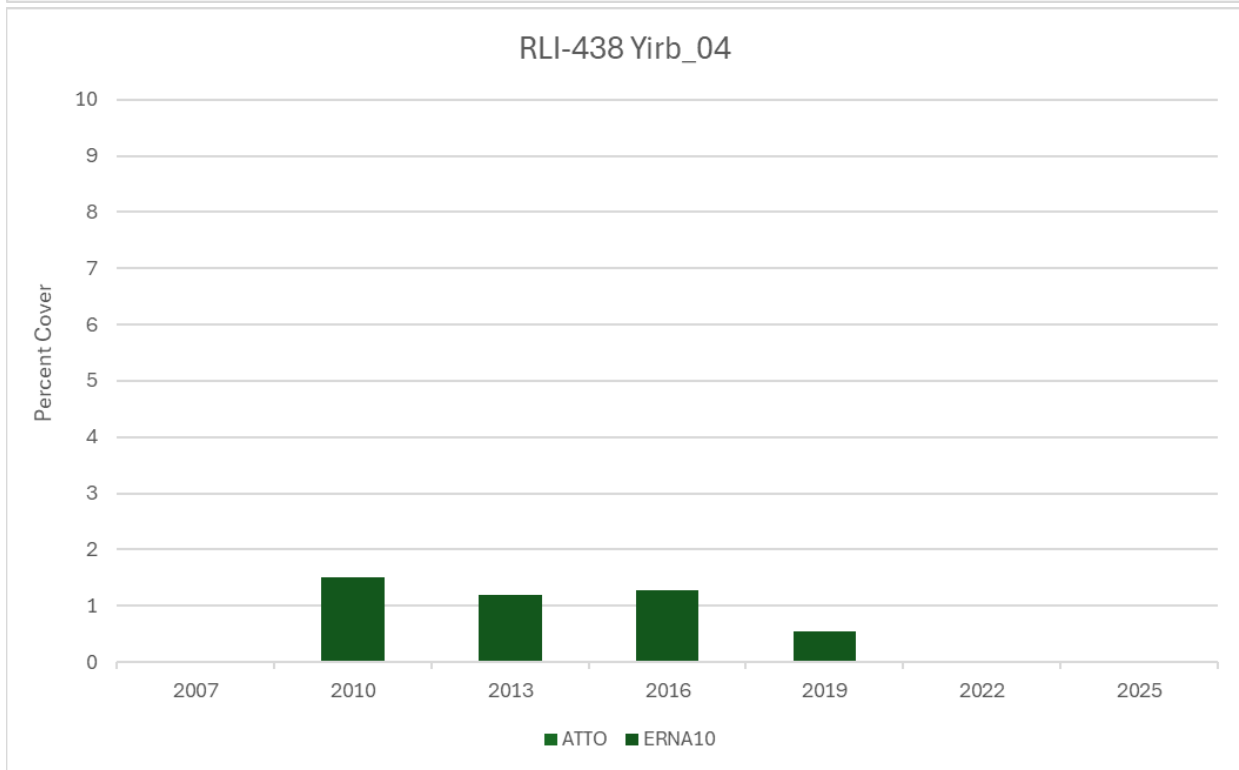
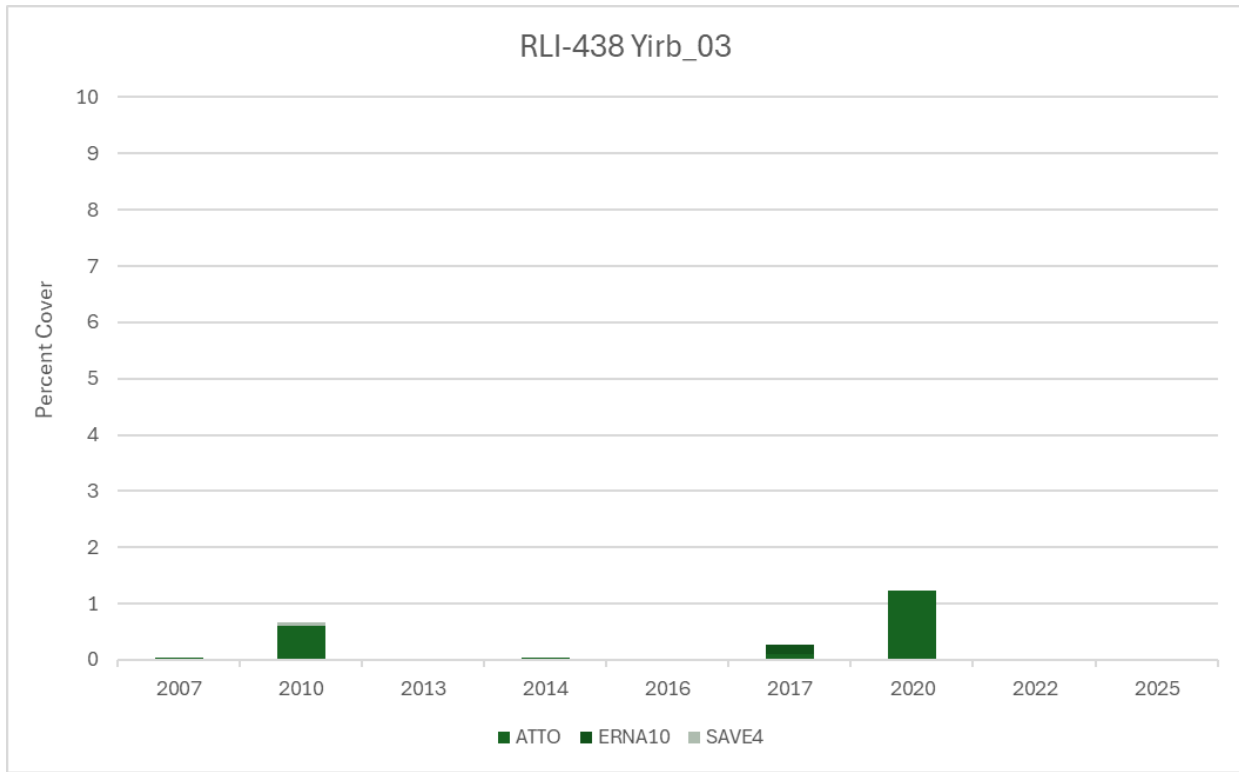


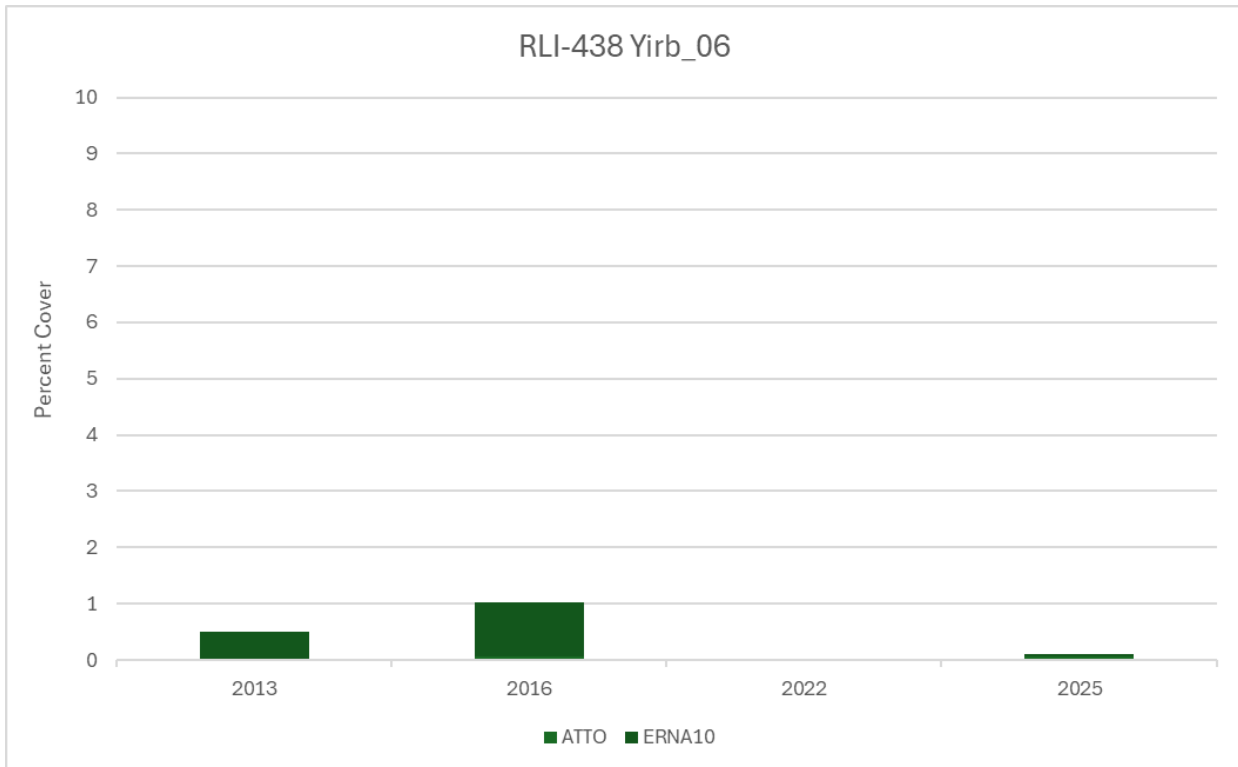
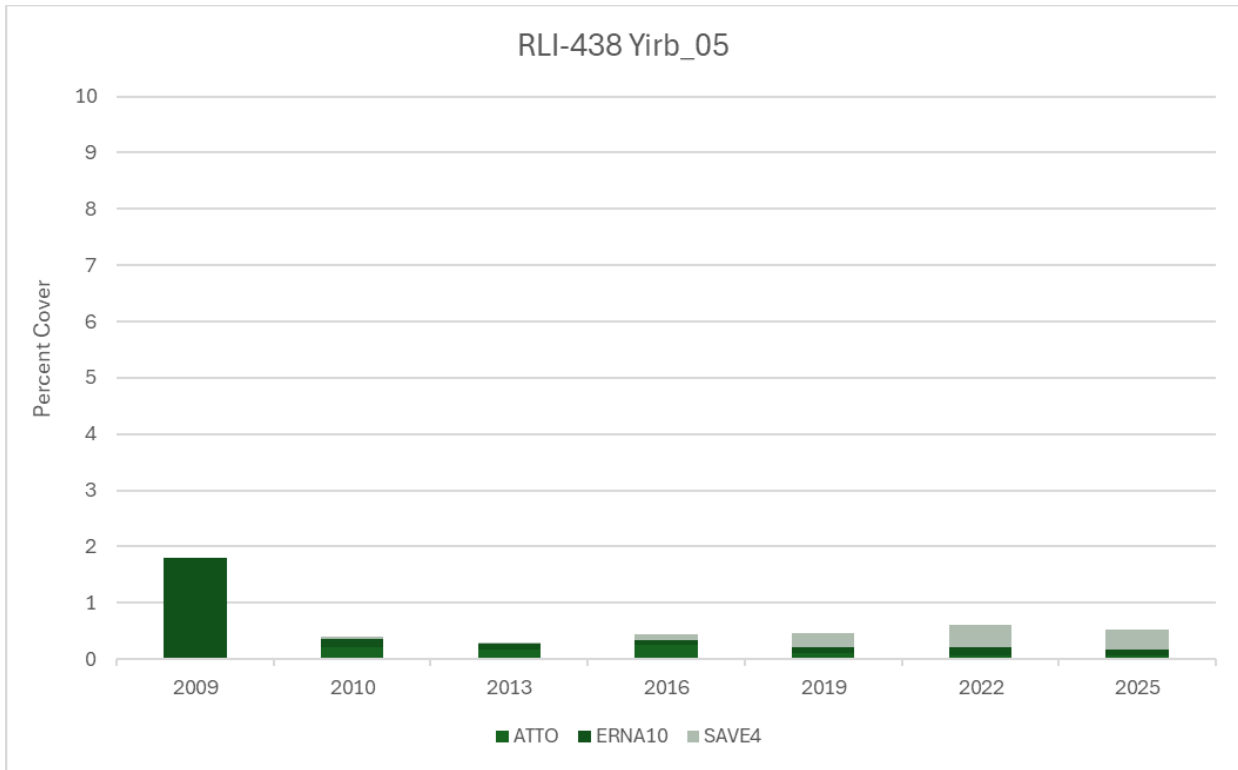
**Thibaut RLI-430 Shrub Cover Species (line intercept)**



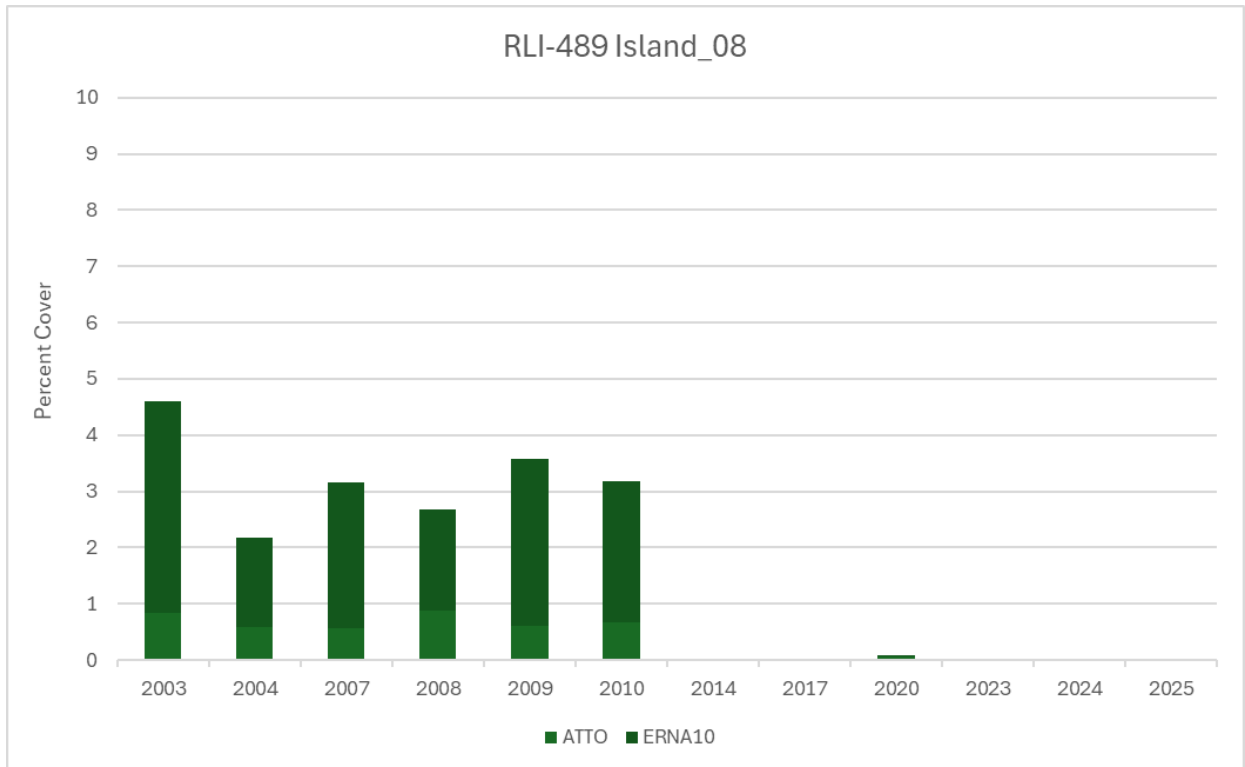
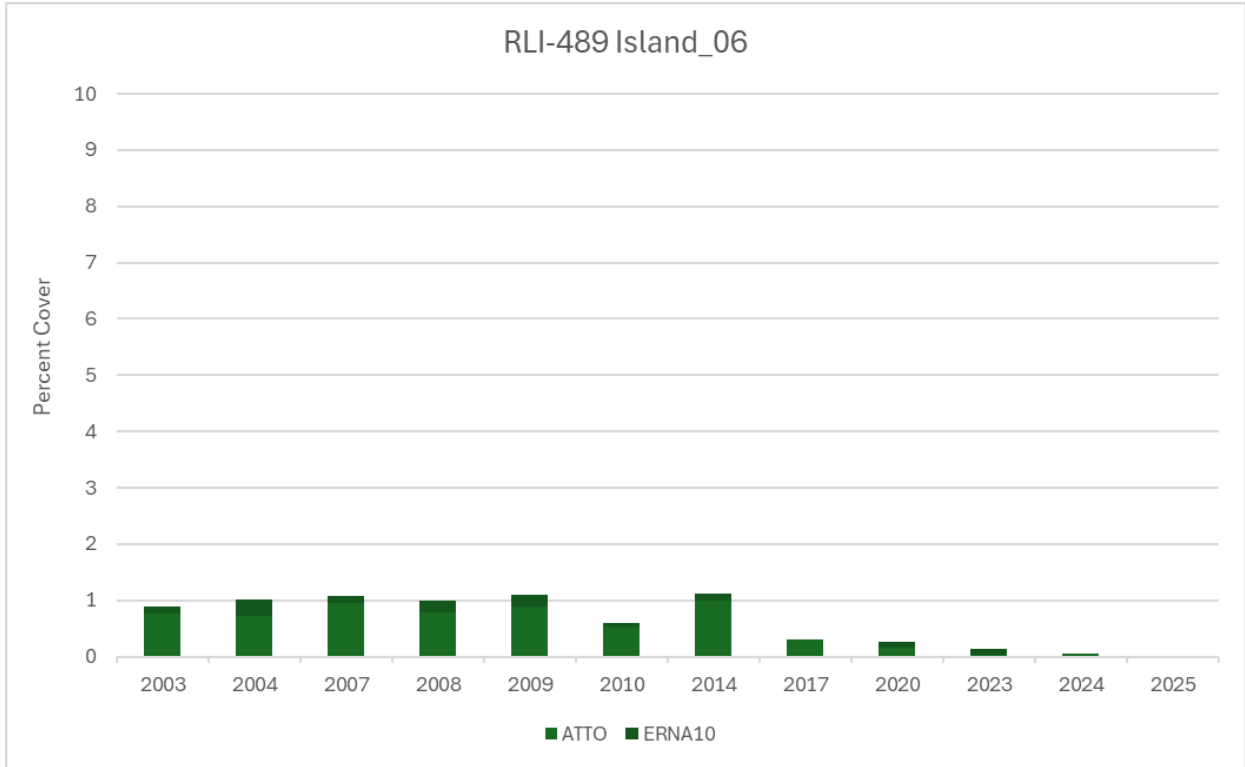


