INYO COUNTY/LOS ANGELES
STANDING COMMITTEE MEETING

May 12, 2022

MEETING PACKAGE

AGENDA

INYO COUNTY/LOS ANGELES STANDING COMMITTEE

10:00 a.m.
May 12, 2022

LADWP Board Room

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

NOTICE TO THE PUBLIC

In order to minimize the spread of the COVID-19 virus, Governor Newsom has issued Executive Orders that temporarily suspend certain requirements of the Brown Act. The Standing Committee meeting will be conducted in person by Inyo County and LADWP representatives but the public can participate via videoconference accessible at:

https://ladwp.webex.com/ladwp/onstage/g.php?mtid=e3379c7fc7d9aea731d308867b8826360

Event number: 2484 605 7734

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

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

1. Public comment on issues not included as part of this agenda.
2. **Action Item:** Approval of documentation of actions from the March 24, 2022 meeting.
3. State water supply condition.
4. Runoff and operations update.
5. Report on LADWP's 2022-23 Owens Valley Annual Operation Plan.
6. **Action Item:** LADWP requests the approval of a plan for reasonable reductions in the irrigation water supply on the City of Los Angeles owned lands pursuant to Section IV.A. of the

Water Agreement.

7. Lower Owens River Project
    a. Consultation with California Department of Fish and Wildlife concerning items 7b and 7c.
    b. **Action Item:** Setting LORP seasonal habitat flow.
    c. **Action Item:** Establishment of Blackrock Waterfowl Management Area flooded acreage.

8. Schedule for future Standing Committee meetings.

9. Adjourn.

Audio Conference:

To receive a callback, provide your phone number when you join the event, or call the number below and enter the access code.

United State Toll
+1-415-655-0002
213-306-3065

Access Code: 2484 605 7734

Standing Committee meeting protocols (Adopted May 11, 2011)

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

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

The LTWA further provides that:

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

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

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

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

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

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

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

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

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

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

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

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

AGENDA ITEM #2

INYO/LOS ANGELES STANDING COMMITTEE

Dedicated to the advancement of mutual cooperation

MEMORANDUM

Date May 12, 2022

Subject: Documentation of Actions Taken by Standing Committee at the March 24, 2022 Meeting.

The Standing Committee's policy is to document any actions taken by the Committee in a memorandum at the subsequent meeting. Standing Committee members present at the March 24, 2022 video conference meeting hosted by the Inyo County were: for Inyo County; Supervisor Matt Kingsley, Supervisor Rick Pucci, Water Commissioners Teri Red Owl and Randy Keller, County Administrative Officer Leslie Chapman, County Counsel John Vallejo, and Water Director Aaron Steinwand, and for Los Angeles; Commissioners Susana Reyes and Nicole Neeman Brady, General Manager Martin Adams, Senior Assistant General Manager for Water Anselmo Collins, Director of Water Operations Andrew Linard, Aqueduct Manager Adam Perez, and Deputy City Attorney David Edwards.

Action taken at the March 24, 2022 meeting, considered by the Committee:

Agenda Item #1 - Approval of documentation of actions from the February 23, 2022 meeting

The Standing Committee approved the March 24, 2022 memorandum entitled: Documentation of Actions Taken by Standing Committee at the February 23, 2022 meeting

Agenda Item #2 - R**equest that Standing Committee adopt findings pursuant to AB 361 that: A) the Committee reconsidered the circumstances of the existing State of Emergency issued on March 4, 2020, in response to the COVID-19 pandemic; and B) local officials continue to recommend measures to promote social distancing, and/or the state of emergency continues to directly impact the ability of the members to meet safely in person.**

The Standing Committee reconsidered the State of Emergency and local health officer recommendations and adopted the findings as stated in the agenda item.

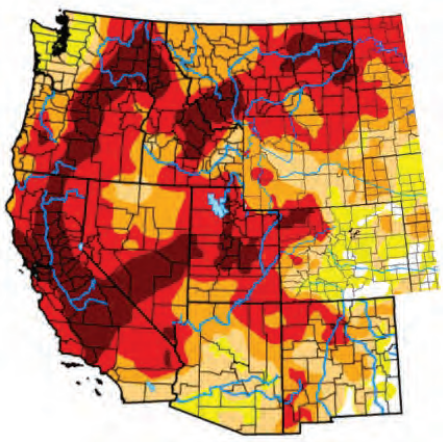
AGENDA ITEM #3

Water Supply Update

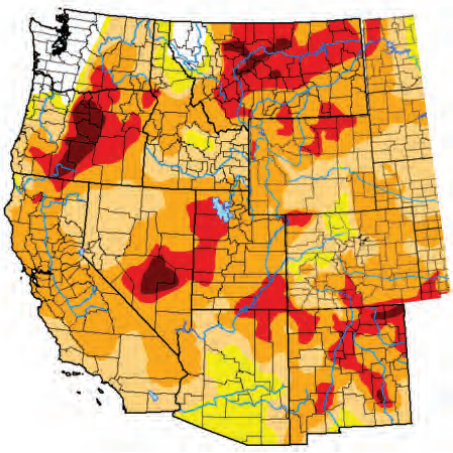
Inyo/LA Standing Committee
May 12, 2022

Drought Conditions Worsening

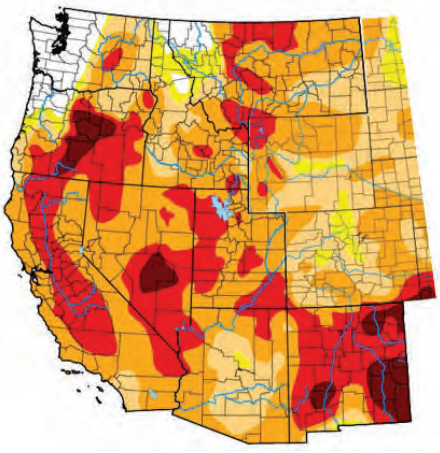
September 28, 2021

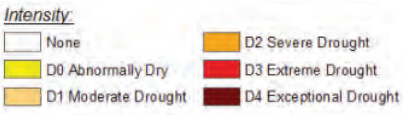


February 17, 2022



May 5, 2022

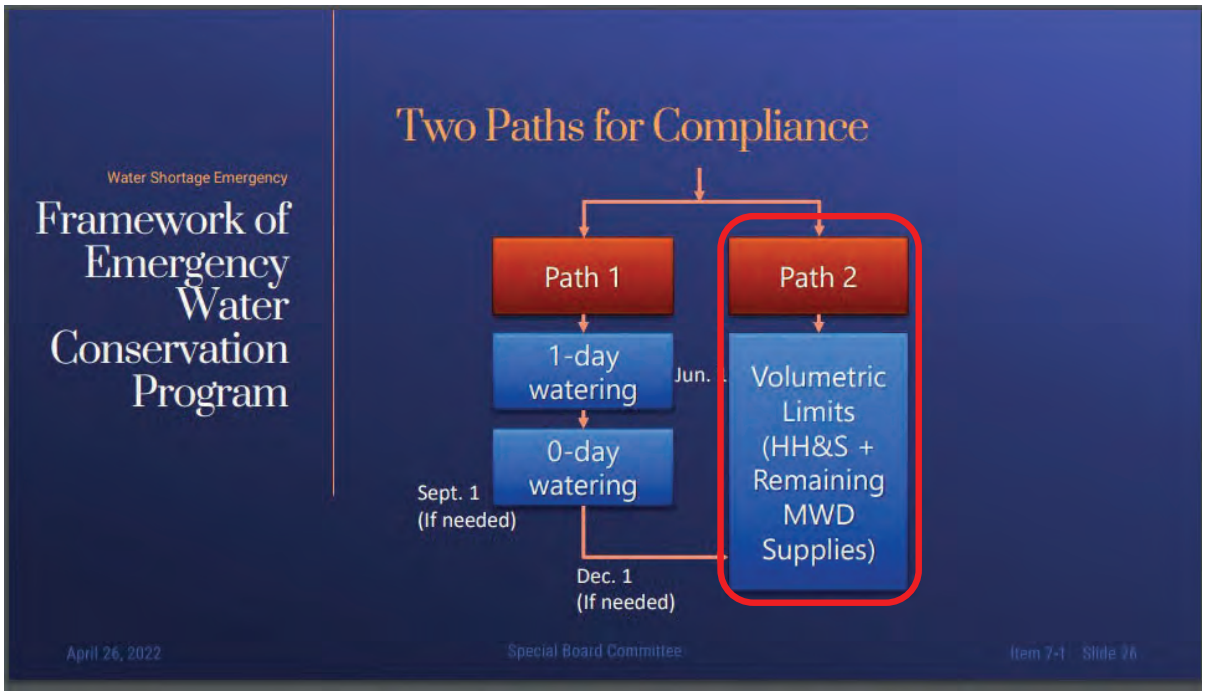




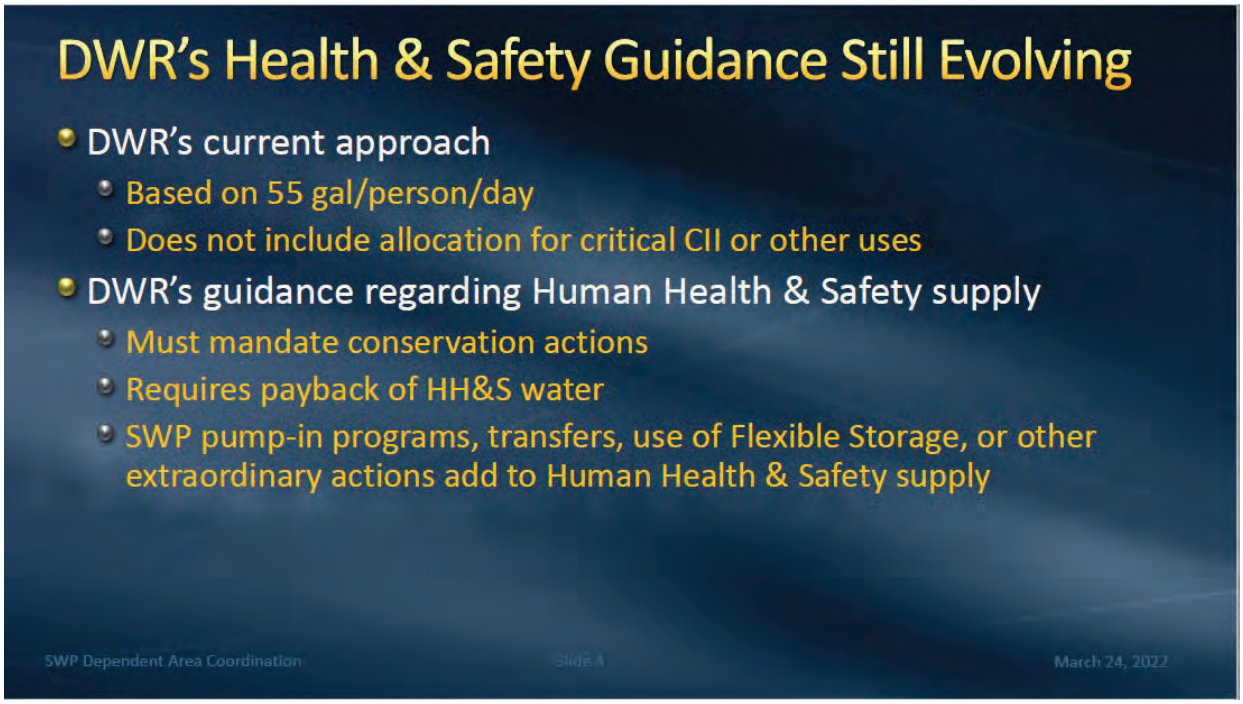
ladwp.com

SWP Dependent Areas

MWD Water Conservation Program



DWR Health & Safety



Emergency Conservation Program Volumetric Limits

Agencies Expected to take SWP Supplies

Agency	Volumetric Limit * (AF/month)
Calleguas MWD	4,334
Las Virgenes MWD	513
City of Los Angeles	21,706
IEUA	4,880
Three Valleys MWD	1,273
Upper San Gabriel Valley	2,099

Water Conservation Ordinance

PHASE 1 (PERMANENT):

- No water should flow off your property;
- No water should leak from any pipe or fixture;
- No irrigation is allowed within 48 hours after a measurable rain event;
- No hosing of driveways, sidewalks, or other surface unless for immediate safety or sanitary reasons;
- No washing of vehicles using a hose without a self-closing nozzle
- All outdoor watering is prohibited from 9:00 a.m. to 4:00 p.m.

PHASE 2 (CURRENT):

- Limiting outdoor watering to 3-days a week and 8 minutes per station per watering day.

PHASE 3 (Eff. JUNE 1):

- *Limiting outdoor watering to 2-days a week and 8 minutes per station per watering day.*
- *Recommend use of pool covers to decrease water loss from evaporation.*
- *Recommend washing of vehicles at commercial car wash facilities.*

PHASE 4:

- *Limiting outdoor watering to 1-day a week and 8 minutes per station per watering day.*
- *Pool covers required.*
- *Washing of vehicles at commercial car wash facilities.*
- *No filling of decorative fountains, ponds, and lakes.*

PHASE 5:

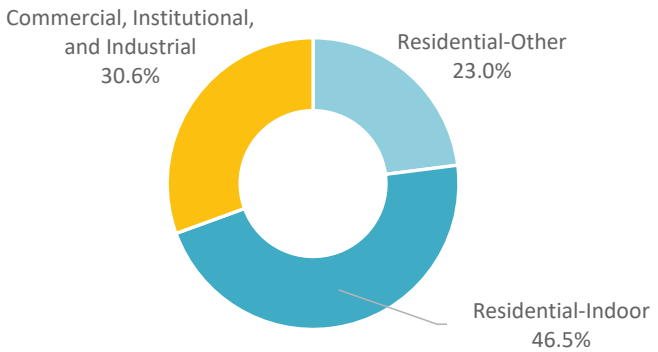
- *No outdoor watering.*
- *No filling of residential pools/spas*

LADWP Customer Water Use Is Highly Efficient

Agency/Area	12-Month (RY21/22) Average Residential GPCD
LADWP	74
LA Times Article Example	192
South Coast Region	87
Statewide	91

Source: State Water Resources Control Board

LADWP Consumption by Customer Type



Other uses:

Cooling towers

Fire Suppression

Consumption

Recycled Water Achievements

Conservation Achievements

30%+
Less per capita water use in the last 15 years

30+
Years of mandatory water conservation ordinances

51 million+
Square feet of turf replaced

3.2 million+
High-efficiency toilets, washing machines, showerheads and faucets replaced

AGENDA ITEM #4

2021/2022 RUNOFF YEAR PUMPING TOTALS

(ACRE FEET)

	BISHOP	LAWS	BIG PINE	TABOOSE-ABERDEEN	THIBAUT-SAWMILL	INDEPEN.-OAK	SYMMES-SHEPHERD	BAIRS-GEORGES	LONE PINE	TOTAL
APR	1,406	1,208	941	829	813	818	84	105	125	6,329
MAY	1,583	1,413	855	459	838	844	165	90	135	6,382
JUN	1,534	1,308	954	562	806	834	130	101	143	6,372
JUL	1,526	1,208	936	1,665	676	821	122	106	147	7,207
AUG	1,460	1,167	856	507	626	841	167	39	167	5,830
SEP	1,366	868	1,543	442	627	765	163	0	154	5,928
OCT	81	619	1,606	458	637	204	287	0	45	3,937
NOV	304	477	1,613	444	757	148	183	0	25	3,951
DEC	441	433	2,047	460	817	131	188	0	17	4,534
JAN	439	262	1,977	478	837	151	180	0	16	4,340
FEB	394	5	1,685	412	666	311	178	0	21	3,672
MAR	435	10	1,477	609	898	374	200	0	33	4,036
TOTAL	10,969	8,978	16,490	7,325	8,998	6,242	2,047	441	1,028	62,518

Planned Pumping for 2021-22 was 64,600 to 79.980 acre-feet

EASTERN SIERRA SNOW SURVEY RESULTS
April 1, 2022

MAMMOTH LAKES AREA (Contributes 27% of Owens River Basin runoff)

Course	Water Content	April 1 Normal	% of April 1 Normal
Mammoth Pass	24.8	42.7	58%
Mammoth Lakes	9.8	20.1	49%
Minarets 2	15.6	29.3	53%
Average:	**16.7**	**30.7**	**54%**

ROCK CREEK AREA (Contributes 16% of Owens River Basin runoff)

Course	Water Content	April 1 Normal	% of April 1 Normal
Rock Creek 1	1.4	7.1	20%
Rock Creek 2	2.0	10.1	20%
Rock Creek 3	2.3	13.2	17%
Average:	**1.9**	**10.1**	**19%**

BISHOP AREA (Contributes 19% of Owens River Basin runoff)

Course	Water Content	April 1 Normal	% of April 1 Normal
Sawmill	8.2	19.0	43%
Average:	**8.2**	**19.0**	**43%**

BIG PINE AREA (Contributes 13% of Owens River Basin runoff)

Course	Water Content	April 1 Normal	% of April 1 Normal
Big Pine Creek 2	2.7	12.6	21%
Big Pine Creek 3	5.9	17.5	34%
Average:	**4.3**	**15.1**	**28%**

COTTONWOOD AREA (Contributes 25% of Owens Basin River runoff)

Course	Water Content	April 1 Normal	% of April 1 Normal
Cottonwood Lakes 1	2.5	12.3	21%
Trailhead*	2.2	12.5	18%
Average:	**2.4**	**12.4**	**19%**

EASTERN SIERRA OVERALL SNOW PACK (Weighted by contribution to Owens River Basin runoff)

	Water Content	April 1 Normal	% of April 1 Normal
Average of all Snow Courses	**7.6**	**18.7**	**41%**

Normals are based on the 1971-2020 period.
** Trailhead has only been measured since 1982, so the normal is estimated.