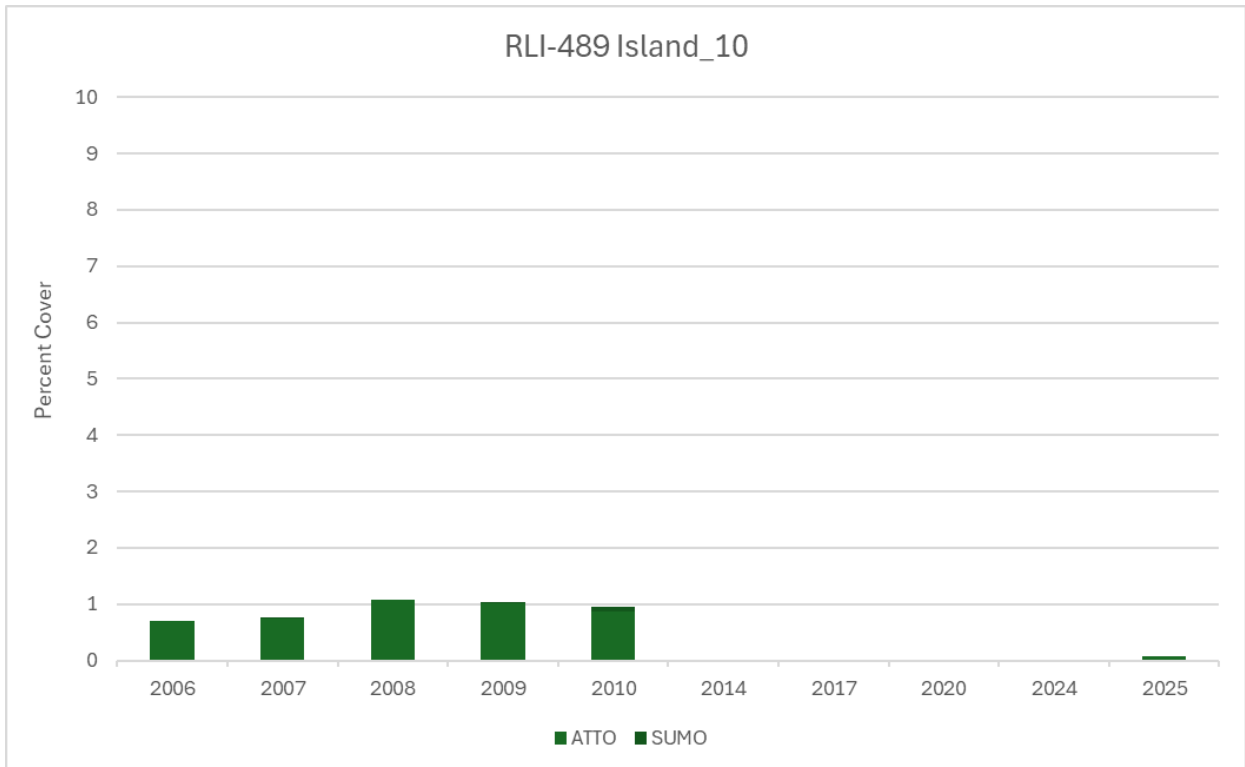
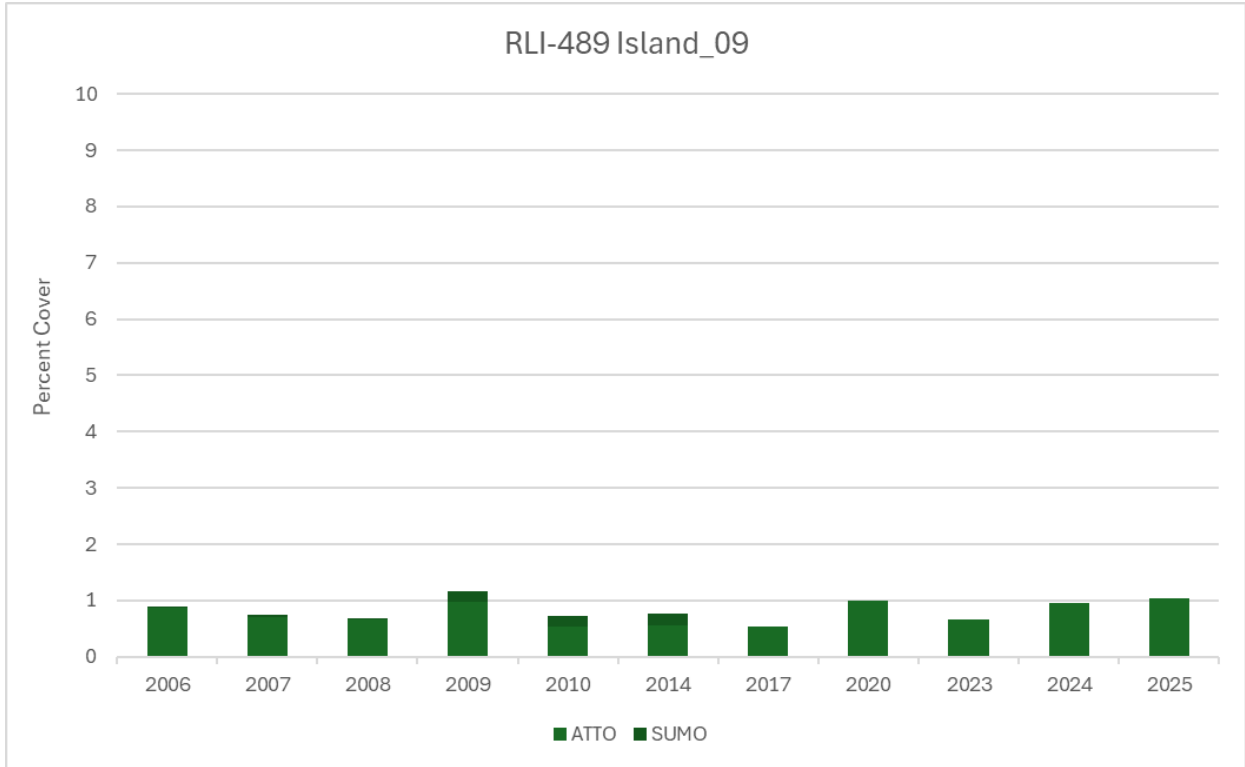
**Big Pine Canal RLI-438 Shrub Cover Species (line intercept)**

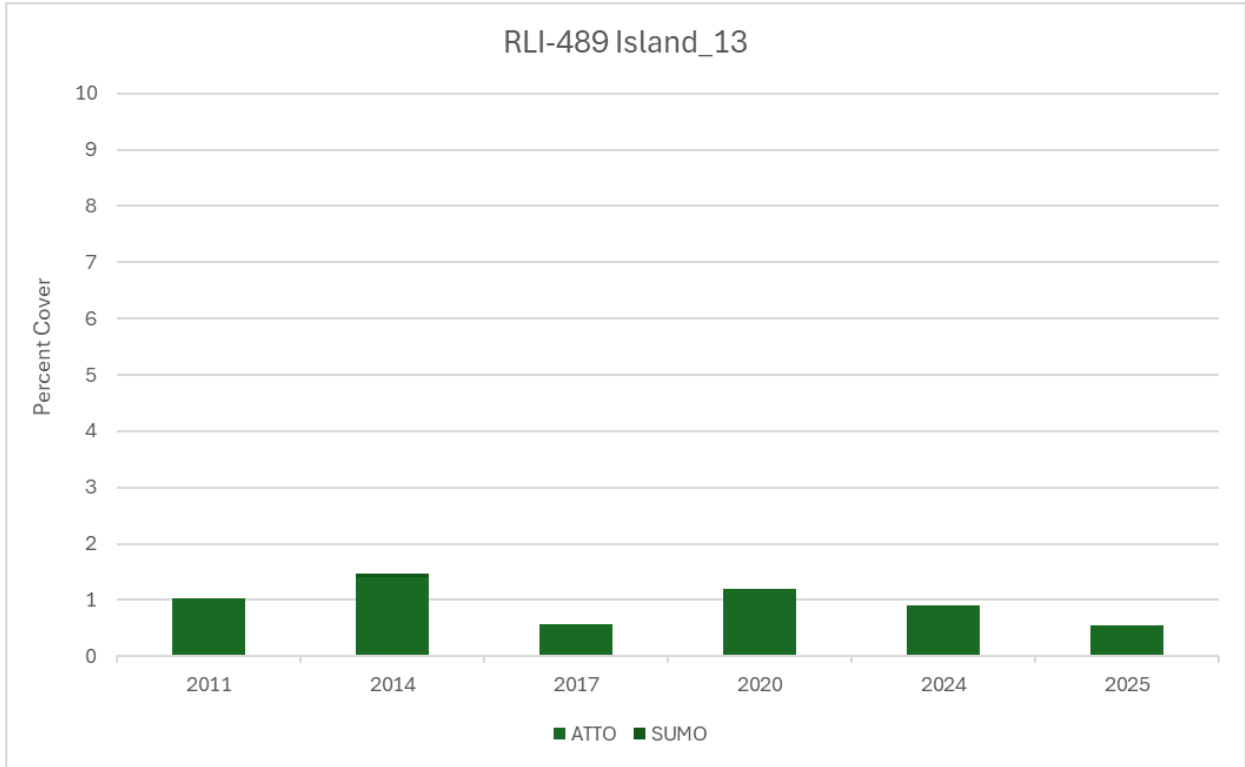




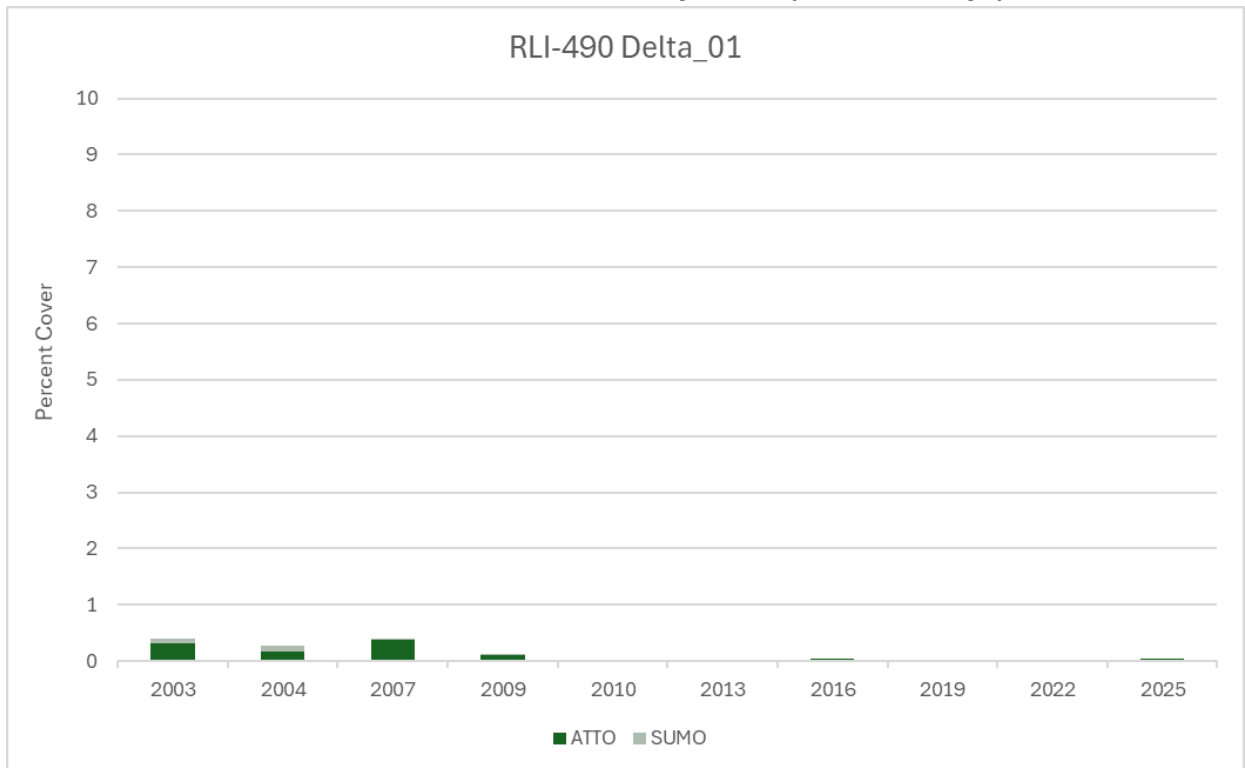
**Islands RLI-489 Shrub Cover Species (line intercept)**