PSS 4/7/2022

2022 EASTERN SIERRA RUNOFF FORECAST
April 1, 2022

APRIL THROUGH SEPTEMBER RUNOFF

	MOST PROBABLE VALUE (Acre-feet)	MOST PROBABLE VALUE (% of Avg.)	REASONABLE MAXIMUM (% of Avg.)	REASONABLE MINIMUM (% of Avg.)	LONG-TERM MEAN (1971 - 2020) (Acre-feet)
MONO BASIN:	**56,200**	**56%**	69%	43%	100,307
OWENS RIVER BASIN:	**117,200**	**39%**	52%	26%	300,298

APRIL THROUGH MARCH RUNOFF

	MOST PROBABLE VALUE (Acre-feet)	MOST PROBABLE VALUE (% of Avg.)	REASONABLE MAXIMUM (% of Avg.)	REASONABLE MINIMUM (% of Avg.)	LONG-TERM MEAN (1971 - 2020) (Acre-feet)
MONO BASIN:	**70,900**	**60%**	74%	46%	118,170
OWENS RIVER BASIN:	**194,300**	**47%**	60%	35%	409,364

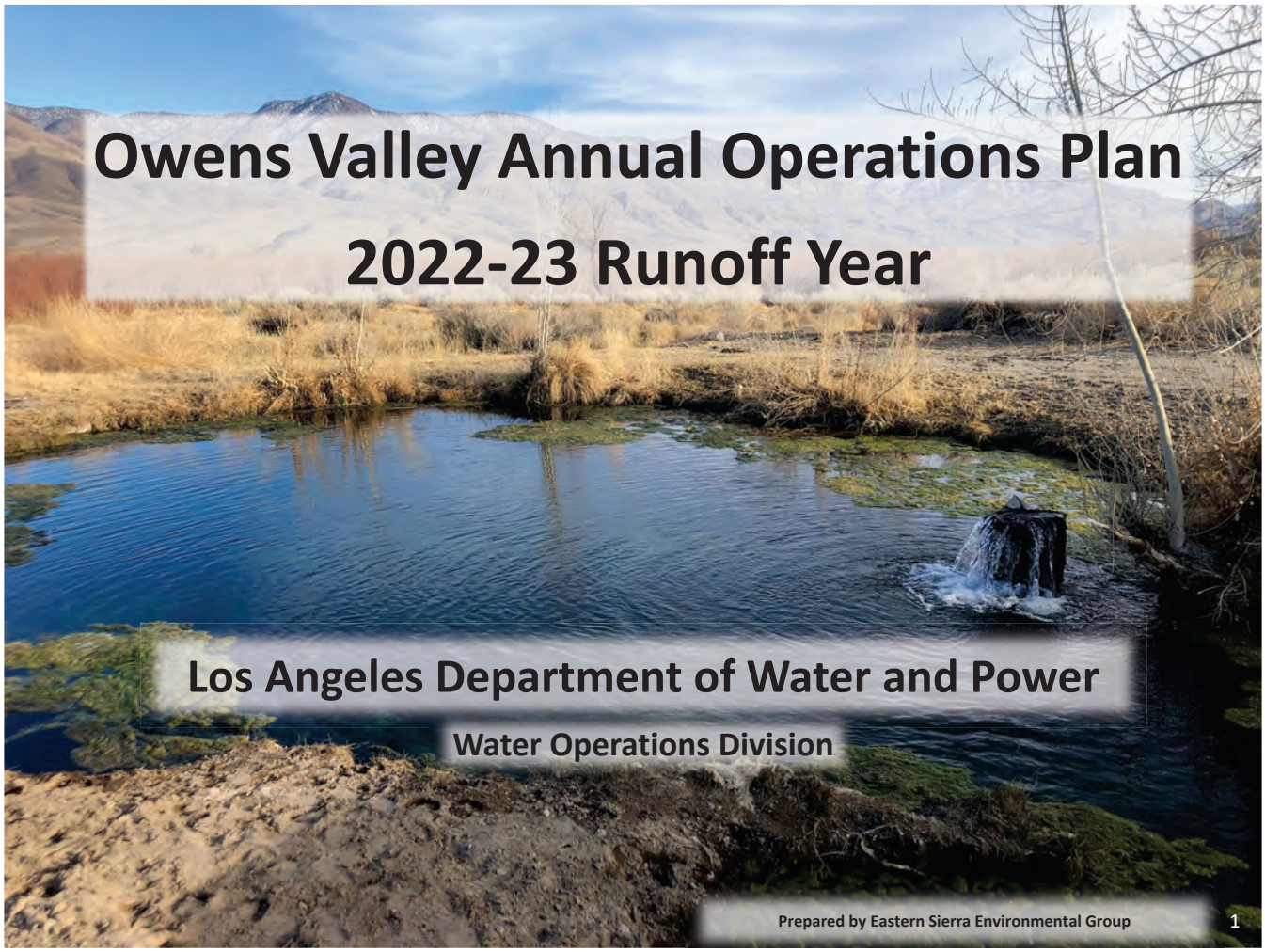
2021-22 was a 45% of normal year, the driest year on record (since 1935)
2022-23 is forecasted to be second driest year on record.

MOST PROBABLE - That runoff which is expected if median precipitation occurs after the forecast date.

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.

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.

AGENDA ITEM #5



Water Agreement Process

Water Agreement Process

- According to Inyo/LA **Water Agreement** procedure, LADWP submits a draft Operations Plan to the ICWD by April 20th of each year.
- Inyo County provides comments on the Plan within 10 days.
- LADWP finalizes the Plan within 10 days of discussing the comments with ICWD staff at a Technical Group meeting.

Water Agreement Process

Consecutive Dry Years – six month pumping plan

Water Agreement - Section V.D.

- "In the event of two consecutive dry years when forecasted Owens River Basin Runoff for the April to September period is less than 75% of normal, LADWP shall prepare a proposed plan for the first 6-month period beginning on April 1st and will prepare a second plan beginning on October 1st."

2022-23 Annual Operations Plan

Snowpack & Runoff Forecast

Snowpack Conditions: 41% of normal

Runoff Forecast: 47% of normal

Forecast is calling for the second driest year on record (since 1935). Last year was the driest year on record.

2022-23 Annual Operations Plan

ON/OFF Status of Vegetation Monitoring Sites (April 2022)

Vegetation Monitoring Site	April 2021 ON/OFF Status
LW1	ON
LW2	ON
LW3	ON
BP1	ON
BP2	OFF
BP3	ON
BP4	ON
TA3	OFF
TA4	ON
TA5	ON
TA6	ON

Vegetation Monitoring Site	April 2021 ON/OFF Status
TS1	OFF
TS2	ON
TS3	ON
TS4	ON
IO1	OFF
IO2	OFF
SS1	OFF
SS2	OFF
SS3	ON
SS4	OFF
BG2	ON

LADWP can pump wells associated with monitoring sites in ON status

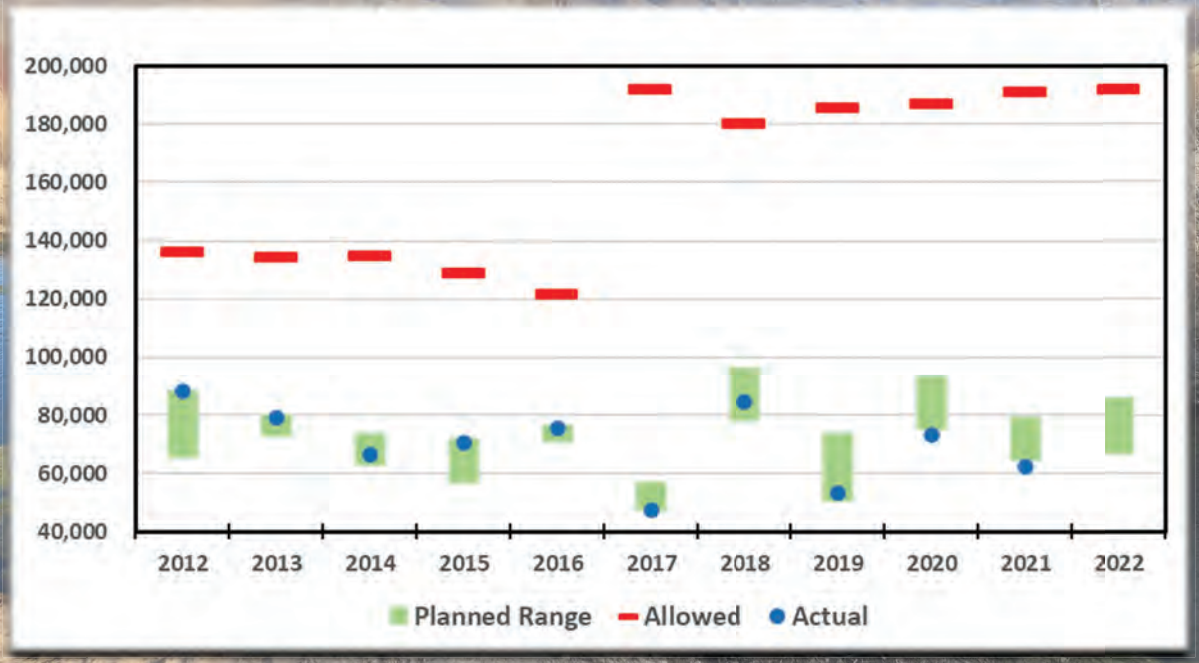
2022-23 Annual Operations Plan

Planned 2022-23 Pumping April-September 6-Month Period

Wellfield	Available Pumping Capacity (af)	Planned Pumping (af)
Laws	44,380	7,000-8,200
Bishop	18,310	9,720
Big Pine	50,510	10,200-11,700
Taboose-Aberdeen	39,920	3,000-7,050
Thibaut-Sawmill	16,120	5,040-5,280
Independence-Oak	12,300	5,860-6,600
Symmes-Shepherd	6,850	1,200
Bairs-George	2,830	450-890
Lone Pine	990	760
Total Owens Valley	**192,110**	**43,230-51,400**

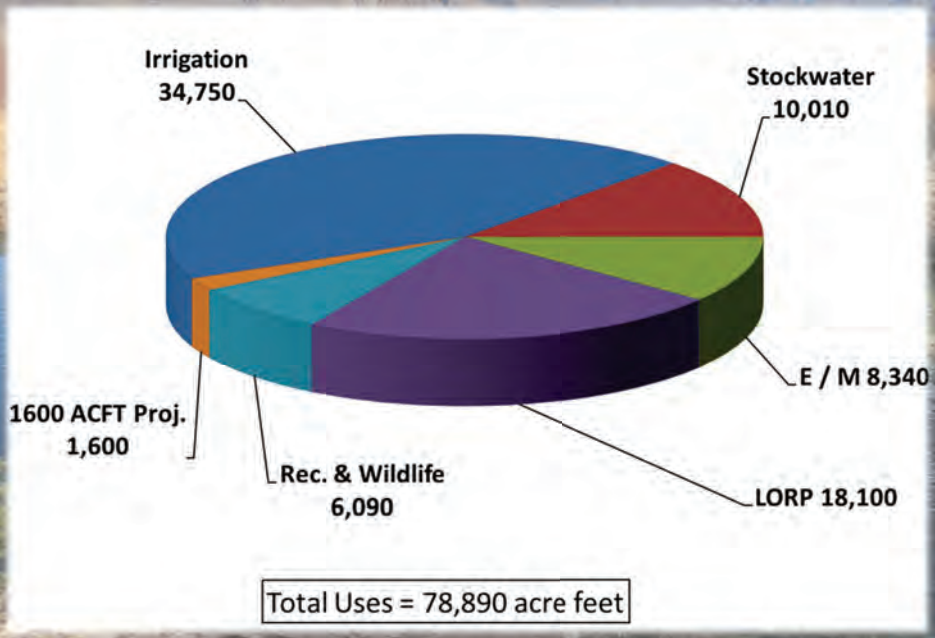
2022-23 Annual Operations Plan

Planned Range, Allowed, and Actual Pumping



2022-23 Annual Operations Plan

Water Supplied to Uses in Owens Valley by LADWP

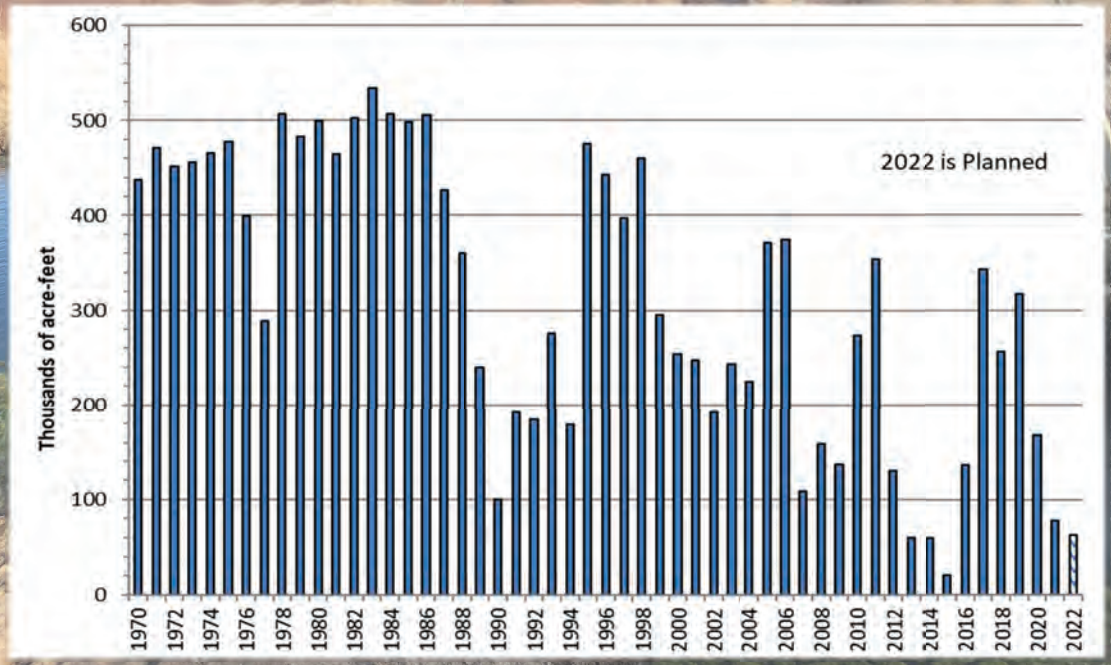


Additional 60,000 AF will be supplied for Dust Mitigation at Owens Lake

2022-23 Annual Operations Plan

Water Export to Los Angeles

Planned Export to Los Angeles is 62,700 acre-feet, which is 25% of Long-Term Average



2022-23 Annual Operations Plan

Planned Water Export to Los Angeles

- Despite a 47% runoff year (following the driest year on record) LADWP will meet its obligations in Owens Valley.
- Water supply in Owens Valley (including runoff, flowing groundwater, and pumping) is not enough to supply uses and losses in Owens Valley.
- As a result, only 63,000 acre-feet of water will be exported from the Eastern Sierra this year.