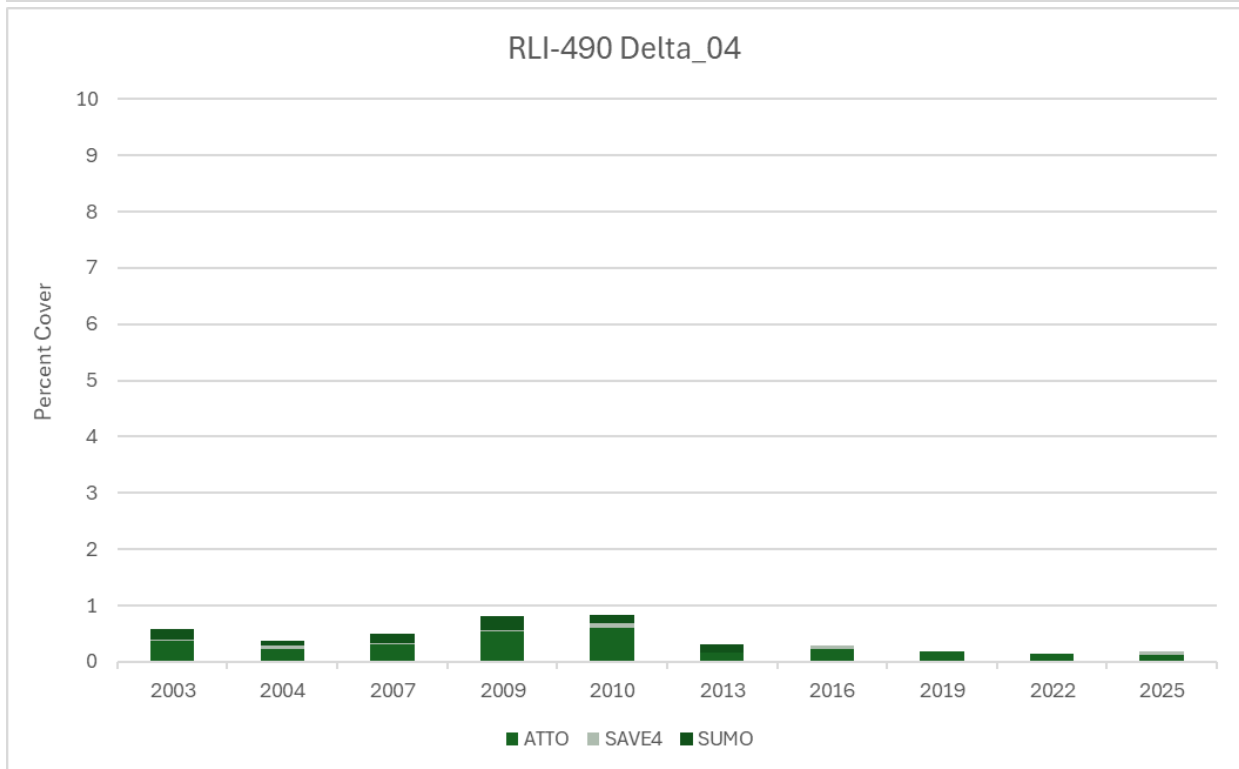
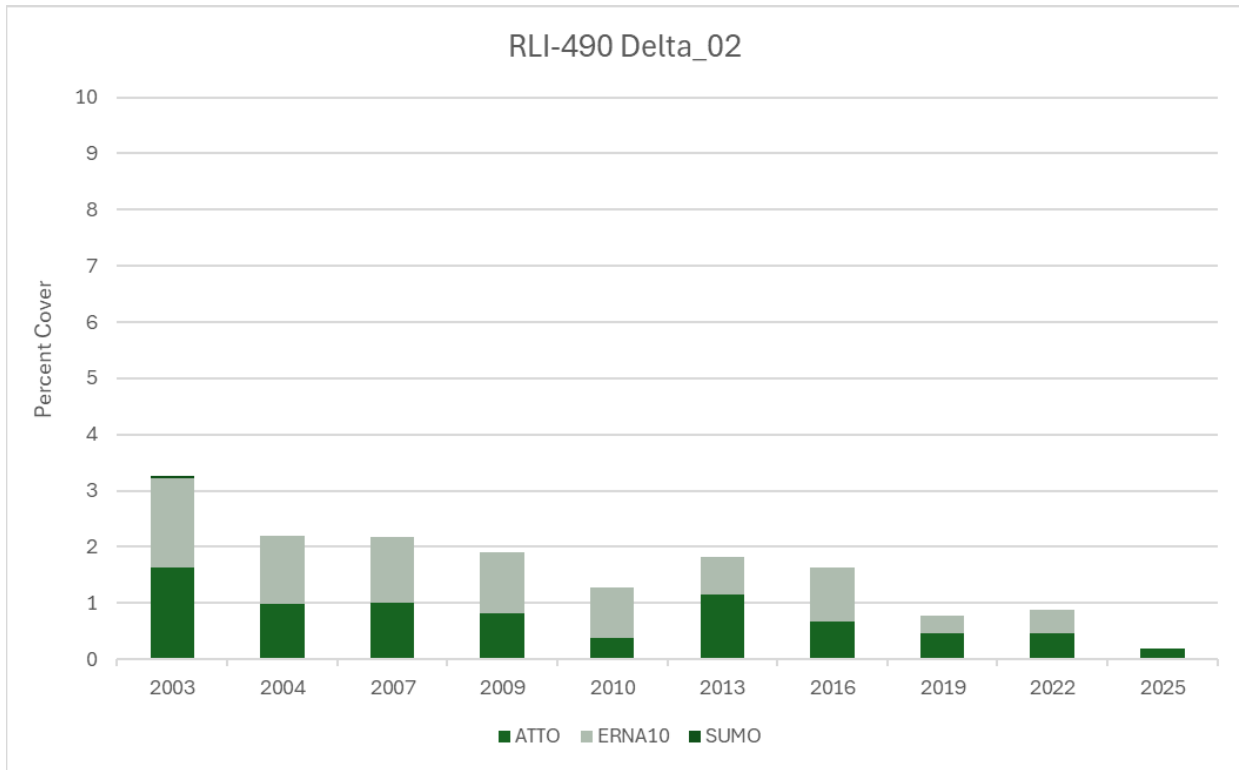


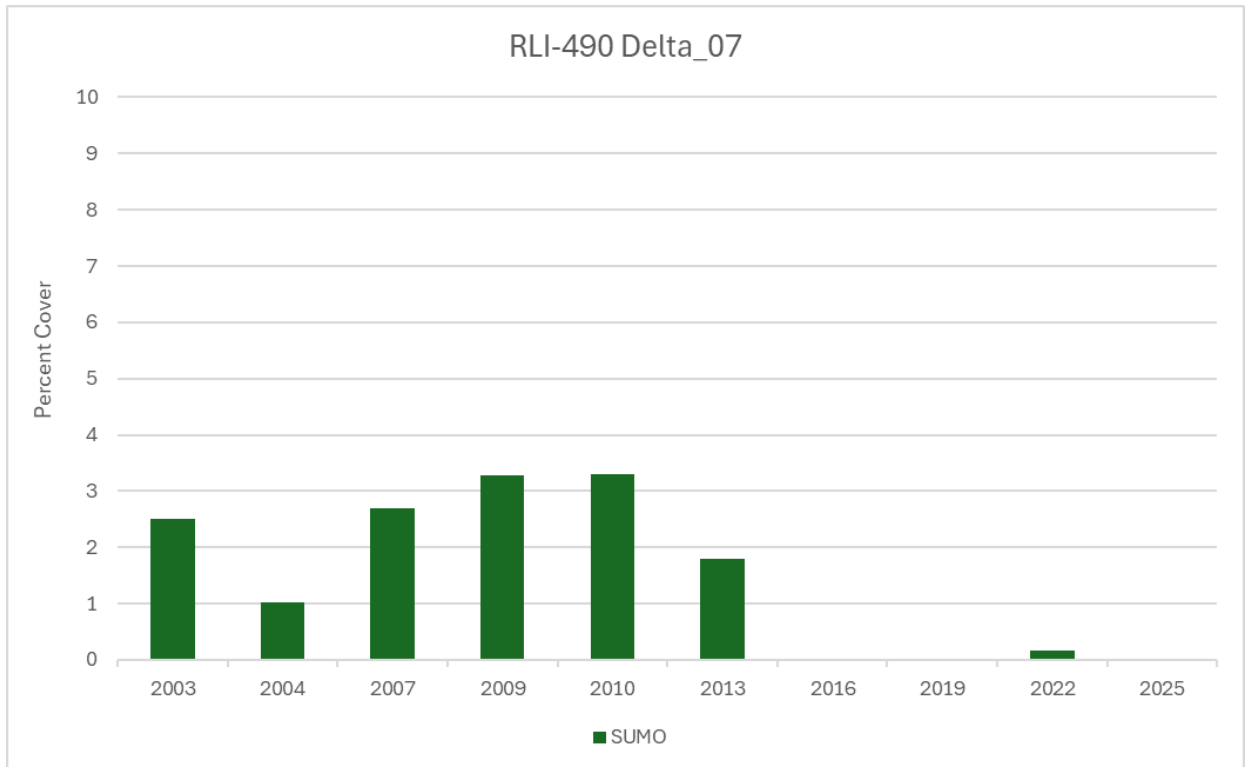
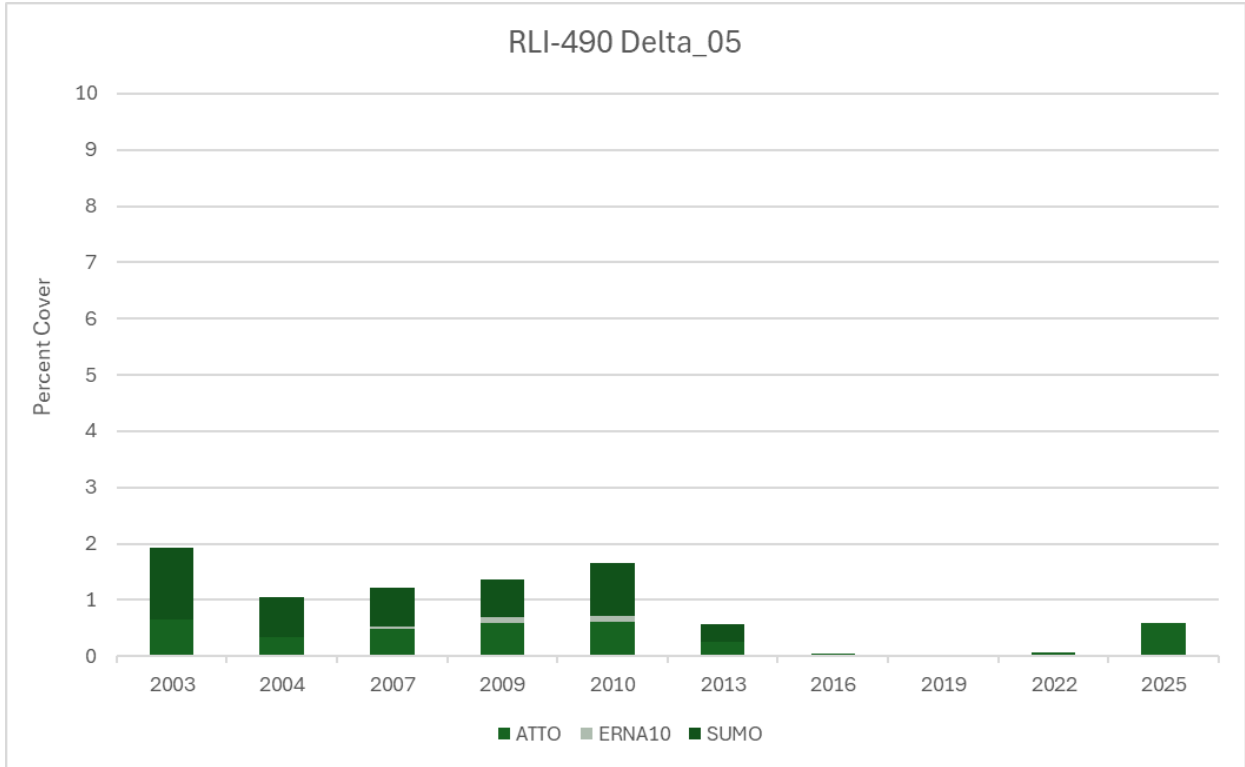




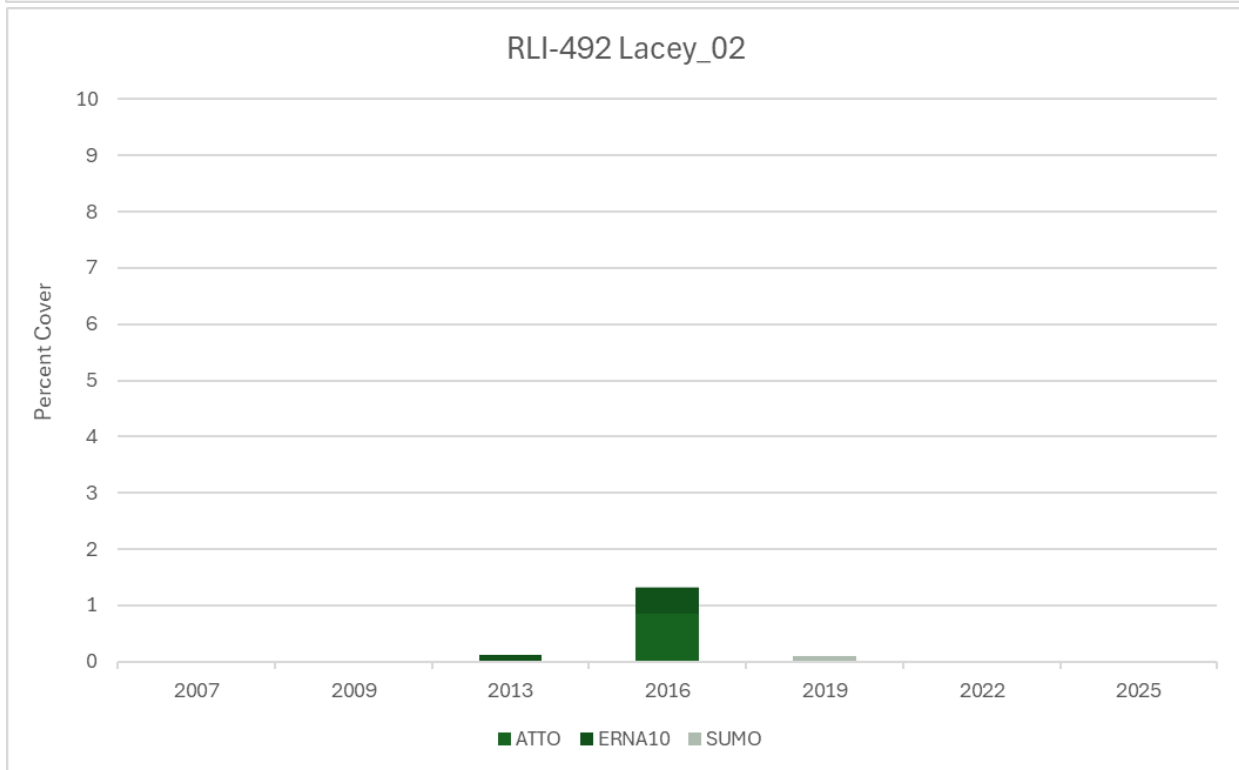
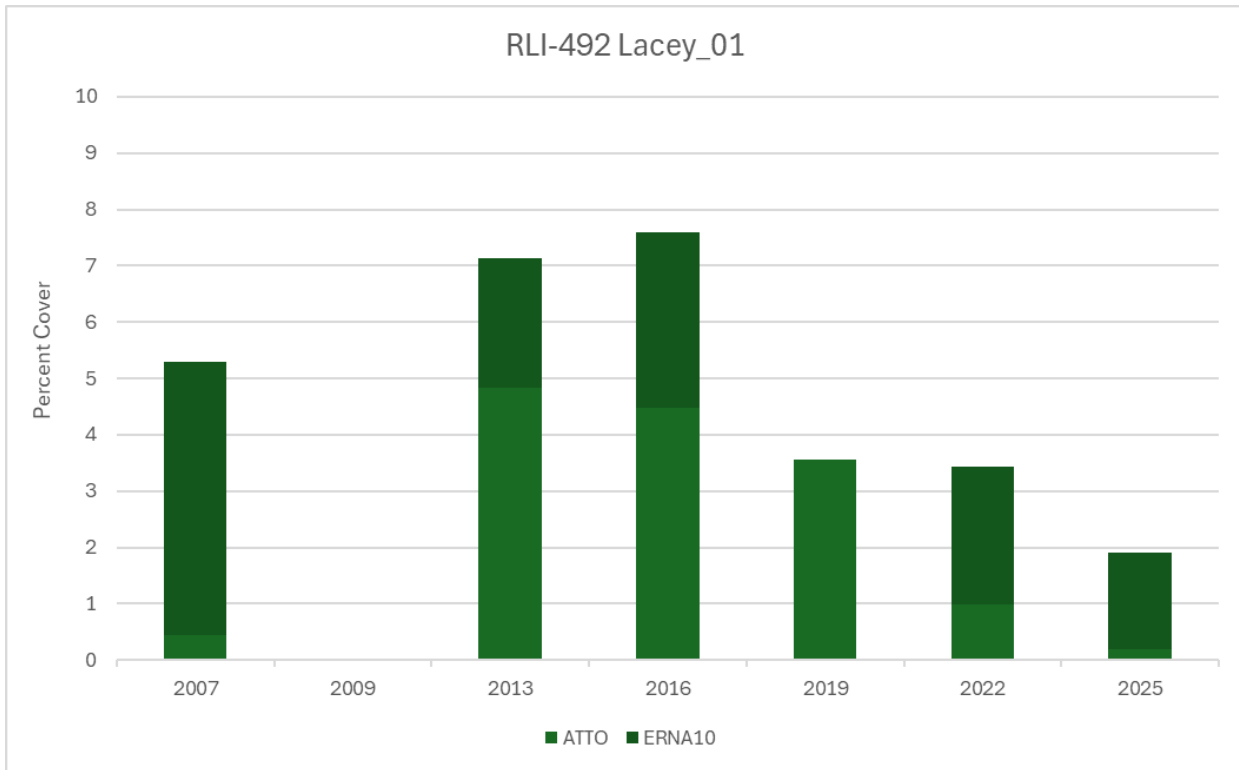
### Delta RLI-490 Shrub Cover Species (line intercept)

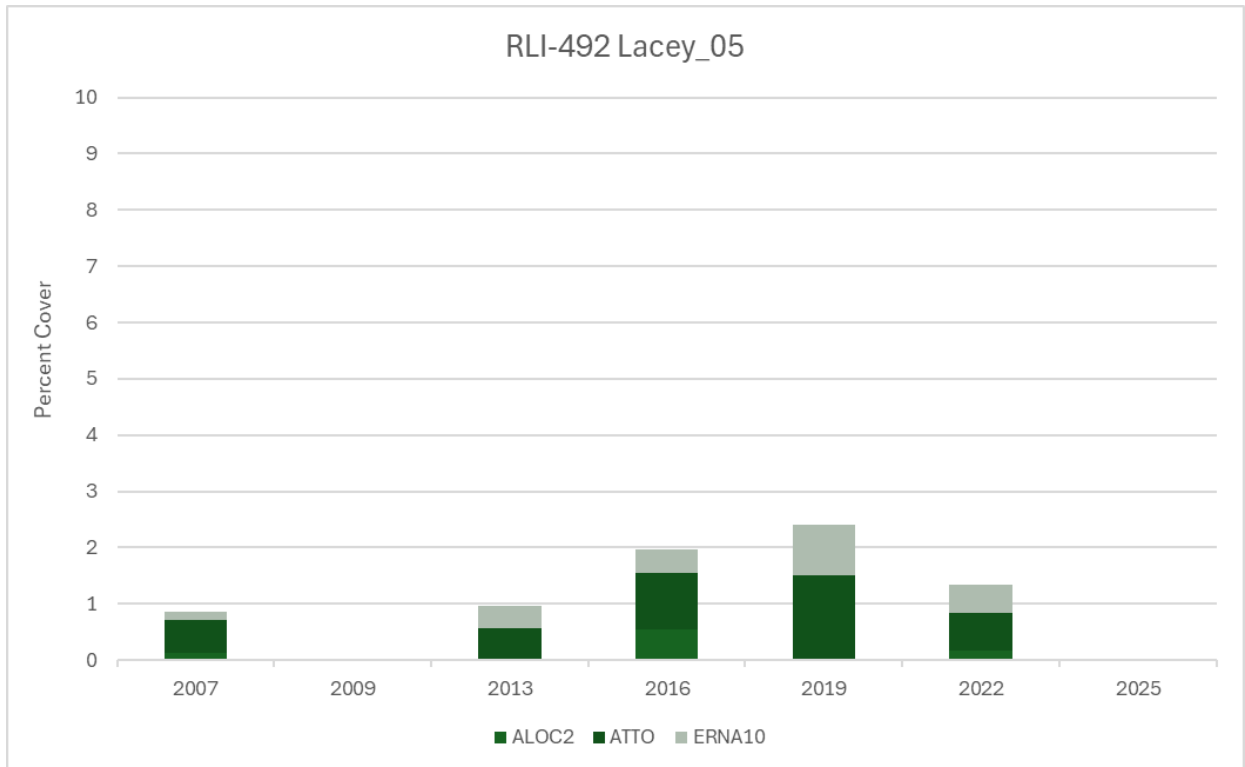
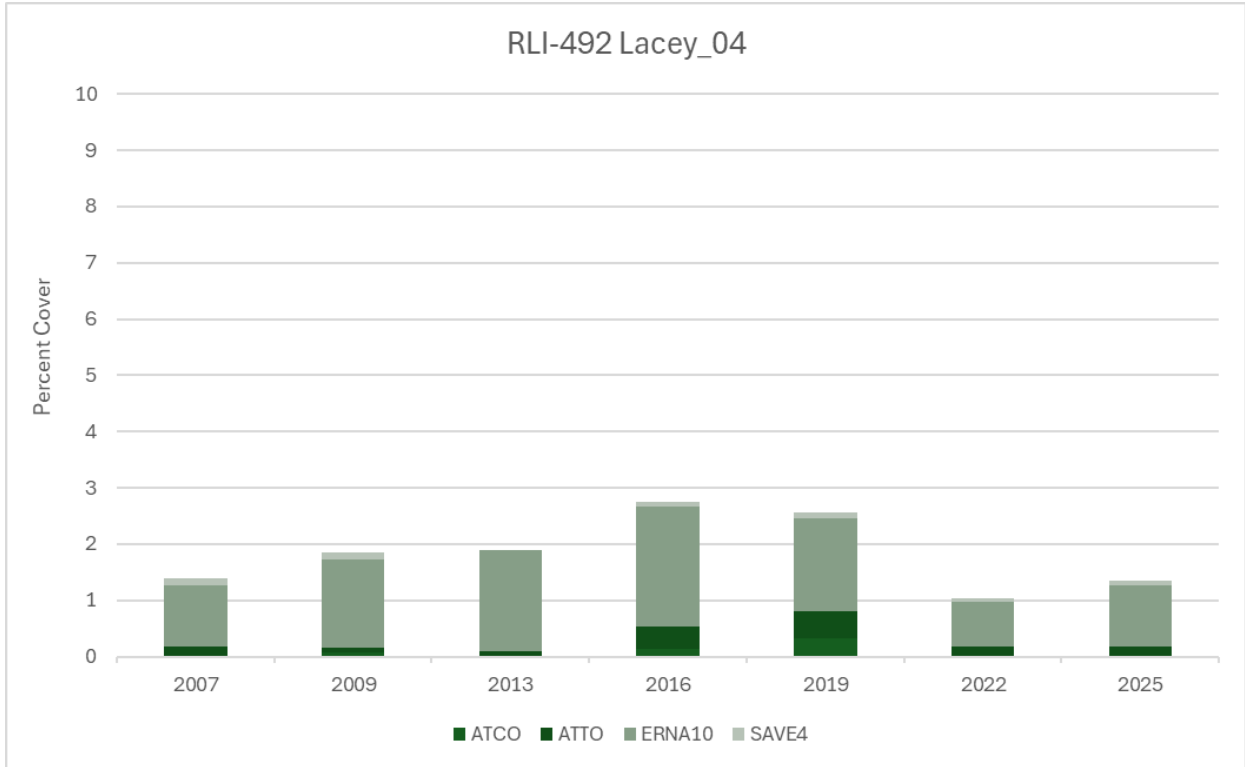


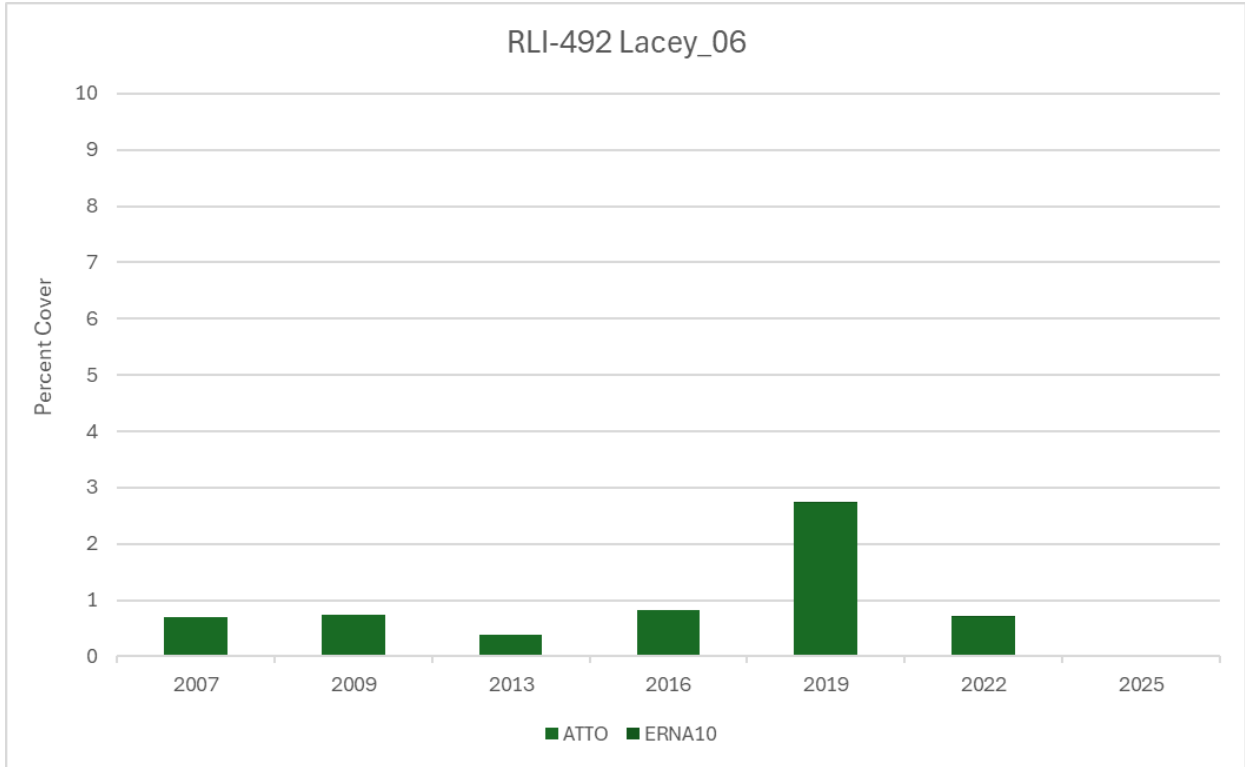




**Lacey RLI-492 Shrub Cover Species (line intercept)**







### 3.2.3.3. LADWP Invasive Species Program

The LADWP noxious-weed treatment program began in 1994 when perennial pepperweed (*Lepidium latifolium*) was initially found in the Owens Valley. Following this discovery, LADWP has focused on the control and eradication of weeds with high potential to cause either economic or environmental detriment. Pepperweed, Russian knapweed (*Acroptilon repens*) and invasive thistle (*Cirsium* spp.) are the primary species targeted. In addition to these species LADWP also treats saltcedar (*Tamarix* spp.). This introduced species is an aggressive colonizer throughout lake shorelines and riparian areas in the western states. Without control, native communities can be replaced by extensive monocultures of saltcedar resulting in decreased biodiversity, riparian process and function, and overall habitat value.

#### **2025 Noxious Weed Treatment Efforts**

In 2025, weed treatment began in late April and concluded on September 30. Over this period a total of 102 acres of noxious weeds were treated by LADWP personnel. This value was calculated using the herbicide application rate and usage for the season (Table 3.7)

Each season weed crews begin treatment south of Lone Pine along water conveyances, irrigated meadows, and water spreading areas. Treatment continues north throughout the season to the Laws and Owens River areas just below Pleasant Valley Reservoir. Selective broadleaf herbicides are used to treat pepperweed with application equipment consisting of backpack sprayers for small localized populations and either a tractor with a spray boom or ATV mounted hand-sprayers for larger populations.

In 2025, LADWP crews spent a significant amount of time treating pepperweed in the Multi-Completion Field located in the Five Bridges area. The area will be mowed in the spring of 2026 to assist in controlling this population. The pepperweed population at Lyman Slough was again prioritized in 2025 to maintain control following the high runoff years of 2017 and 2023. Prolonged inundation during these years caused significant mortality to pepperweed, while still present it is significantly less than initially observed in 2017.

The Winterton and Thibaut waterfowl habitat areas were once again prioritized in 2025 to control existing pepperweed populations and potential expansion under the new interim water regime. These areas will continue to be prioritized in subsequent years.

During the winter of 2024-2025 LADWP's weed team coordinated with LADWP's *Enterprise GIS* staff to develop a tablet/phone-based application to allow real-time field mapping of weed populations by weed crews and other staff. The application is GPS enabled and has up to date arial imagery, waterway locations, roads, and other layers to assist crews to navigate and map weed populations. Other features include the ability

to record points, polygons, lines, attach photos, and record treatment notes. Use of the application was beta tested in 2025 and updates based on staff recommendations were made to the application in early 2026. Beginning in March 2026, all LADWP Watershed Resources Specialists and weed treatment crews will be issued the new application allowing them the ability to monitor weed population sizes and evaluate treatment efficacy.

Pepperweed treatment will resume beginning in April 2026 and will continue through September using methods described above or similar.

**Table 3.7 LADWP Weed Treatment Locations 2025.**

General Area	Treatment Site
Bishop	Bishop Creek Canal and Adjacent Meadows Intake to Warm Springs Rd
	Buckley and Rawson Pond Area
	Dixon Ln/Riverside Dr Meadows
	Five Bridges Multi-Compltion Field
	Frog Pond Area
	McNally Canals
	School Farm
North of Big Pine	Lyman Slough Canal and Adjacent Meadows
Big Pine	Big Pine Canal and Adjacent Meadows Intake to HYW 168
	Meadows East of County Rd
	Meadows South of Dude Ranch Rd
	Warren Lake Area
Aberdeen	Calvert Slough Area
Independence	Blackrock Waterfowl Area
	Homestead Site
	LA Aqueduct Intake to HYW 395
	Thibaut Waterfowl Area and Corals
Lone Pine	Diaz Lake Meadows

**2025-2026 Saltcedar Treatment Efforts**

A total of 240 acres were canvassed for treatment in 2025-2026 (Figure 3.1).

During the 2025-2026 season, saltcedar treatment efforts focused on the Blackrock 4-Corners area. Work began in October and saltcedar consisted of dense stands of various sizes from seedlings to mature trees with 10-inch diameter trunks.

The 2025-2026 control efforts consisted of cut stump treatment of larger diameter trees using a skid steer mounted turbo saw attachment, mowing smaller diameter trees including saplings and seedlings, and hand cutting using chainsaws and pruners.

*Garlon 4-Ultra* herbicide was applied to cut stumps using the turbo saw attachment, spray equipment mounted on side-by-side utility vehicles, and backpack sprayers. Skid steer mounted turbo-saw and grapple rake attachments were utilized to cut, gather and consolidate substantial volumes of slash into piles for burning. Piles measuring approximately 10 ft. in diameter and 6 ft. tall were stacked in locations to be burned by Cal Fire utilizing the Cal Fire Vegetation Management Program (VMP).

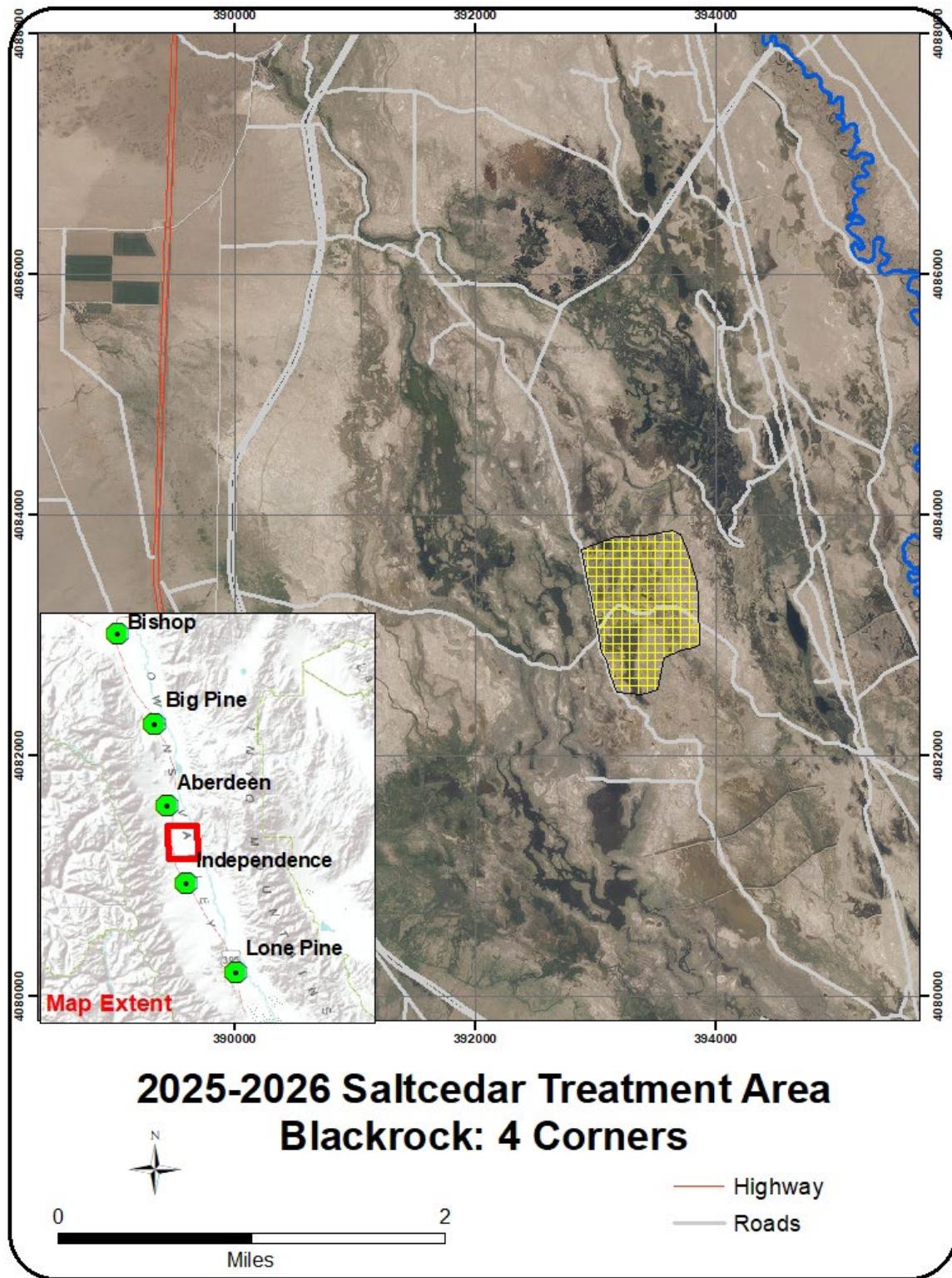


Figure 3.1. 2025-2026 Saltcedar Treatment Area: Blackrock

### **3.2.3. Yellow Billed Cuckoo Habitat Enhancement Plan**

The *Final Ad Hoc Yellow-billed Cuckoo Habitat Enhancement Plan* (Enhancement Plan) states in Section 2.1.8.3:

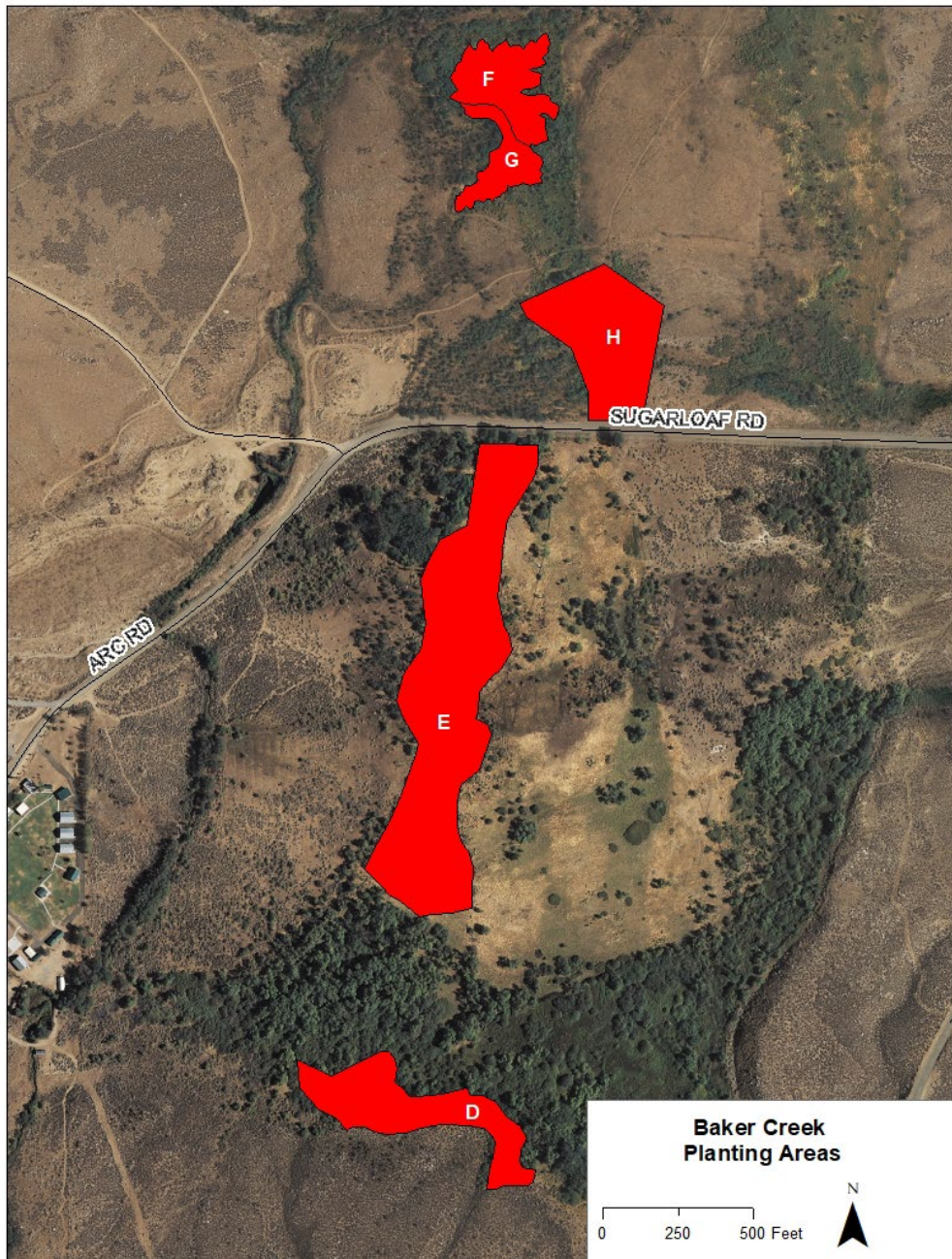
*“Annual reports will be prepared each year by LADWP to summarize the progress of the willow and cottonwood planting and black locust control. The annual reports will include a brief introduction to include the performance standards, monitoring methodologies, monitoring results for the year, and discussion of any adjustments required to achieve the overall goal to improve the habitat”.*

#### **Fences**

All fencing required in the Enhancement Plan was complete as of 2011.

#### **Baker Creek Planting**

All planting areas (Figure 3.2) within Baker Creek have received their initial plantings and replacement pole plantings based on the first growing season monitoring data.



**Figure 3.2. Overview of Pole Planting Areas in the Baker Creek Watershed**

## **Nonnative Species Control**

### **Black Locust (*Robinia pseudoacacia*)**

All planting areas have met the criterion for upper canopy nonnative cover values besides area E, where the cover value in 2025 was 8.6% (Figure 3.3). The western edge of area E has a mature stand of black locust with very little understory. Additionally, black locust has re-sprouted in areas where pole plantings were planted. Black locust provides habitat and shade, suppressing the understory deterring unwanted, weedy understory growth. Removal of black locust would disturb the surrounding area and inevitably, cut stumps will re-sprout. In Area E, black locust cover values have always been above the set criterion, even during years of active treatment (Table 3.7). Black locust will continue to be monitored and if cover values remain in the current range, it will be proposed to change the criterion to reflect what is naturally occurring within area E.

## **Planting Area Monitoring**

Section 2.1.8.1. of the Enhancement Plan states:

*“Quantitative monitoring will assess the attainment of final success criteria and identify the need to implement contingency measures in the event of failure. Monitoring will begin in late summer after the second growing season since initial planting to capture the fullest extent of the growing season and after the majority of avian species have finished breeding. Monitoring will continue annually through Year 6 within each planting area or until the success criteria are met.”*

Planting criteria for the planting areas are as follows: areas E and F the cover values for upper and mid canopy native species are greater than or equal to 50%, in area G the cover values for upper and mid canopy native species are greater than or equal to 65%. In LADWP’s 2017 Owens Valley Annual Report, LADWP recommended that the native understory cover criterion of 50% be eliminated due to competing goals with upper and mid canopy cover values and the resulting drop in ground water levels due to the prolonged drought that had negative impacts on the understory. Nonnative canopy species will be less than 5% and nonnative understory species cover will be less than 25% in all planting areas.

A comprehensive analysis of each planting area was conducted in 2016 and is summarized in LADWP’s 2017 Owens Valley Annual Report. From this analysis, it was recommended to discontinue further planting and monitoring efforts in areas A, B, and C (through Adaptive Management Sections 2.1.9. and 2.1.9.1 of the Enhancement Plan) based on little success since implementation at each of these sites. Although planted multiple times, planting areas A, B, and C have been unable to support the establishment of pole plantings to attain desired canopy cover as described in the Enhancement Plan, most likely due to clay soils as a limiting factor and poor suitability of planting sites.

Planting areas D, F and H have met all enhancement criteria as of 2018 and therefore, vegetation monitoring in these areas is no longer conducted. Planting area G met all enhancement criteria in 2023, therefore vegetation monitoring in this area did not occur in 2025. Vegetation monitoring for area E occurred on August 22 and 25, 2025 and has met all enhancement criteria except for the upper canopy non-native criterion. This information is summarized in Table 3.7. Since initial planting was phased over three years, 2025 was the thirteenth year of line point monitoring for planting area E.

**Table 3.2. Percent Absolute Cover Values for 2011-2025 within Planting Areas D, E, F, G & H**

		Planting Area D	Planting Area E	Planting Area F	Criteria for Areas D, E and F	Planting Area G	Planting Area H	Criteria for Area G and H
		Met Criteria	Met Criteria	Met Criteria		Met Criteria	Met Criteria	
Upper Canopy Native	2011			1		6		
	2012	2		1		5	7	
	2013	3	7	2		15	8	
	2014	2	8	2		13	4	
	2015	5	11	3		3	8	
	2016	8	9	2		17	5	
	2017	7	13	6		27	12	
	2018	**	13	4		13	**	
	2019	**	19	**		15	**	
	2020	**	21	**		9	**	
	2021	**	12	**		7	**	
	2022	**	17	**		12	**	
	2023	**	18.6	**		25	**	
2024	**	22.3	**		**	**		
2025	**	28	**		**	**		
Upper Canopy Non-Native	2011			T*		1*		
	2012	0*		2*		4*	1*	
	2013	0*	6	1*		T*	T*	
	2014	0*	5	T*		T*	T*	
	2015	0*	7	T*		T*	1*	
	2016	0*	11	1*		13	T*	
	2017	0*	9	3*	<5	1*	4*	<5
	2018	**	11	2*		T*	**	
	2019	**	7	**		1*	**	
	2020	**	13	**		1*	**	
	2021	**	11	**		1*	**	
	2022	**	9.8	**		1*	**	
	2023	**	10.3	**		1*	**	
2024	**	9	**		**	**		
2025	**	8.6	**		**	**		
Mid Canopy	2011			30		15		
	2012	45		45		15	35	
	2013	48	6	42		26	37	
	2014	55	6	36		21	46	
	2015	62	6	50		31	47	
	2016	59	8	46		27	48	
	2017	67	14	51		37	71	
	2018	**	15	52		35	**	
	2019	**	14	**		40	**	
	2020	**	11	**		52	**	
	2021	**	8	**		45	**	
	2022	**	12	**		41	**	
	2023	**	13.5	**		40	**	
2024	**	12.7	**		**	**		
2025	**	22.5	**		**	**		

**Table 3.7 (Cont.). Percent Absolute Cover Values for 2011-2025 within Planting Areas D, E, F, G & H.**

		Planting Area D	Planting Area E	Planting Area F	Criteria for Areas D, E and F	Planting Area G	Planting Area H	Criteria for Area G and H
		Met Criteria	Met Criteria	Met Criteria		Met Criteria	Met Criteria	
Upper & Mid Canopy	2011			32	≥50	21		≥65
	2012	46		46		20	42	
	2013	51*	12	44		41	45	
	2014	57*	15	38		34	48	
	2015	67*	17	52*		34	55	
	2016	67*	16	48		44	53	
	2017	74*	28	57*		64	83*	
	2018	**	27	56*		48	**	
	2019	**	33	**		55	**	
	2020	**	32	**		61	**	
	2021	**	20	**		52	**	
	2022	**	29	**		53	**	
	2023	**	32	**		65*	**	
	2024	**	35	**		**	**	
2025	**	50.5*	**	**	**			
Understory Non-Native	2011			11*	<25	13*		<25
	2012	3*		11*		13*	4*	
	2013	T*	7*	10*		7*	9*	
	2014	2*	2*	2*		6*	7*	
	2015	2*	4*	2*		1*	6*	
	2016	3*	17*	2*		11*	11*	
	2017	18*	9*	36		14*	11*	
	2018	**	16*	18*		12*	**	
	2019	**	8*	**		1*	**	
	2020	**	4*	**		T*	**	
	2021	**	4*	**		T*	**	
	2022	**	2*	**		2*	**	
	2023	**	7.7*	**		1.6	**	
	2024	**	5.5*	**		**	**	
2025	**	0.8*	**	**	**			

\*Has met criteria as stated above. \*\*Area has met all enhancement plan criteria. T=Trace<1

## **Planting Area E**

### Pre-existing conditions

Located in the Brown Pasture, planting area E is approximately 8.7 acres in size. The site is dominated by meadow vegetation with tree and shrub willow, as well as Fremont cottonwood (*Populus fremontii*) and black locust (*Robinia pseudoacacia*) scattered throughout the site. This area was burned during the Center Fire in 2011. Soils in this planting area are loam to sandy loam and sand in the near surface horizons.

### Desired condition

The recommended number of pole planting for area E is 3,036 pole plantings based on 12-foot spacing. If successful, planting in area E would increase habitat acreage and connect existing habitat to the south in the Brown Pasture to habitat to the north in the Apple Orchard Enclosure. Pre-fire habitat suitability was classified as low and following 6 to 10 years post planting habitat suitability will be medium.

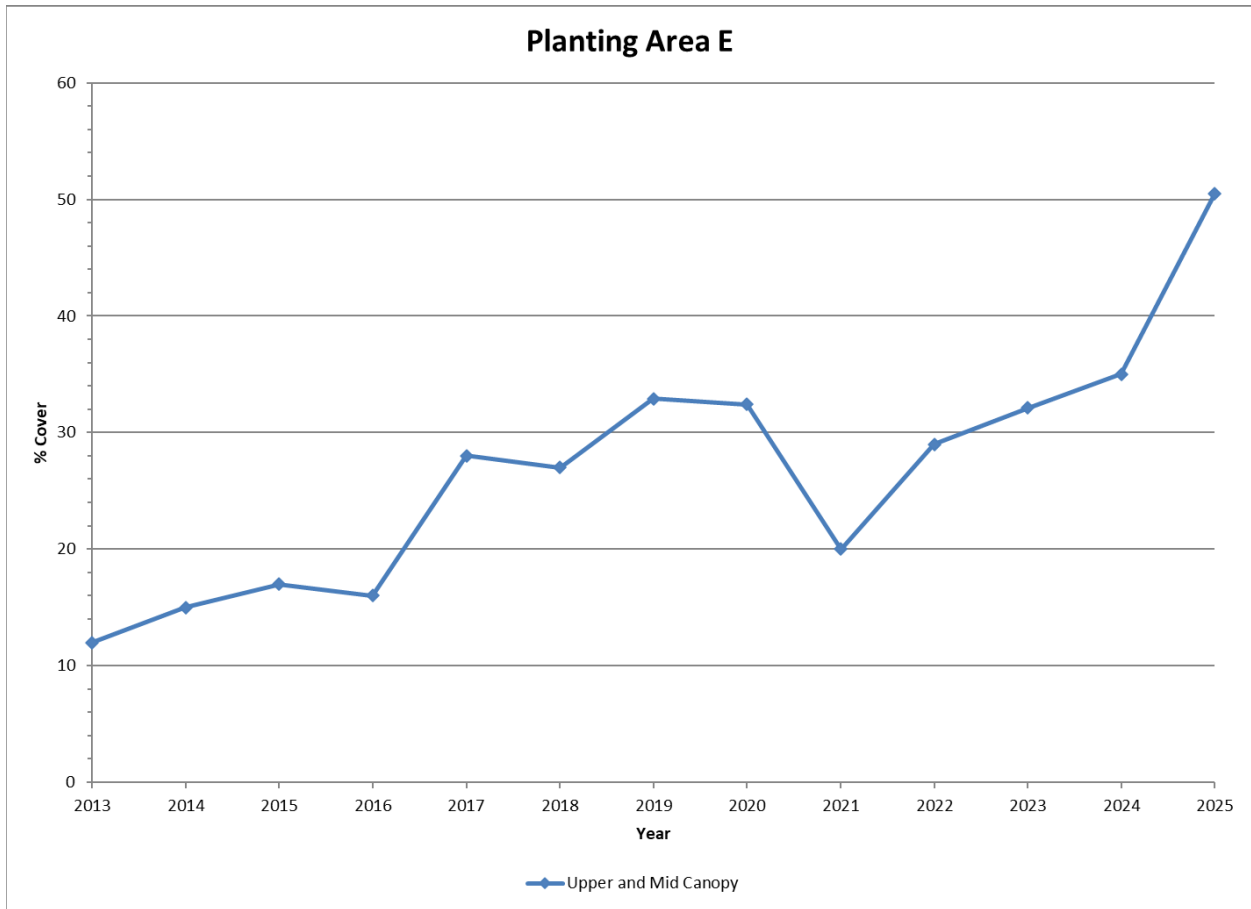
### Implementation Efforts

In 2012, initial pole planting was implemented in area E. The plan called for an estimate of 3,036 pole plantings but only 1,205 were planted due to 12 foot spacing from existing canopy and depth to ground water. The Enhancement Plan required that 222 of the original 1,205 pole plantings in area E be replanted in 2013. In 2014, an additional 260 pole plantings were planted to try and meet criteria by the sixth year following the initial planting. A total of 1,687 pole plantings were planted in area E over three years. In 2019, an additional 300 pole plantings were planted to fill in areas that had low survivability and to help meet criteria.