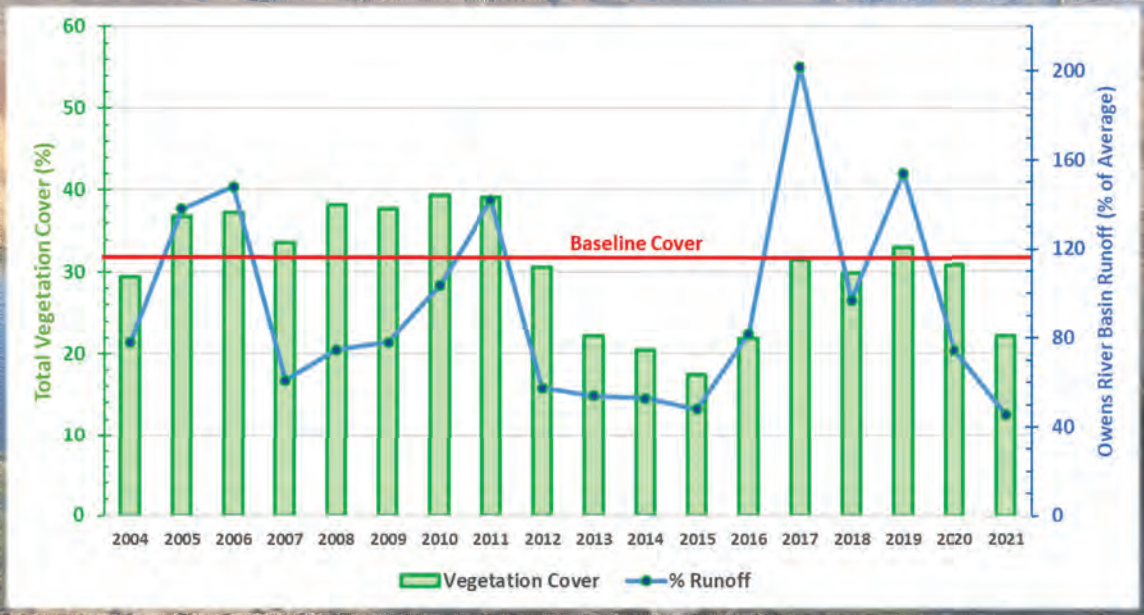
Owens Valley Conditions

Average Owens Valley Groundwater Levels

(using representative monitoring wells)

Owens Valley Conditions

Average Owens Valley Vegetation Condition



Based on 70 wellfield vegetation parcels monitored throughout Owens Valley

2022-23 Annual Operations Plan

Environmental Mitigation Projects

- 64 environmental mitigation projects are required by the Inyo/LA Water Agreement, 1991 EIR, 1997 MOU, and other related documents.
- Current status:
  - Completed - **8**
  - Implemented, achieving goals, and ongoing (i.e. have ongoing water, financial, or other monitoring requirements) - **43**
  - Fully implemented but are not yet meeting goals - **13**
  - Not fully implemented - **0**

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Independence, CA 93526

COUNTY OF INYO
WATER DEPARTMENT

April 29, 2022

Mr. Adam Perez, Aqueduct Manager
Los Angeles Department of Water and Power
300 Mandich Street
Bishop, California 93514

Subject: Inyo County comments on LADWP's proposed Annual Operations Plan for Runoff Year 2022-2023

Dear Mr. Perez,

In accordance with Section V.D. of the Inyo/Los Angeles Long Term Water Agreement, this letter transmits the Inyo County's comments on LADWP's Draft Owens Valley Operations Plan for Runoff Year 2022-2023 (Draft Plan). Based on the analysis and reasons presented below, the County recommends a pumping range from a minimum of 55,900 ac-ft to a maximum of approximately 59,540 ac-ft. The County will make a decision on LADWP's proposed reduction in the amount of water supplied to in-valley irrigation after LADWP and the County have discussed the comments in this letter.

Last year's measured runoff was approximately 45% of normal, and runoff this year is forecast to be 47% of normal. In accordance with the Water Agreement (Section V.D) when consecutive dry years occur, the Draft Plan presents pumping by wellfield for the first six months of the runoff year. The Draft Plan also indicates that the City intends to pump between 67,210 and 86,300 acre-feet (ac-ft) of groundwater during the entire 2022-2023 runoff year. The Draft Plan indicates total planned exports from the Eastern Sierra will be approximately 62,700 ac-ft. Approximately 30,400 ac-ft of the potential high range of pumping is in excess of sole source uses (e.g. in-valley agriculture) presumably for aqueduct supply, including export.

The County recognizes that the expected low runoff this year will present challenges to meeting the Water Agreement goals and LADWP needs. Actual runoff last year was the lowest on record, and forecasted runoff in 2022 would be the second lowest on record. These low runoff conditions stress native vegetation in the Valley and limit water supplies to irrigated lands and environmental projects.

The American Southwest has been unusually dry and hot for the last twenty years, and this may be the driest period in the last several hundred years (Williams et al, 2020). Locally, between 2012 and

2022, the Eastern Sierra has experienced two periods of drought lasting multiple years. Eight of the eleven years had below normal runoff including three years with the lowest runoff on record (including the current year forecast). For a comparison of runoff during recent droughts see Figure 1. The County is concerned that rather than a departure from normal conditions, the pattern of droughts in recent years may signal the onset of an accelerated change in climate that was not understood when the Long Term Water Agreement or its groundwater management planning concepts were developed. Recent global climate model predictions by LADWP suggested that an average 0.165% rate of decline in annual runoff or approximately 300 ac-ft/year, may be expected due to climate change (LADWP, 2020). In addition to the expected decrease in total runoff, it is possible that years of extreme drought in which runoff is insufficient to supply many uses in the Owens Valley may occur more frequently.

Experience during recent droughts suggest that conservative amounts of pumping to limit water table decline can prevent vegetation declines below baseline (e.g. 2007-09, Figure 2) or prevent new permanent impacts to vegetation from occurring (e.g. 2012-2016 and subsequent recovery, Figure 2). The County recommends that pumping be managed conservatively given the severity of the drought, uncertainty concerning the length of the drought, and concerns how the effects of climate change may manifest in future years. In addition, the Inyo County Water Commission recommended that Inyo and Los Angeles begin examining how to manage pumping considering climate change. We suggest staff prepare a report summarizing the reliable information about the effects of climate change on Eastern Sierra runoff to aid decision makers.

The County's analysis suggests water levels are expected to decline in some wellfields even if pumping were to be limited to only the amount necessary to supply uses in the valley. Therefore, the Inyo County Water Commission recommended pumping be limited to approximately 55,900 ac-ft. The predicted changes in water levels for this amount of pumping are analyzed and included in this letter as the County's low recommended pumping amount. If the goal were to supply sole source uses and maintain water levels where possible, ICWD analysis suggests pumping should be limited to approximately 59,540 ac-ft. The County believes that pumping in the range between 55,900 ac-ft and 59,540 ac-ft will be prudent for the upcoming drought year to allow the multiple goals of the Water Agreement to be met and could at least stabilize water level conditions to protect groundwater dependent vegetation protected by the Water Agreement.

The County agrees with the strategy in the Draft Plan to fully supply water to mitigation and environmental projects and lands that have an allocation less than 4ac-ft/ac. We remain concerned, however, over the persistent reduced delivery of stockwater compared with 1981-82, even in years of favorable runoff, and the potential for adverse effects on lease operations and Type E vegetation.

The Draft Plan also includes a request to cap irrigation deliveries at 4 ac-ft/ac. The proposed cap must be approved by the Inyo Board of Supervisors and LADWP acting through the Standing Committee. We concur that current conditions equate to a dry year with localized water shortages, allowing for consideration of a program for reasonable reductions in irrigation for LADWP owned lands. Due to the extremely low runoff last year irrigation was reduced primarily to pastures and fields fed by creeks. Irrigation for 2020-21 was approximately 38,493 ac-ft which was below the Water Agreement baseline amount of 46,680 ac-ft in 1981-82. The Draft Plan suggests 34,750 ac-ft will be delivered in 2022-23 which would be the lowest since the adoption of the Water Agreement.

It is important to note that from the mid-1960s to 1970, the total leased acreage classified by Los Angeles as irrigated was reduced from 21,800 acres to 11,600 acres. The remaining irrigated acres were provided a firm commitment of irrigation water even in dry years, which was a change from the previous period when LADWP could reduce or halt irrigation in dry years depending on needs of the City regardless of the local environmental and economic impacts. The Water Agreement provides that LADWP will continue to supply a firm water supply to the 11,600 acres and to approximately 2,600 additional acres of irrigated lands for environmental projects and lands in the Olancha-Cartago area. Water-related uses on these lands that were in effect during the 1981-82 runoff year must continue. These lands are also to be managed so as to avoid causing significant decreases and changes in vegetation, and significant decreases in recreational uses and wildlife habitats. LADWP's 1960's reduction in irrigated acres was assessed as a potential impact in the 1991 EIR (Impact 14-1). The EIR concluded that additional mitigation was not required in part because the firm allocation of water stabilized the local agricultural economy, and because the Water Agreement contained provisions to maintain uses (unless agreed to by the Inyo County Board of Supervisors) that adequately protected the economy and environment of the Owens Valley.