Current conditions

It has been 13-years since the initial planting in Area E. According to the Enhancement Plan, the criterion for upper and mid canopy cover is  $\geq 50\%$ . The criterion for nonnative canopy cover is  $< 5\%$  and nonnative understory cover is  $< 25\%$ . Until the growing season of 2021, upper and mid canopy cover had been slowly trending upward (Figure 3.3). Upper and mid canopy cover has increased from a low of 12% in 2013 to 50.5% in 2025. At 50.5%, this planting area has met the enhancement criterion of  $\geq 50\%$ .

The nonnative canopy cover in 2025 was 8.6% which is 3.6% over the criterion for this planting area. As reported there are mature stands of black locust that were not removed because they may not be able to be replaced with willows and cottonwoods due to the depth of ground water in the area. The nonnative understory cover value of 0.8% in 2025 has met the enhancement plan’s criteria of  $\leq 25\%$  for area E (Table 3.7).



**Figure 3.3. Percent Absolute Cover Values for 2013-24 for Area E**

Depth to Groundwater

As recommended in the 2017 Owens Valley Annual Report a depth to ground water analysis was completed on January 25, 2019 in planting area E (Figure 3.4). This analysis determined that ground water levels are suitable for replanting in this planting area. On the week of January 28, 2019 approximately 200 red willow (*Salix laevigata*) and 100 cottonwood (*Populus fremontii*) poles were harvested and placed into cold storage. Pole plantings were planted in the spring of 2019, before the 2019 monitoring season.

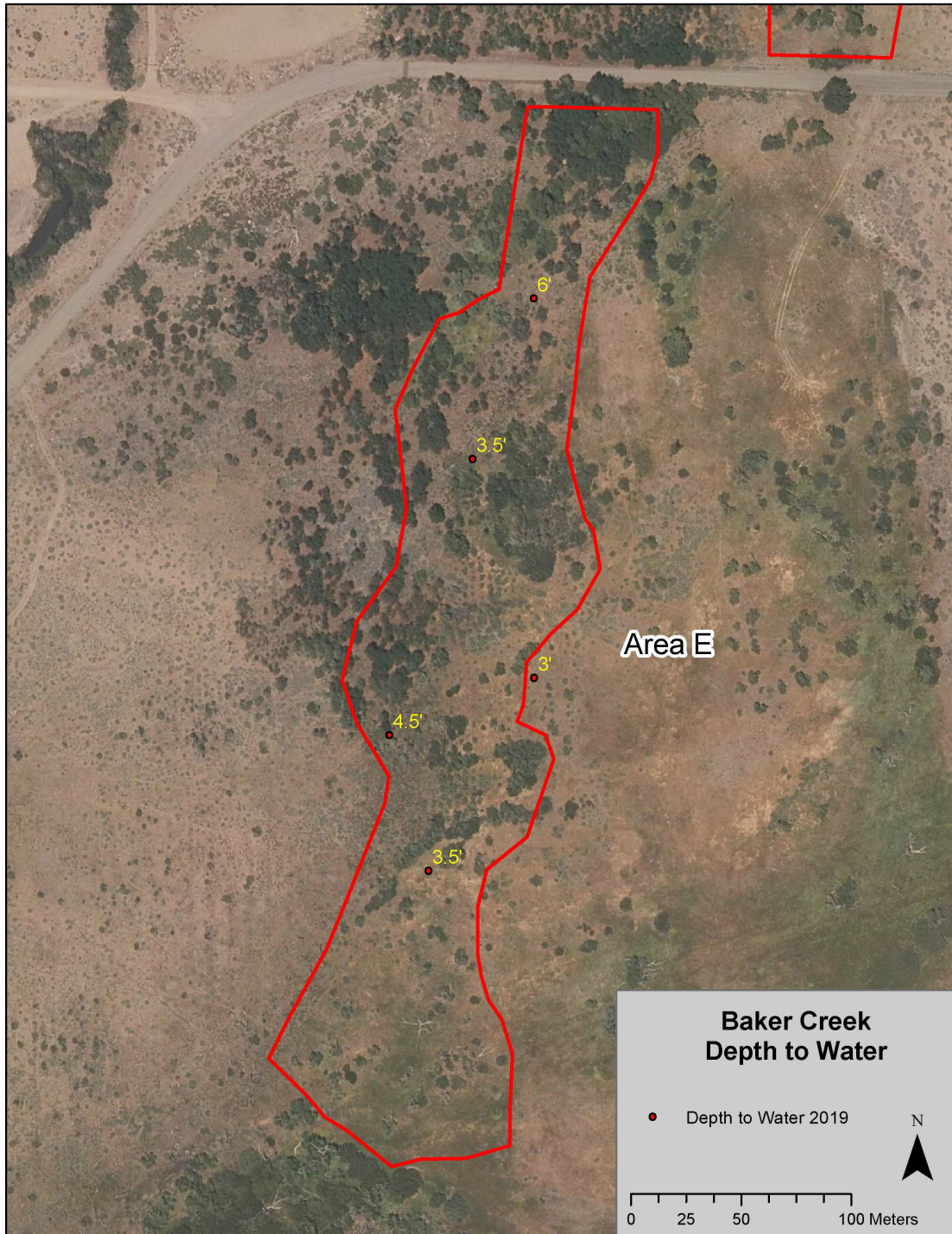


Figure 3.4. Depth to water for Planting Area E January 25, 2019

## Discussion

2025 marks the fifteenth year since pole planting at the Baker Creek Yellow-Billed Cuckoo Project was implemented. During this time, the Project area has experienced a major wildland fire, a five-year drought, and the wettest winter on record.

In 2017, planting areas D and H met the criteria stated in the Enhancement Plan and are complete. In 2018, planting area F met the criteria stated in the Enhancement Plan and is also complete. In 2023, planting area G met all non-native criteria and the 65% criterion for upper and mid canopy cover and is complete. In 2025, planting area E met all criteria besides the criterion for nonnative canopy cover.

## Recommendations

LADWP recommends discontinuing monitoring in all planting areas that have met the criterion in the Enhancement Plan. Additionally, it is recommended that no new pole plantings be planted in area E.

LADWP will continue monitoring planting area E until the area reaches the criteria described in the Enhancement Plan. LADWP will report on conditions of the remaining planting area (area E) in its 2027 Owens Valley Annual Report

**3.3. Mitigation Monitoring Reporting Program for Irrigation Project in the Laws Area**

POT. IMPACT		MITIGATION			MONITORING			
Summary of Impact	MM No.	Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
<b>Air Quality</b>								
Creation of dust during pipeline installation and ground preparation for planting.	M-1	Ground surfaces will be thoroughly wet prior to and during work to minimize dust.	To be implemented throughout the project as needed.	LADWP construction staff and/or LADWP lessee.	Water trucks will pre-wet construction areas and water as necessary throughout construction. Ground will be pre-irrigated prior to planting.	As needed throughout construction and/ or prior to planting.	Throughout the construction or agricultural period.	LADWP construction staff and/or LADWP lessee.
Groundwater pumping to supply water to the project could adversely affect groundwater dependent vegetation in the vicinity of the project and cause blowing dust.	M-2	Section III and Section IV of the Agreement between the County of Inyo and the City of Los Angeles and its Department of Water and Power on a Long-Term Groundwater Management Plan for Owens Valley and the County	To be implemented throughout the project as needed.	Inyo/Los Angeles Technical Group	Annual monitoring of the vegetation in the vicinity is being conducted.	During the period when groundwater pumping and water management practices could affect vegetation.	Annually during the growing season.	Inyo/Los Angeles Technical Group
<b>Hydrology and Water Quality</b>								
Groundwater pumping	M-3	Water Agreement	To be implemented throughout the project as needed.	Inyo/Los Angeles Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when groundwater pumping and water management practices could affect such vegetation.	During the period when groundwater pumping and water management practices could affect vegetation.	Annually during the growing season.	Inyo/Los Angeles Technical Group

## Mitigation Monitoring Reporting Program for Irrigation Project in the Laws Area (continued)

OT. IMPACT		MITIGATION			MONITORING			
Summary of Impact	MM No.	Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
Reducing the irrigation duty from 5 AF per acre to 3 AF per acre and of changing from flood irrigation to sprinkler irrigation.	M-4	Water Agreement	To be implemented throughout the work as needed.	Inyo/Los Angeles Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when groundwater pumping and surface water management practices could affect such vegetation.	During irrigation season	Annually during the growing season.	Inyo/Los Angeles Technical Group
<b>Biological Resources</b>								
Altering the flow in a ditch that carries water diverted from Coldwater Canyon.	M-5	Water Agreement	To be implemented throughout the work as needed.	Inyo/Los Angeles Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when surface water management practices could affect such vegetation.	During the period of changes in surface water management practices could affect vegetation.	Annually during the growing season.	Inyo/Los Angeles Technical Group
Altering the flow in Silver Canyon Ditch.	M-6	Water Agreement	To be implemented throughout the work as needed.	Inyo/Los Angeles Technical Group	Monitoring at each identified site will consist of one or more field visits during the period when surface water management practices could affect such vegetation.	During the period of changes in surface water management practices could affect vegetation.	Annually during the growing season.	Inyo/Los Angeles Technical Group
Growth of noxious weeds	M-7	LADWP or its lessee or lessees, in conjunction with the County's weed abatement program, will promptly treat or remove the weed.	To be implemented throughout the work as needed.	LADWP Watershed Resources Staff; LADWP Lessee; and/or Inyo County Agricultural Department.	Monitoring consists of field visits during the growing season.	Annually during the growing season.	Annually during the growing season.	LADWP Watershed Resources Staff; LADWP Lessee; and/or Inyo County Agricultural Department.

**Mitigation Monitoring Reporting Program for Irrigation Project in the Laws Area (continued)**

POT. IMPACT		MITIGATION			MONITORING			
Summary of Impact	MM No.	Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
<b>Cultural Resources</b>								
Archaeological investigations identified six previously unrecorded archaeological sites and 11 isolates within the project area.	M-8	Pipeline placement was to avoid identified sites; if new sites are encountered during implementation, work will be halted until an archaeologist can be consulted.	To be implemented throughout the work as needed.	LADWP Construction Manager	Construction personnel will monitor for unidentified sites during the progression of construction.	During construction activities.	Throughout the construction period.	LADWP Construction Manager

## MITIGATION MEASURES

### ***Mitigation Measure M-1***

Impact: Creation of dust during pipeline installation and ground preparation for planting.

Measure: Ground surfaces will be thoroughly wet prior to and during work to minimize dust.

LADWP currently applies water through irrigation systems at the revegetation sites as described in the previous section and additionally with water trucks for dust control if and where necessary.

### ***Mitigation Measure M-2 and M-3***

Impact: Groundwater pumping to supply water to the project could adversely affect groundwater-dependent vegetation in the vicinity of the project and cause blowing dust.

Measure: *1991 Agreement between the County of Inyo and the City of Los Angeles and its Department of Water and Power on a Long Term Groundwater Management Plan for Owens Valley and Inyo County (Water Agreement).*

Table 3.8 shows the vegetation cover in vegetation parcels within the Laws Wellfield as determined by LADWP. Data from the baseline period 1985 to 1987 (depicted as 1986 for simplicity) indicates estimates of vegetation cover in the parcels prior to implementation of the irrigation project in the Laws area. Data since 2004 are estimates of vegetation cover after implementation of the irrigation project in the Laws area. Lastly, Table 3.9 shows groundwater levels in the Laws wellfield before and after the start of pumping associated with irrigating the revegetation parcels.

**Table 3.3. Vegetation Cover in Selected Parcels within the Laws Wellfield**

Year	LAW030	LAW035	LAW043	LAW052	LAW062	LAW063	LAW065	LAW070	LAW078	LAW082	LAW085	LAW105	LAW107	LAW112	LAW120	LAW122	LAW137
1986	23	34	61	28	21	11	10	59	52	16	30	26	47	20	26	60	22
2004	26	3	5	5	5	9	7	6	36	4	5	35	46	17	33	64	19
2005	30	14	13	14	11	17	8	8	49	5	12	49	68	36	41	73	33
2006	51	17	10	11	14	15	11	18	54	10	21	48	71	33	47	78	32
2007	40	11	14	9	16	19	12	20	58	6	26	44	79	38	48	75	24
2008	39	13	18	15	23	26	18	21	67	9	35	68	80	49	48	70	27
2009	36	2	8	15	12	14	12	11	69	8	29	41	90	40	50	78	20
2010	31	12	11	6	12	15	10	20	65	12	31	58	81	31	52	68	27
2011	35	17	20	16	17	25	20	23	53	10	14	43	65	32	47	77	28
2012	22	4	7	8	10	12	7	10	35	8	14	43	54	33	35	60	21
2013	24	2	3	4	5	6	5	6	27	6	6	27	45	14	39	45	17
2014	12	1	3	4	4	6	4	3	23	5	5	19	31	11	26	42	14
2015	13	1	6	4	2	4	3	4	23	4	4	26	35	8	30	26	14
2016	17	1	4	3	2	5	2	3	16	6	6	21	46	10	21	32	16
2017	24	6	14	5	4	12	8	12	35	8	13	33	59	20	41	51	23
2018	33	5	10	12	9	14	9	11	45	14	17	38	67	20	49	61	23
2019	23	17	17	13	9	19	12	39	41	12	17	44	68	36	55	61	24
2020	32	3	13	15	10	16	9	10	44	17	20	35	62	36	55	63	21
2021	22	2	5	6	8	14	10	5	35	8	16	35	59	23	31	55	15
2022	19	3	9	9	9	15	8	7	28	8	15	21	43	22	32	33	19
2023	42	14	18	16	18	22	17	19	50	11	14	39	65	28	62	66	30
2024	41	34	22	22	22	27	21	50	60	20	30	47	67	40	80	78	35
2025	29	10	20	17	18	22	16	22	53	26	21	26	69	21	44	60	26

**Table 3.4. April Depth to Water (in feet) for Test Holes in the Laws Wellfield**

Year	Test Hole				
	T107	T436	T438	T490	T492
2004	30.1	10.1	11.6	14.6	31.9
2005	31.9	10.2	8.9	14.7	31.5
2006	18.1	4.5	3.7	13.2	24.0
2007	21.1	5.3	6.3	10.2	23.1
2008	25.1	7.3	8.6	12.5	27.6
2009	28.0	8.8	9.4	13.8	29.1
2010	30.8	9.5	11.4	13.6	31.0
2011	31.5	9.6	9.1	13.2	32.3
2012	31.9	10.1	9.6	10.9	32.7
2013	33.1	11.1	12.0	13.2	32.7
2014	34.4	11.8	12.5	15.1	33.9
2015	35.5	12.7	13.0	16.0	36.6
2016	35.8	12.8	13.2	16.5	36.2
2017	35.8	10.4	8.7	16.0	33.3
2018	22.9	5.1	5.5	8.6	21.9
2019	27.2	6.4	5.1	9.2	26.3
2020	22.9	4.9	4.8	7.3	22.9
2021	26.5	7.2	10.3	12.2	30.0
2022	29.2	7.9	11.5	14.4	30.4
2023	24.8	5.0	9.2	11.6	23.2
2024	15.5	3.2	3.4	2.5	11.3
2025	18.4	4.2	5.6	4.9	19.5

**Mitigation Measure M-4**

Impact: Reducing the irrigation duty from 5 AF per-acre to 3 AF per acre and of changing from flood irrigation to sprinkler irrigation.

Measure: Water Agreement

LADWP evaluates pasture condition using the Natural Resource Conservation Service (NRCS) Pasture Condition Assessment (Cosgrove et. al. 1991). This protocol is designed to optimize plant and livestock productivity while minimizing detrimental effects to soil or water resources. All irrigated pastures are evaluated every three years. Lessees are required to maintain scores above 80% which equates to “good condition”.

**Mitigation Measure M-5**

Impact: Altering the flow in a ditch that carries water diverted from Coldwater Canyon.

Measure: Water Agreement

Diversions from Coldwater Canyon Ditch are utilized for irrigation of the Seed Farm. During operation, approximately one-quarter of the total flow remains in the ditch.

Diversions for irrigation from Coldwater Canyon Ditch continued in 2025. Periodic examinations were conducted along the ditch throughout the growing season. These examinations did not indicate any signs of vegetation stress.

**Mitigation Measure M-6**

Impact: Altering the flow in Silver Canyon Ditch.

Measure: Water Agreement

Diversions from Silver Canyon Ditch are no longer utilized for irrigation of Parcels LAWS 90, 94, and 95. Well 422 supplies irrigation water for these parcels.

**Mitigation Measure M-7**

Impact: Growth of State-rated A or B noxious weeds in the project area.

Measure: LADWP or its lessee or lessees, in conjunction with Inyo County’s weed abatement program, will promptly treat or remove the weed.

Surveys were conducted on the irrigation project in the Laws area for noxious weeds during the 2025 growing season. No A or B listed noxious weeds were found. The lessee treats weeds through a combination of grazing and burning as necessary.