The Inyo County Board of Supervisors considered the suggested program for irrigation reductions at its April 26, 2022 meeting. During the Board's consideration, significant concerns regarding the plan were raised, including, but not limited to: (1) the Draft Plan includes such a large range of potential pumping (approximately 20,000 acre-feet) that it prevents an accurate review of the Draft Plan by the County as anticipated by the Water Agreement (Section V.D is), (2) the high end of the proposed pumping is higher than in recent years (even dry years with similar runoff) and could lead to new impacts that violate the requirements of the Water Agreement in addition to those areas that are chronically below baseline conditions , (3) the negative economic impact of reducing irrigation to LADWP-owned lands, (4) the necessity to modify hatchery pumping to only the water that is needed for the hatchery operations as required by the Water Agreement, and (5) the inclusion of pumping for potential export. The Board was particularly concerned with LADWP's proposed increase in the maximum amount of pumping coupled with a concurrent irrigation reduction. Consequently, the Board directed staff to continue discussions with LADWP and the Technical Group before the providing direction to the Standing Committee representatives on LADWP's request to reduce irrigation.

General Comments

The Draft Plan includes the possible test pumping of 386W near the Five-Bridges mitigation site. Mitigation measure 10-12 was adopted by LADWP in the 1991 EIR to mitigate the impacts caused by the operation of wells W385 and W386 in the late 1980's (p. 10-58 of the 1990 DEIR, Sept. 1990). The adopted mitigation measure included discontinuation of pumping from the two wells. In 2018 Inyo and Los Angeles settled litigation regarding test pumping W385. That settlement required the Technical Group temporarily amend the 1999 Revegetation Plan to allow pumping from W385 and to adopt a Mitigation and Monitoring plan for the test. The settlement also prescribes several actions that must occur before testing of W386 can proceed including: 1) Technical Group agreement that testing W385 did not cause adverse effects, 2) Technical Group approval of monitoring and mitigation plan for a W386 test, and 3) Technical Group agreement to again temporarily suspend the 1999 Revegetation Plan provision that W385 and W386 remain "permanently shut down" to allow the test to be conducted. The monitoring and mitigation plan for the 385W test included a provision that hydrological conditions should be favorable before commencing pumping and that irrigation would be provided equal to the pumped amount. Favorable hydrologic conditions were present at the beginning of the W385 test, and the County would insist that similar conditions exist before the start of a test of

W386 to protect sensitive resources and to clearly discriminate the effects of pumping from drought. It is apparent that requirement will not be met given the extremely low runoff forecast and current groundwater levels. The County remains concerned that the 1980's vegetation impact at Five-Bridges has not been fully mitigated, demonstrated by diminished perennial cover, conversion of shrub willow areas, and weed infestation. The unrecovered portion of the project would not respond positively to additional water table declines and irrigation reductions in the surrounding area.

The calculation of Owens Valley export in the Draft Plan (Figure 1.12 and Section 1.5) is fiction. The calculation should not arbitrarily divide the Owens River watershed along the Inyo/Mono County boundary and count water that naturally flows from the Mono County portion of the watershed as "imported" water into the Owens Valley to meet water demands. The amount of water provided to environmental projects reflects that most of the impacts of LADWP's water gathering activities occurred in Inyo County, including the diversion and export of waters derived from the entire watershed that would naturally support the Lower Owens River and Owens Lake. The calculation inherently implies that only water derived from creeks within Inyo County must be provided to environmental projects located in the County, but that was not a requirement included in any project.

The Draft Plan presents a table of LADWP's position on the accumulated E/M project imbalance. The County does not agree that the calculated imbalance constitutes a deviation from the Water Agreement. The Water Agreement provides that some wells supplying E/M projects are to be operated in accordance with the well On/Off provisions of the Agreement and the E/M projects included as mitigation measures in the 1991 EIR require compliance with CEQA and/or agreement by the Board of Supervisors to revise management or reduce water allocation. Since the Water Agreement was adopted, some E/M supply wells have not been operated in accordance with On/Off provisions when wells are in off status due to low soil water and/or to prevent violation of the Water Agreement vegetation protection goals. From our understanding, these factors are not reflected in the LADWP accounting.

Although the Water Agreement's process for Annual Operations Plans is based on planning for individual years, the Water Department recommends that the Technical Group consider multi- year planning to manage water table fluctuations within ranges compatible with vegetation baseline conditions. Staff worked cooperatively on such proposals to revise the Green Book for several years, but while progress was made, final methods were never agreed upon.

Neither the Draft Plan nor Table 2.7 in the Draft Annual Report Chapter 2 – Conditions in the Owens Valley specify the amount of water used for Owens Lake dust mitigation separate from other uses. To assist Inyo County's participation in the Owens Lake Groundwater Work Group, please include these data in the Draft Plan or elsewhere in the Annual Report.

Evaluation of 2022 Operations Plan

Background

Relatively low runoff and approximately 62,518 ac-ft of pumping in 2021-2022 caused the water table to decline in most areas of the Owens Valley (Table 1). Groundwater levels in six of the seven wellfields declined with larger decreases observed in Laws and Bairs-George. Smaller declines on average occurred in Thibaut Sawmill and Independence Oak wellfields. Water levels were relatively stable in Symmes Shepherd, Big Pine, and Taboose-Aberdeen wellfields due to the relatively conservative pumping in 2021-22 (62,518 ac-ft). Operations in 2021 were unusual in that pumping in Big Pine was curtailed much of the year due to closure of the Fish Springs hatchery, and water

levels are approximately the same as last spring. As of April 2022, water levels in two thirds of the indicator wells remain below those measured in the mid-1980s when the baseline vegetation mapping was completed, primarily in Laws, Independence-Oak, and Symmes-Shepherd wellfields. Water levels in Independence-Oak and Symmes-Shepherd did not recover from the pumping early in the 2012-2016 drought despite favorable runoff during 2016-2019 (Table 1) and mostly remain below baseline.

The Draft Plan's proposal to pump water for aqueduct supply including export in areas near vegetation that is measurably and chronically below baseline levels is environmentally harmful The lower range of proposed pumping is less than long-term average pumping under the Water Agreement (72,284 ac-ft, 1991-2021) but significantly greater than necessary for sole source uses (approximately 55,900 ac-ft). Adjusting pumping to at least maintain a shallow water table in some areas of groundwater-dependent vegetation in 2022-23 is necessary to stabilize declines at the onset of the present drought and to avoid impacts should the extremely low runoff conditions persist. Shallow groundwater levels are particularly important to maintain perennial grasses which show larger and more persistent declines than total perennial cover and declines in a larger number of parcels.

Methods

ICWD's analysis of the Draft Plan and pumping recommendations are based on the goals and principles of the Water Agreement, the status of individual pumping wells according to Green Book soil water triggers, groundwater dependent vegetation conditions monitored by the Technical Group, water table conditions in each well field, and groundwater uses within each wellfield.

The County uses multiple linear regression models at 46 indicator wells to predict water table elevation in April 2023 as a function of wellfield pumping, 2022 water table elevation, and forecasted Owens Valley runoff. The Laws indicator well models rely on the sum of diversions into the Upper and Lower McNally canals at the Owens River as the variable related to recharge instead of Owens Valley runoff. Water spreading is not planned for Laws in 2022-23 (Table 2.8 of the Draft Plan). The set of indicator well models used by ICWD differs from the set of indicator wells used by LADWP (Table 1.7 of the Draft Plan), but the Inyo and LADWP average predicted water table changes generally agree (Table 2).

The evaluation of four pumping scenarios are presented in this letter; (1) minimum pumping for uses in the valley (the low range of the County's recommended pumping suggested by the Inyo County Water Commission and Board of Supervisors), (2) LADWP's proposed lower limit (minimum), LADWP's upper limit (maximum) for pumping in the Draft Plan, and (4) the amount of pumping that ICWD analysis determined is compatible with the goals of the Water Agreement (Table 3). The upper limit of the pumping proposed in the Draft Plan represents the maximum impact on the water table, and LADWP has commonly pumped near the maximum proposed amount except for unusual circumstances. The analysis of water levels with minimum pumping for specific uses in the Owens Valley is included as a basis for comparison with the higher levels of pumping in the Draft Plan.

In below normal runoff years, ICWD estimates minimum pumping for in-valley uses to be approximately 55,900 AF. We recognize that the actual pumped amount deviates from this estimate depending on differences in forecasted and actual runoff which affects the amount of surface water available to supply irrigation or mitigation projects instead of groundwater. The ICWD periodically updates the estimated pumping to supply in-valley uses based on recent practices. The minimum pumping amount in Laws was increased to recognize that additional lands required to be irrigated at

the Laws Ranch have been supplied groundwater and that the Draft Plan proposes to supply the McNally Ponds this fall. In Big Pine at the Fish Springs Hatchery there are certain months in the fall or winter where pumping capacity of both wells is not necessary to meet present hatchery fish production goals. The minimum pumping required to supply the Fish Springs Hatchery was reduced anticipating that infrastructure to allow the hatchery to vary water delivery to meet needs and potentially reduce the constant pumping will be installed during this runoff year. Smaller adjustments to minimum pumping in Thibaut-Sawmill, Bairs-George, and Lone Pine were based on well capacity or uses evident in recent years.

LADWP's proposed operations plan includes pumping for export from all wellfields except Bishop and Lone Pine at the higher proposed range. The lower range of proposed pumping also does not include export from the Symmes-Shepherd wellfield.

Wellfield-specific conditions

The following sections present a summary of conditions in each wellfield including: the predicted effects of the proposed pumping, and ICWD's comments on LADWP's proposed operations. In the sections below, baseline water levels refer to the average of April water levels for 1985, 1986, and 1987, and baseline vegetation conditions refer to the conditions documented in the baseline maps attached to the Water Agreement as Exhibit A. Observed water level changes since April 2021 and deviations from baseline water levels based on ICWD field measurements are given in Table 1. Wellfield pumping proposed by LADWP in the Draft Plan, minimum pumping, and pumping amounts to stabilize water levels are given in Table 3. Predicted water table changes are presented in Table 4.

Laws. The Draft Plan proposes between 8,900 and 10,710 ac-ft of pumping in the Laws wellfield to supply town water systems, irrigation, enhancement/mitigation (E/M) projects, and export. Last year, the water table declined between 0.2 and 2.7 feet in indicator wells. Water levels currently range from 1.8 feet above to 6.2 feet below baseline. Vegetation parcels LAW035, LAW043, LAW052, LAW062, LAW070, LAW072 and LAW085 are all in the same general vicinity and have chronically below-baseline grass cover, and perennial cover that only infrequently recovers to baseline conditions.

Water levels in Laws respond substantially to irrigation and water spreading that is diverted from the Owens River into the McNally canals. LADWP's Draft Plan suggests no diversion from the river is planned. The proposed upper pumping amount in Laws would cause water levels to decline several feet (Table 4). Water levels are predicted to decline even at pumping for in-valley uses in Laws. Given the chronically poor vegetation conditions in the parcels listed above despite water table recovery in 2019-20, pumping should be limited to uses in Laws and should not include pumping for export. Pumping at this amount will maintain water levels only in 438T; all other indicator wells are predicted to decline.

Despite repeated recovery of water levels to near or above baseline since 2000, the degraded conditions in parcels noted above persist. It is important that the Technical Group evaluate in 2022 whether a significant impact exists (Green Book Sec. I.C.) in these vegetation parcels in Laws.

Bishop. LADWP proposes to pump 12,000 ac-ft from the Bishop wellfield. It appears that the proposed pumping will be within the limits of the Hillside Decree. ICWD recommends pumping not exceed 12,000 ac-ft providing that it complies with the Hillside Decree and that uses/losses downstream of the wells exceed pumping.

Big Pine. LADWP proposes to pump between 20,200 and 23,100 ac-ft from the Big Pine wellfield. The upper amount includes hatchery and town supply as well as several months of operation of exempt well(s) for export. One large vegetation parcel in the wellfield, BGP162, has had vegetation cover chronically below baseline and several others declined below baseline in 2021. Two other parcels, BP154 and FSP006 have suffered a measurable grass decline. The water table changes varied between +1.6 ft to -2.5 ft at indicator wells and monitoring sites in the wellfield. Water levels vary between 3 ft above to 1 ft below baseline at indicator wells but, due to the reduction in hatchery pumping, the average water level in the shallow-aquifer indicator wells remained above baseline (0.8 ft) for the third consecutive year. The County continues to advocate for minimum pumping in this wellfield due to the consistently high level of annual pumping and the hydrologic stress that creates.

It is our understanding that LADWP has decommissioned W341 and replaced its pumping with adjacent W415 for the town water system needs. In 2020 the Inyo/Los Angeles Technical Group approved test procedures for the initial period of operation of W415 pumping above the exemption for town supply (W415 test) consistent with GreenBook Section VI. The Draft Plan states the test will not be completed in 2022. We also recognize that the Water Agreement, as amended in 2002, committed LADWP to provide surface and groundwater for the Big Pine Irrigation and Improvement Association (BPIIA) ditch system from Big Pine Creek. In an exchange of letters in 2020, Inyo and Los Angeles concurred that water exiting the Big Pine Community Service District into Big Pine Creek would be considered pumped make-up water for the BPIIA. That accounting practice should continue.

Taboose-Aberdeen. LADWP proposes to pump between 6,000 and 14,850 ac-ft in the Taboose-Aberdeen wellfield. Alkali meadow parcels TIN050, TIN053, TIN064, and TIN068 all have chronically lower grass cover than baseline despite water level recovery to baseline suggesting a Type C to B conversion may have occurred and the water table regime may be insufficient to recover vegetation to baseline. Last year, water table changed between +1.7 to -0.7 feet. Water levels in most indicator wells were stable or rose. Indicator wells in this wellfield range from 1 ft above to 3.1 ft below baseline. One indicator well is predicted to remain stable in 2022-23 at the LADWP lower limit of pumping; all others decline at either the lower or upper limit. Reducing proposed pumping to 2,500 ac-ft would stabilize water levels during the upcoming year on average. Pumping from W118 and W349 should be limited to avoid lowering water levels under the parcels in the northern portion of the wellfield exhibiting grass declines.

The Technical Group should evaluate in 2022-23 whether a significant change in Type C parcels exists in vegetation parcels with chronically depressed grass cover.

Thibaut-Sawmill. LADWP proposes to pump 10,080 to 10,920 in the Thibaut-Sawmill wellfield. Two parcels, IND026 and IND029 in the southern portion of this wellfield have chronically depressed water levels and grass cover. Pumping should be managed to promote water table recovery under these parcels by not pumping W382. Cover in BLK094 is not fully recovered in terms of perennial or grass cover. Last year, the water table declined 0.6-1.1 ft, but water levels remained at baseline or several feet above baseline in two wells (Table 1), largely due to reductions in pumping at the Blackrock hatchery in 2014. Water levels in two indicator wells will remain above baseline at LADWP's proposed maximum pumping amount; however, ICWD analysis suggests that pumping not exceed 8,800 ac-ft for the hatchery and possible late summer irrigation pumping from W155 if creek flow is insufficient. Pumping should be managed to maintain water levels under the

parcels mentioned above.

The Technical Group should evaluate in 2021-22 whether a significant impact exists in vegetation parcels IND026 and 029.

Independence-Oak. LADWP proposes to pump between 7,000 and 8,800 ac-ft in the wellfield. Last year, water levels changed from +0.3 to -2.4 ft, and were 2.3-6.8 ft below baseline. Water levels in the southern portion remain below baseline and have not recovered since 2018. Pumping should be limited to sole source uses at 6,420 ac- ft. Water levels in some wells decline even at that amount, and restricting pumping to irrigation and E/M projects would result in approximately 0.5 ft. decline in water levels on average (Table 4).

Symmes-Shepherd. LADWP proposes to pump 1,200-2,910 ac-ft from the Symmes-Shepherd wellfield for sole source irrigation supply and export. One parcel, IND139, exhibits chronically depressed grass cover. Last year, the water table changes varied between +0.4 to -0.7 ft; but despite the gradual water table recovery and conservative pumping in recent years, the water table level remains below baseline. The ICWD analysis suggests that pumping be limited to approximately 1,500 ac-ft to stabilize water levels.