**Mitigation Measure M-8**

Impact: Archaeological investigations identified six previously unrecorded archaeological sites and 11 isolates within the project area.

Measure: Pipeline placement was to avoid identified sites; if new sites are encountered during implementation, work will be halted until an archeologist can be consulted.

No cultural resources have been encountered during construction or operation of the irrigation project in the Laws area

### 3.4. Irrigation Project in the Big Pine Area (Big Pine Ditch System)

POT. IMPACT		MITIGATION			MONITORING			
Summary of Impact	MM No.	Measure	Timing	Responsibility	Method	Period	Frequency	Responsibility
<b>Hydrology and Water Quality</b>								
The cumulative effect of groundwater pumping from Well W415, the new Bell Canyon well, as proposed in the project, in combination with the operation of other wells in the Big Pine area could cause significant adverse impacts to groundwater dependent vegetation, other vegetation, or non-LADWP wells in the area.	M-1	Water Agreement	To be implemented throughout the project as needed.	Inyo/Los Angeles Technical Group	A monitoring site will be developed by the Inyo/Los Angeles Technical Group as called for in the Inyo/Los Angeles Water Agreement to manage operation of each well.	During the period when groundwater pumping is needed for the project.	As decided by the Inyo/Los Angeles Technical Group, consistent with the Water Agreement.	Inyo/Los Angeles Technical Group

Well 415 has been drilled and equipped but is not yet in operation. The Bell Canyon Well has not yet been drilled. In Spring of 2020, ICWD and LADWP agreed upon a 6-month pumping test and associated monitoring for W415. The test has yet to occur.

### 3.5. LADWP OTHER COMMITMENTS

Table 3.10. provides title, legal reference, provision, progress to date, and current status on each of LADWP's other commitments listed on Table 3.2.

Again, categories describing status are:

*Complete:* Project has no additional commitments required (no water allotment or other financial or environmental mitigation; no continual monitoring and reporting),

*Ongoing as necessary/required:* These measures are only applied when necessary (monitoring and reporting for mitigation measures for new projects, construction, etc.),

*Implemented and ongoing:* Project is fully implemented and is currently meeting goals; however, there may be ongoing water or financial commitments or monitoring and reporting requirements,

*Fully implemented but not meeting goals:* Project is fully implemented but has not yet met prescribed goals or success criteria,

*Not fully implemented:* Project under development or under construction, but not fully implemented.

**Table 3.5. LADWP Other Legal Commitments**

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date					
1	Aerial Photo Analysis	MOU Section III.E	By June 2000, LADWP, the County, and experts in aerial photography interpretation will conduct a study analyzing existing air photos of the Owens Valley to evaluate the merits of using air photos in monitoring vegetation in the valley, to determine the feasibility of using air photos to analyze and refine the vegetation map data base, and to provide recommendations on how aerial photography, or other remote sensing techniques, could be used to monitor vegetation conditions and changes. If feasible and cost-effective relative to other field monitoring techniques, recommendations will be implemented.	The deadline was extended by the 1997 MOU Parties. In January 2002, consulting firm Ecosat Geobotanical Surveys, Inc. completed reports addressing the 1997 MOU requirements. Complete.	X				
2	Annual Report on the Owens Valley	MOU Section III.H	LADWP and the County will prepare an annual report describing environmental conditions in the Owens Valley and studies, projects, and activities conducted under the Inyo-Los Angeles Agreement and the MOU. Copies of the report will be distributed to the other Parties and made available to the public. The report will be released on or about May 1 of each year.	ICWD has prepared annual reports since 1991. LADWP has released annual reports since 2001. Presently, annual reports are written separately by each agency due to timing constraints; LADWP must issue their annual report in conjunction with their Annual Operations Plan near May 1 each year. ICWD is not required to meet this timeline for their report.			X		
3	BLK 094 Burns	Proposed Resolution of the Blackrock 94 Dispute (2014)	To enhance certain alkali meadows by reversing the encroachment of woody shrubs into such meadows, LADWP will perform prescribed burns on approximately 665 acres of shrub encroached alkali meadows in the Owens Valley. Recognizing CALFIRE and GBUAPCD will require that regulatory permits be issued prior to burning, burning the entire 665 acres may take several years; however, if permits and conditions allow, LADWP will conduct the burning of the 665 acres within 5 years of the date of this Settlement Agreement. The burning of the 665 acres will be conducted as described in LADWP's land management plans.	LADWP conducted the following burns with the assistance from CALFIRE to meet this commitment: White Meadow Burns (2015, 2016), 167 acres; Long Pond Burn (2019), 318 acres; Calvert Burn (2021), 193 acres. LADWP's prescribed burn commitment has been met. Project is complete.	X				
4	Cooperative Studies	Water Agreement Section IX	It is recognized that additional cooperative studies related to the effects of groundwater pumping on the environment of the Owens Valley are necessary. The reasonable costs of the studies implemented under the Stipulation and Order or the Green Book shall be funded by the LADWP. If necessary, such funding will be in addition to funds provided under section XIV (Financial Assistance).	Several cooperative studies have been performed to date. Currently, LADWP and ICWD are conducting a cooperative study with consulting firm Formation Environmental to evaluate the utility of remote sensing technology in Owens Valley vegetation monitoring. Information gathered may be used to improve upon current methods of monitoring described in the Green Book.			X		

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date					
5	Dispute Resolution	Water Agreement Section XXVI	The agreement provides a process for resolving disputes between the County and Los Angeles regarding issues related to the agreement or the Green Book.	The County and Los Angeles use the Dispute Resolution process identified in the Water Agreement as needed. The County and Los Angeles entered into a Settlement Agreement on June 25, 2018 as resolution to the dispute regarding issues surrounding W385R pump test and the status of the Five Bridges Mitigation Project. The pump test was conducted December 2019-February 2020.		X			
6	Dispute Resolution and Litigation	MOU Section VI	The parties to the 1997 MOU will maintain frequent, informal communications to minimize disagreements. In the event of a dispute among the parties over the 1997 MOU, the parties will meet and confer before any litigation concerning the dispute may be commenced. The parties may elect to retain the services of a mutually acceptable impartial mediator/facilitator to assist in dispute resolution. Any litigation arising out of the 1997 MOU is to be commenced in the Inyo County Superior Court.	The MOU Signatory Group has met regularly and on an as needed basis. In 2023 and 2024, there were multiple meetings between the MOU parties, ICWD and DWP discussing the status of revegetation mitigation projects.		X			
7	Enhancement/Mitigation Projects	Water Agreement Section X	All existing E/M projects will continue unless the Standing Committee agrees to modify or discontinue a project. Periodic evaluations should be made by the Technical Group. Enhancement/mitigation projects shall continue to be supplied by enhancement/mitigation wells as necessary. New enhancement projects will be implemented if such projects are approved by the Standing Committee.	All Enhancement/Mitigation Projects defined in the 1991 EIR are complete or are implemented/ongoing.			X		
8	Exchange of Information and Access	Water Agreement Section XVII	The County and LADWP shall make any data or information in its possession that reasonably pertains to purposes of the Water Agreement available to the other party with reasonable notice.	LADWP and ICWD exchange data and information as necessary per the Water Agreement.			X		
9	Financial Assistance-Big Pine Ditch System	Water Agreement Section XIV.E	LADWP is to provide up to \$100,000 for reconstruction and upgrading of the Big Pine ditch system. LADWP is to supply up to 6 cfs to the ditch system from a new well to be constructed west of Big Pine.	The Big Pine Irrigation and Improvement Association has implemented all Phases of the project. LADWP has provided \$99,745 of the \$100,000 committed to the project. The Improved Big Pine Ditch System has been in operation since 2005. After test pumping and identification of a monitoring site for Well 415 to supply supplemental water and makeup water for the ditch system, a contract will be considered for the installation of another well in Bell Canyon to provide additional water for the project.			X		
10	Financial Assistance-General Financial Assistance to the County	Water Agreement Section XIV.D	LADWP is to make an annual payment to the County to assist the County in providing services to its citizens. The first payment shall be \$1,221,685 minus previous contributions made during the 1991-1992 fiscal year. The annual payment thereafter is to be adjusted upward or downward each year in accordance with a formula in the State Constitution for an assessment of Los Angeles-owned property in Inyo County.	Los Angeles has provided these annual payments to the County since 1991, and provided \$6,353,675 in 2025. Funds provided by Los Angeles have been deposited into the County's General Fund and expended on County services as directed by the Board of Supervisors. LADWP has paid the County more than \$88 million since 1991 for this purpose.			X		

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date					
11	Financial Assistance-Park & Environmental Assistance to City of Bishop	Water Agreement Section XIV.F	LADWP is to make an annual payment to the City of Bishop to assist the City in maintaining its park and for other environment-related activities. The payment of \$125,000 is to be adjusted upward or downward each year in accordance with the consumer price index, not to exceed 5% in any year. The County shall make an annual payment to the City of Bishop in an amount equal to the payment made by LADWP.	Los Angeles has provided annual payments to the City of Bishop, and provided \$249,134 in 2025. LADWP has paid the City of Bishop \$5,327,475 since 1997 for this purpose. The County has made its required payment under this section of the agreement.			X		
12	Financial Assistance-Park Rehabilitation, Development, & Maintenance	Water Agreement Section XIV.B	LADWP shall provide funding to the County for rehabilitation of existing County parks and campgrounds, development of new County campgrounds, parks, and recreational facilities and programs, and for the annual operation and maintenance of existing and new facilities and programs on lands owned by the City of Los Angeles.  LADWP is to provide up to \$2 million to the County for these purposes. LADWP is to make an annual payment of \$100,000 (adjusted upward or downward in accordance with the consumer price index not to exceed 5%) by July 10 of each year. The annual funding will be placed in trust by the County and shall be used only for the purposes of existing and new parks, recreational facilities and programs. If at any time \$300,000 or more is accumulated in the trust, LADWP shall not be required to make an additional annual payment until the trust is less than \$100,000 as of June 30 any given year.	LADWP has provided annual payments to The County for parks operation and maintenance activities including a payment in 2025 of \$203,294 for a total of \$4,234,914.  Combined with the \$1,831,914 paid to The County for parks rehabilitation during the first 10 years of the Stipulation and Order, LADWP has paid the County \$6,066,828 since 1997 under this provision of the Agreement.			X		
13	Financial Assistance-Salt Cedar Control	Water Agreement Section XIV.A	LADWP shall provide funding to the County to implement a Saltcedar Control Program: a total of \$750,000 for the first three years of the program; thereafter, \$50,000 per year for annual maintenance and control efforts (adjusted upward or downward in accordance with the consumer price index not to exceed 5% in any year). The funds are to be placed in trust with the County and will be used only for the purposes of salt cedar control. If at any time, \$150,000 or more is accumulated in trust, LADWP shall not be required to make an annual payment until fund in trust are less than \$50,000.	ICWD initiated the Saltcedar Control Program in 1997. LADWP began making required payments at that time. In 2025, LADWP paid ICWD \$95,233 for this work. LADWP has paid the County \$2,586,655 since 1997 under this provision of the Water Agreement.  In 2004, as part of a Wildlife Conservation Board (WCB) grant, LADWP provided \$56,000 for Saltcedar control, and the balance of the program was funded from a WCB grant for \$490,000 obtained by the County working in cooperation with LADWP. A second grant from the WCB for \$560,000 was received in February 2004. A third grant for \$600,000 from the WCB was received by ICWD in November 2007.			X		

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date					
14	Financial Assistance-Water and Environmental Activities	Water Agreement Section XIV.C	LADWP shall assist the County in funding water and environmentally related activities by making an annual payment to the County. The amount of the first payment shall be \$820,580. The annual payment is to be adjusted upward or downward each year in accordance with the consumer price index and shall be made by July 10th each year. The maximum adjustment shall not exceed 5% in any year. Annual funding has been placed in trust with the County and shall be used only for purposes of operation and maintenance of water and environmentally related activities. If at any time \$1,500,000 or more is accumulated in the trust, LADWP should not be required to make an additional payment until the funds in the trust are less than \$820,580 as of June 30 of any year.	Los Angeles has provided annual payments to the County, and provided \$1,894,964 in 2025. Funds provided by Los Angeles have been expended to fund ICWD. LADWP has paid the County \$45,185,180 since 1988 for this purpose.			X		
15	Financial Provisions	MOU Section IX	Within 90 days after the discharge of the writ, the County will pay the sum of \$53,000 to Sierra Club, and the sum of \$30,000 to the Owens Valley Committee (OVC) for professional services in the development and preparation of the MOU.	The specified amounts have been paid by the County to the identified parties.	X				
16	Fish Slough	MOU Section IV	The Parties acknowledge that LADWP and CDFW have reached agreement concerning threatened and endangered species that involves land management and other activities in the Fish Slough area of Mono County. The agreement is to be memorialized in a letter from LADWP to CDFW.	A letter agreement was never memorialized; however, LADWP has worked closely with CDFW on the Fish Slough Area of Critical Environmental Concern (ACEC) for many years.			X		
17	Groundwater Management	Water Agreement Section II	The County and LADWP are to manage water resources within the County to avoid certain described decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in the County.	By agreement of the Standing Committee, implementation of groundwater management pursuant to the Agreement commenced in 1987.			X		
18	Groundwater Pumping on the Bishop Cone	Water Agreement Section VII	LADWP pumping on the Bishop Cone must be in strict adherence to the provisions of the "Hillside Decree." Before LADWP may increase groundwater pumping on the Cone, or construct new wells on the Cone, the Technical Group must agree on a method for determining the exact amount of water annually used on Los Angeles owned lands on the Cone. The agreed upon method shall be based on a jointly conducted audit of such water uses.  LADWP's annual groundwater extractions from the Cone shall be limited to an amount not greater than the total amount of water used on Los Angeles owned lands on the Cone during that year.	The Standing Committee adopted the Bishop Cone audit procedure and the audit has been conducted since 1996. In 1998, the Superior Court entered a "Memorandum of Judgment" in Matlick vs. City of Los Angeles which reaffirmed LADWP's pumping practices on the Bishop Cone.  Revised audit methods were agreed upon by the County and LADWP in 2016 because past audits did not account for stockwater use and ditch losses on the Bishop Cone. Audits beginning with the 2015-16 runoff year reflect all sources of water supplied to the Bishop Cone.			X		

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date					
19	Groundwater Recharge Facilities	Water Agreement Section VIII	LADWP may construct groundwater banking and groundwater recharge facilities in the Owens Valley and in Rose Valley. (The EIR describes certain groundwater recharge facilities in Laws, Big Pine, and Rose Valley.) Development of such facilities are subject to agreement by the Standing Committee.	These facilities have not been constructed to date and are not under development at this time.		X			
20	Habitat Conservation Plan	MOU Section III.B	LADWP, in consultation with the parties to the 1997 MOU and others, is to identify areas of City-owned land, which are not included in the LORP planning area, and develop plans for the identified areas to remedy problems caused by livestock grazing and other uses of the land. Priority will be given to riparian areas, irrigated meadows and sensitive plant and animal habitats. The plans will provide for the continuation of sustainable uses (including recreation, livestock grazing, agriculture, and other activities) will promote biodiversity and a healthy ecosystem, and will consider the enhancement of threatened and endangered species habitats. Habitat conservation plans for Threatened and Endangered Species will be incorporated if and where appropriate.	LADWP finalized the <i>Habitat Conservation Plan for City lands in Inyo and Mono Counties</i> in 2015. On October 7, 2015 the United States Fish and Wildlife Service (USFWS) announced the availability of the Draft Low Effect Habitat Conservation Plan (draft HCP) for LADWP's operations, maintenance, and management activities on City land in Inyo and Mono Counties, California. The comment period ended on January 15, 2016. A total of nine comment letters were received from the public and other governmental agencies. LADWP and USFWS staff have completed responses to comments and developed the final HCP. Complete as of April 2017.		X			
21	Haiwee Reservoir	Water Agreement Section XIII	The County and Los Angeles will develop a recreational plan for South Haiwee. The recreation plan will be implemented and operated by the County or a concessionaire. Any plan must take into account Los Angeles' operating and security needs.	A recreational plan has not been developed. A security audit was performed following the September 11, 2001 national security incident. This audit concluded that due to a potential security threat to a municipal water source, Haiwee Reservoir should be closed to the public. A Negative Declaration was filed to close Haiwee Reservoir on December 16, 2004. The facility was officially closed to the public in 2005.		X			
22	Inventory of Plants and Animals at Spring and Seeps (outside LORP Planning Area)	MOU Section III.C	Within 36 months of the discharge of the writ, DWP and the County will jointly complete an inventory of plants and animals at existing springs and seeps and associated wetlands on lands owned by the City of Los Angeles within the portion of the Owens River watershed located in the County that is not included in the LORP Planning area.	LADWP completed data collection for spring and seep discharge. Environmental consulting firm Ecosystem Sciences completed the inventory of plants and animals from 1998-2000.		X			
23	Laws Area Potential Mitigation- Consideration by Standing Committee	1991 EIR Impact 10-18	Approximately 640 acres in the Laws area have a very low density of vegetation cover. The loss or reduction of vegetation cover in these areas was caused by the abandonment of agriculture following purchase of lands by Los Angeles, wet year water spreading from the McNally Canals by LADWP during the pre-project and project periods, wildfire, groundwater pumping, and other factors. The primary cause of the loss or reduction of the vegetation is, therefore, not a result of the project. Although these conditions on these lands are not a result of the project, because of the existing sparse vegetation conditions, these lands will be considered by the Standing Committee for selective mitigation, which would be compatible with water spreading and groundwater recharge activities during wet years.	These lands have not been presented to the Standing Committee to date for selective mitigation. LADWP continues to implement the defined mitigation requirements prescribed in the 1991 EIR and other guiding legal documents.		X			

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	Commitment	Legal Reference	Provision	Progress to Date					
24	Legislative Coordination	Water Agreement Section XVI	Except under certain circumstances, the County and LA are to refrain from seeking or supporting any legislation, administrative regulation, or litigation that would weaken or strengthen local or state authority to regulate groundwater or that would affect any provision of the agreement.	The legislative coordination policy has been followed by both the County and Los Angeles to date.			X		
25	LORP Agency Consultation and Public Involvement	MOU Section II.D	Consultation with the Parties, agencies, DWP ranch lessees, and the public concerned with the development of the LORP Plan will occur throughout the development and implementation of the LORP Plan.	The MOU Parties, agencies, LADWP ranch lessees, and the public were consulted during the development of <i>Ecosystem Sciences' 2002 LORP Ecosystem Management Plan</i> .	X				
26	LORP EIR	MOU Section II.F	DWP as the lead agency and the County as responsible agency will jointly prepare an EIR on the LORP. A draft LORP EIR will be released within 36 months of the discharge of the writ, and a final LORP EIR will be completed and presented for certification as soon as possible following the release of the draft. Extension of these deadlines may be granted by unanimous consent of the Parties or due to circumstances beyond the control of the DWP and/or the County.	The LORP DEIR was released November 1, 2002. The public comment period concluded January 14, 2003. The Final EIR was approved by the Board of Water and Power Commissioners in July 2004 and the County Board of Supervisors in November 2005. LADWP received all the necessary permits for implementation by January 9, 2006 and construction began immediately thereafter.	X				
27	LORP Implementation	MOU Section II.H	DWP will commence the baseflow of 40 cfs in the river channel by the 72nd month after the discharge of the writ unless circumstances beyond DWP's control prevent the completion of the pumpback system and/or the commencement of the baseflow within the 72 month period. DWP will commence implementation of the other physical features of the LORP upon the certification of the LORP EIR.	The LORP DEIR stated that the baseflow would not commence on June 13, 2003. The Final EIR was completed in June 2004 per the February 13, 2004 Stipulation and Order. Phase I flow releases began December 6, 2006. Phase II releases of 40 cfs were achieved in February 2007, and were certified by the court in July 2007. Additional punitive conditions involving maintaining flows and recording of flows were added to the 2007 Stipulation and Order following certification of the 40 cfs base flows.	X				
28	LORP Monitoring and Adaptive Management Plan	MOU Section II.E	Monitoring sites and water flow gaging stations will be identified and a program for data collection, analysis, and reporting will be described as part of this plan. Should the reported information reveal that adaptive modifications to the LORP management are necessary to ensure the successful implementation of the project, or the attainment of the LORP goals, such adaptive modifications will be made.	Environmental consulting firm Ecosystem Sciences finalized the LORP Monitoring and Adaptive Management Plan (MAMP) in 2008. Monitoring follows that prescribed in this plan and LADWP and ICWD generate a joint annual report each year that contains monitoring results and adaptive management recommendations. The plan expired in 2022 and is now complete.	X				
29	LORP Permits Approvals and Licenses	MOU Section II.I	The Parties will work cooperatively with LADWP and/or the County in obtaining, and will support the issuance of, any permits, approvals, licenses, or agreements which are required by law and/or are necessary for the implementation of the LORP.	Permits were received from the following agencies to facilitate implementation of the LORP: California State Water Resources Control Board (CWRCB), California Department of Fish and Wildlife (CDF&W), California State Lands Commission (CSLC), US Army Corps of Engineers (ACOE), California Department of Transportation (CalTrans), and the Bureau of Land Management (BLM).	X				
30	LORP Plan	MOU Section II.A	LADWP and the County will direct and assist Consultants in the preparation and implementation of the LORP ecosystem management plan. This plan will apply to all lands within the LORP Planning area and will address the four physical features of the LORP.	The Lower Owens River Project Ecosystem Management Plan was authored by environmental consulting firm Ecosystem Sciences in 2002. This document was prepared for LADWP and ICWD per the 1997 MOU.	X				

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date					
31	LORP Planning Area- Inventory of Plants and Animals at Spring and Seeps	MOU Section III.A.2	An inventory of plants and animals at existing springs and seeps and associated wetlands on lands owned by the City of Los Angeles located within the LORP Planning Area will be conducted by Consultants.	Environmental Consulting firm Ecosystem Sciences completed the inventory and submitted results to the MOU Parties in June 2001.	X				
32	LORP Pumpback System	MOU Section II.G	Construction of a pumpback system will commence as soon as possible following the certification of the LORP EIR and will proceed as expeditiously as possible. Construction should be completed within 3 years after it is commenced.	The Pumpback Station was constructed prior to flow releases associated with project implementation in December 2006.	X				
33	Lower Owens Off River Lakes and Ponds	MOU Section II.C.3	Off-river lakes and ponds in the LORP area will be maintained and/or established through flow and land management to provide habitat for fisheries, waterfowl, shorebirds, and other animals. These habitats will be as self-sustaining as possible.	Several of these ponds were originally supplied water in the 1980s as part of the Lower Owens River Rewatering (E/M) Project. Water supply to the ponds continues as managed under the LORP.			X		
34	Lower Owens River (financial commitment)	Water Agreement Section XII	Los Angeles will pay the costs of implementing the LORP. the County will repay Los Angeles one half of the project costs up to maximum of \$3.75 million. Any funds provided for the project from sources other than Los Angeles will be an off-set against the County's repayment obligation. Los Angeles will pay the annual costs of operating the pumpback system. the County and Los Angeles will each pay one half of the other costs of the project.	As part of a negotiated agreement with the County to not pursue funding from the United States Environmental Protection Agency (USEPA), LADWP has credited the County \$5.1 million to cover the County's \$3.75 million obligation for LORP implementation with the remaining \$1.35 million to be used by the County towards post implementation costs. LADWP and the County continue to share costs of operations and maintenance of the LORP per the LORP Post Implementation Agreement.			X		
35	Lower Owens River Delta Habitat Area	MOU Section II.C.2	This feature provides for the enhancement and maintenance of approximately 325 acres of existing habitat and the establishment and maintenance of new habitat consisting of riparian areas and ponds suitable for shorebirds, waterfowl, and other animals. An annual average of approximately 6 to 9 cfs will be released below the pumpback system to supply this area.	Releases for the Delta Habitat Area occur simultaneously with the 40 cfs baseflow. No construction was necessary for this component of the project other than the completion of the Pumpback Station. An interim flow regime was established with a 5-year timeline. This interim flow regime has been extended another year and will expire on March 31, 2026, but will likely be extended on an annual basis moving forward.			X		

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36	Lower Owens River Project 1500-Acre Blackrock Waterfowl Habitat Area (BWMA)	MOU Section II.C.4	<p>The goal of this component is to maintain this waterfowl habitat area to provide the opportunity for the establishment of resident and migratory waterfowl populations and to provide habitat for other 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.</p> <p>In average and above runoff years, approximately 500 acres within an overall project area of 1500 acres will be flooded to provide habitat for resident and migratory waterfowl and other native species. 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.</p>	All preliminary construction work identified for implementation of the Blackrock Waterfowl component is complete. The Blackrock Waterfowl Habitat Area has been managed in accordance with the LORP EIR and 1997 MOU since implementation. In Spring 2021, the Inyo/Los Angeles Standing Committee adopted a 5-year Interim Management and Monitoring Plan to manage the BWMA with seasonal flooding and moist soil management to further improve habitat for wildlife. LADWP and the County implemented the first year of the Interim Plan in 2021-2022 and will expire on March 31, 2026, but will likely be extended on an annual basis moving forward.			X		
37	Lower Owens River Riverine- Riparian System	MOU Section II.C.1	A continuous flow will be established and maintained in the river channel from at or near the intake structure which diverts the Owens River into the Los Angeles Aqueduct to a pumpback system located near the river delta which will convey water from the river to the Los Angeles Aqueduct. A base flow of approximately 40 cfs from at or near the Intake to the pumpback system will be maintained year round. Additionally, a seasonal habitat flow of up to 200 cfs will be released annually based on estimated runoff in the Owens River watershed. Any water in the river channel that is above the amount specified in this MOU for release below the pumpback system to supply the Owens River Delta Habitat Area will be recovered by the pumpback system for delivery to Los Angeles.	The Lower Owens River Project was implemented in 2006 and project base flows were achieved in July 2007 throughout the system. Seasonal habitat flows are released annually according to the guidelines provided in the LORP EIR (2004).			X		
38	Mitigation Plans for Impacts Identified in the 1991 EIR and the Water Agreement	MOU Section III.F	The Technical Group will prepare mitigation plans and implementation schedules for all areas for which on-site mitigation measures have been adopted in the 1991 EIR. The plans will be completed by June 1998. In accordance with the EIR, on-site mitigation will be accomplished through revegetation with native Owens Valley species and through establishment of irrigation.	To date, projects associated with all mitigation measures have been implemented, satisfying the relevant mitigation measures found in the 1991 EIR. Project and plan enforcement is within the jurisdiction of the LTWA and the Technical Group through dispute resolution. Some projects are complete, some are implemented and ongoing, and some are implemented but not yet meeting goals. Refer to Table 3.1 for current status of each of these projects.			X		
39	New Wells & Production Capacity	Water Agreement Section VI	LADWP's groundwater pumping capacity may be increased to provide increased operational flexibility and to facilitate rotational pumping. The Department may replace existing wells and construct new wells in areas where hydrogeologic conditions are favorable, and where the operation of that well will not cause a change in vegetation that would be consistent with these goals and principles.	<p>The Water Agreement and 1991 EIR describe 15 new wells that LADWP proposes to construct in the Owens Valley. LADWP has constructed 6 replacement wells on Bishop Cone and one of the 15 new wells allowed under the Water Agreement (located in Lone Pine). The Technical Group must establish management for the well before it can be operated.</p> <p>Development of two new wells on the Bishop Cone (B2 and B5) is presently on hold. LADWP is evaluating potential new well development in the Owens Valley.</p>					X

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	Commitment	Legal Reference	Provision	Progress to Date					
40	Owens River Recreational Use Plan	Water Agreement XIV.B	As part of the parks rehabilitation program, the County is to develop a plan for recreational use and management of the Owens River from Pleasant Valley Reservoir to the Owens River delta as one of the first new programs.	<p>ICWD initiated this project in 2007 by forming a collaborative group to gather preliminary information. In 2010, consulting firm <i>MIG Consultants</i> were selected to write the LORP Recreational Use Plan. A Draft Recreation Use Plan was released February 2012. This plan was presented to the Standing Committee and the public in October 2012. Next steps include further review of the draft plan, CEQA evaluation and obtaining permits prior to implementation of the project.</p> <p>The County is pursuing the development of the Owens River Water Trail in 6 river miles of the LORP. ICWD obtained a \$500,000 grant from California Boating and Waterways to implement the project. LADWP funded the CEQA evaluation of the project (\$546,000) in 2018; the Draft EIR for the project was issued for public review in Spring 2019. The project is awaiting certification of the final EIR.</p>					X
41	Release of City Owned Lands - Lands for Public Purposes	Water Agreement Section XV.D	Los Angeles shall negotiate in good faith for the sale or lease to the County of any Los Angeles owned land requested by the County for use as a public park or for other public purposes.	LADWP currently has 39 leases, 10 license agreements, 0 use permits, and 3 sign permits with Inyo County for public purposes. These include agreements for local parks, campgrounds, landfills, maintenance yards, borrow pits, etc. LADWP responds as needed upon request by Inyo County.		X			
42	Release of City Owned Lands- Bishop	Water Agreement Section XV.B	Los Angeles will sell at public auction, or sell directly to the City of Bishop Community Development Agency, properties within the Bishop City limits totaling 26 acres of surplus Los Angeles owned land.	LADWP has fulfilled this requirement by selling 26 acres in the Bishop City limits in 1995.	X				
43	Release of City Owned Lands- Inyo County	Water Agreement Section XV.A	Los Angeles shall offer for sale 75 acres of Los Angeles owned lands in Inyo County for the orderly development of the towns in the county.	LADWP has fulfilled this requirement by offering for sale 75 acres in 2011.	X				

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date	Status				
44	Release of City-owned lands- Additional Sales (Water Agreement Section XV.C)	Water Agreement Section XV.C	Upon the request of the Inyo County Board of Supervisors or Bishop City Council, Los Angeles shall negotiate in good faith for the sale at public auction of additional surplus City land in or near valley towns for specific identified needs.	<p><b>Big Pine Area</b></p> <ul style="list-style-type: none"> <li>LADWP has released land to the Big Pine Fire Department for the sale of 1.02 acres.</li> </ul> <p><b>City of Bishop Area</b></p> <ul style="list-style-type: none"> <li>LADWP has completed the sale of 3.48 acres with the City of Bishop for the Silver Peaks Project. This property, located at 935 Spruce Street, is designated for disabled and affordable housing purposes.</li> <li>LADWP has completed the sale of land to the City of Bishop for the See Vee Lane Signal Project and an aerial easement for powerlines.</li> <li>LADWP has completed the sale of an easement to the City of Bishop for a water pipeline.</li> <li>LADWP has completed the sale of an easement with the City of Bishop for a multiuse path for the Seibu to School Project.</li> <li>LADWP is in the process of approving a sale of 275 acres to the Bishop Area Wastewater Authority for expansion of the wastewater treatment facilities.</li> <li>LADWP has completed the sale of land where Bishop Nursery was located.</li> <li>LADWP is in the process of selling 3 properties in the City of Bishop direct to lessees under the Land Divestment Policy.</li> <li>LADWP is in the process of selling 3 landfill sites to the County of Inyo.</li> </ul> <p><b>Lone Pine Area and South</b></p> <ul style="list-style-type: none"> <li>LADWP has granted the sale of two easements to Caltrans for highway purposes associated with the Olancho-Cartago Four-Lane Expressway Project.</li> <li>LADWP is processing two sales for easements to the County for the Pine Creek and Carroll Creek bridge replacements.</li> </ul> <p><b>LADWP Initiative</b></p> <ul style="list-style-type: none"> <li>LADWP’s Board approved a land divestment policy for in-town leased property. Divestment of in-town properties that are no longer needed for operational purposes is underway. Commitment is complete.</li> </ul>	X				
45	Technical Group Meetings	MOU Section III.G	All scheduled meetings of the Technical Group will be open to the public.	Scheduled Technical Group meetings were opened to the public beginning October 15, 1997.		X			
46	Town Water Systems	Water Agreement Section XI	LADWP shall transfer ownership of the water systems in the towns of Lone Pine, Independence, and Laws to the County, or another Owens Valley public entity or entities. Prior to transferring the systems, evaluations of each system will be performed by a mutually agreed upon consultant, and if necessary, work will be done to upgrade the systems.	The County contracted with a private company to assume the operation, maintenance and billing for the systems in July 1999. Pursuant to an agreement with LADWP, the County completed upgrades of the systems in December 2002, using \$2.6M in funds provided by LADWP. LADWP completed the transfer of ownership to the County in January 2005.	X				

Reporting No.	Table 3.10 LADWP OTHER LEGAL COMMITMENTS				Complete	Ongoing as Necessary/Required	Implemented and Ongoing	Fully Implemented but not meeting goals	Not fully implemented
	Commitment	Legal Reference	Provision	Progress to Date	Status				
47	Type E Vegetation Inventory	MOU Section III.D	Within 30 months of the discharge of the writ (December 1999), LADWP and the County are to develop baseline conditions for management of vegetation classified as Type E in the long-term agreement. These conditions will be adopted by the Standing Committee.	The inventory of Type E Vegetation was conducted by consulting firm <i>Resource Concepts</i> under a contract administered by the County and funded by LADWP. The final report on the inventory was complete in December 1999.	X				

## **4.0 APPENDICES**

### **4.1 Appendix A. Bishop Cone Audit 2024-25 RY**