Bairs-Georges. LADWP proposes to pump 930 to 2,110 ac-ft in the Bairs-Georges wellfield. Perennial and grass cover in the largest monitored parcel in the wellfield MAN037 is again below baseline and while cover increased in 2019-20, it has yet to attain baseline. The increased vegetation cover has corresponded with water level recovery to baseline. Last year, water levels changed +0.1 to -2.0 ft. in indicator and vegetation monitoring site wells and only one well remains at baseline. Under LADWP's maximum proposed pumping, water levels would decline 0.3 to 1.8 ft and would be below baseline in all wells. The County acknowledges the possible need to supplement irrigation/stockwater flows from Georges Creek with pumped water in this low-runoff year (approximately 460 ac-ft), and 1200 ac-ft of pumping can accomplish this need and maintain water levels in 2022.

Lone Pine. LADWP proposes to pump 900 ac-ft from the Lone Pine wellfield for town and E/M project supply. In most recent years, the actual pumping for in valley uses has been closer to 1,000 ac-ft. Concerning operation of well W416, the Draft Plan notes that LADWP may equip and test this well and has requested that the Technical Group designate a monitoring site to manage this well. The management requirements of this well differ from those of many of LADWP's aqueduct supply wells in that potential adverse effects on non-LADWP wells are a much more substantial concern here than in other wellfields. The Water Department does not think the modifications to the well alleviate concerns that it may affect private wells. Before W416 can be operated, the Technical Group should adopt procedures to test the well under conditions that prevent impacts to vegetation and private wells similar to the test proposals for 415W and 386W. The County recommends pumping not exceed 1000 ac-ft for the uses specified in the Draft Plan.

We look forward to addressing these comments at the Technical Group meeting on May 9, 2022. If you wish to discuss these comments prior to the Technical Group meeting, feel free to contact me.

Sincerely,

Aaron Steinwand, Water Director

cc: Inyo County Board of Supervisors
Inyo County Water Commission
Leslie Chapman, County CAO
John Vallejo, County Counsel
Greg James, Special Counsel

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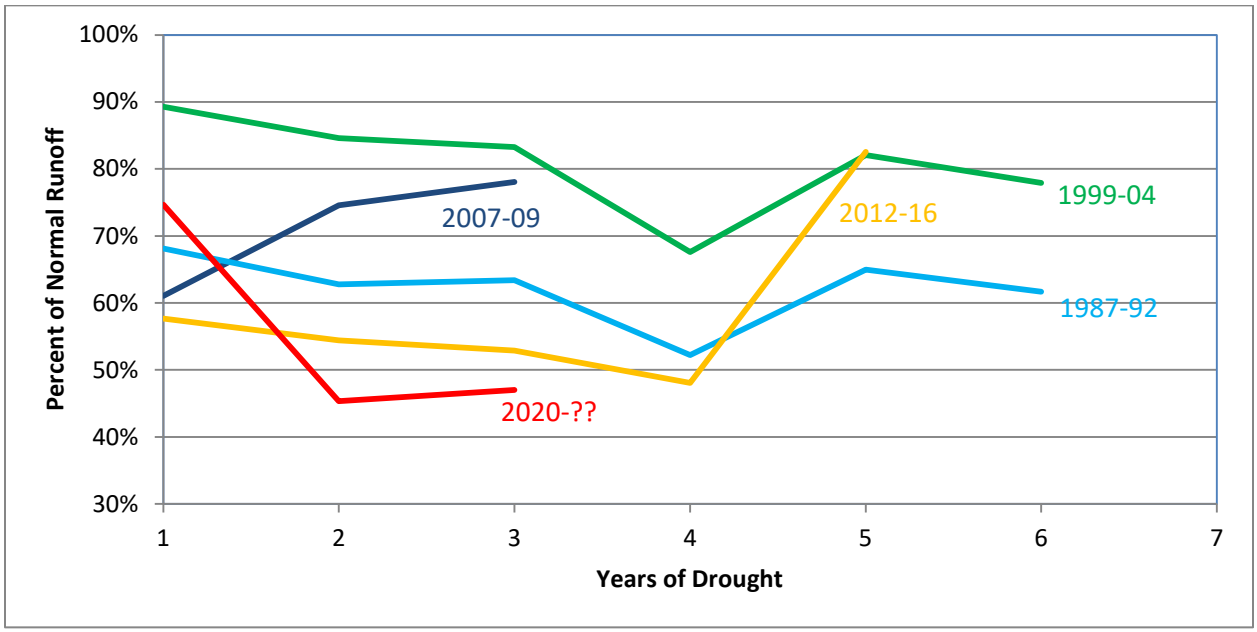


Figure 1. Plots of percent of normal runoff depicting the severity and duration of drought periods that have occurred since the adoption of the Water Agreement.

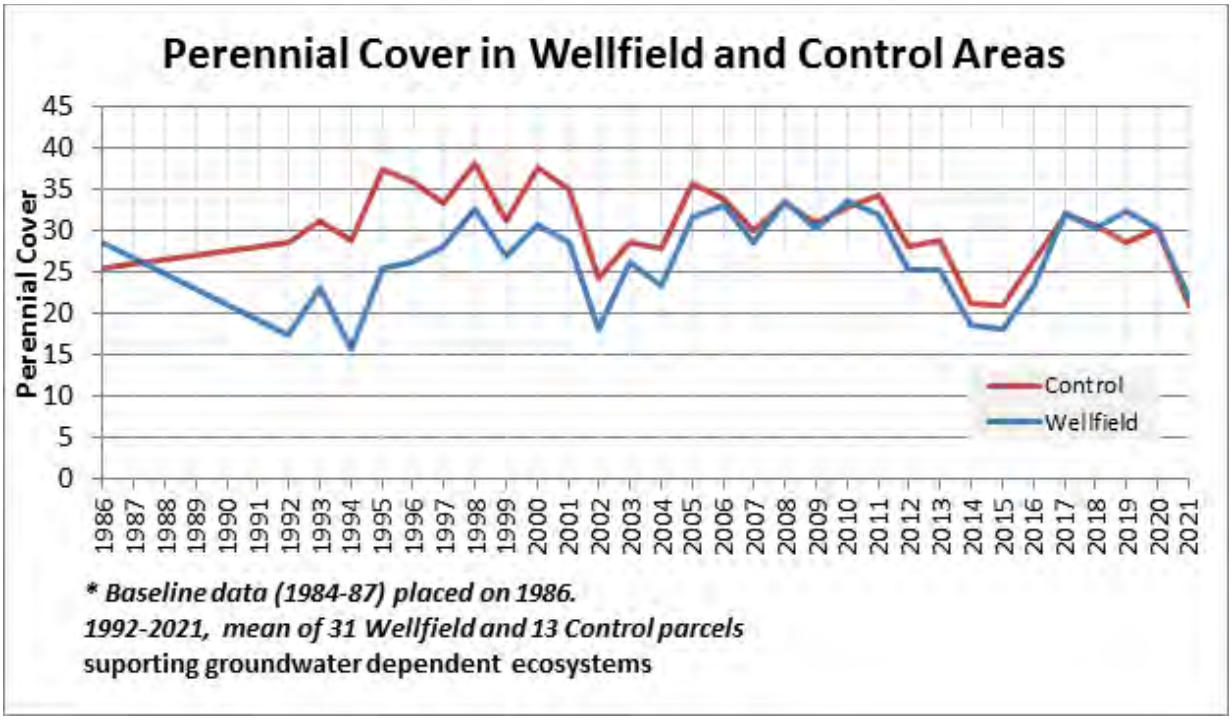


Figure 2. Average perennial cover (%) measured in control and wellfield parcels that have been sampled each year since 1992.

Table 1. Depth to Water (DTW) at indicator wells, April 2022. All data are in feet. Negative values denote a decline in water level. Depths are from reference point on the test well. Baseline elevation at monitoring sites was predicted from monitoring site/indicator wells regression models unless the test well was present 1985-87.

Station ID, Monitoring site	DTW April 2022	Change from April 2021	Deviation from Baseline in 2022
Laws			
107T	30.09	-2.72	-5.82
434T	7.49	-0.51	0.11
436T	8.95	-0.86	-0.85
438T	15.82	-2.19	-6.22
490T	16.02	-2.27	-2.95
492T	31.04	-2.02	1.76
795T, LW1	15.75	-0.19	-2.46
V001G, LW2	20.43	-1.95	-0.81
574T, LW3†	15.64	-1.19	-2.56
Big Pine			
425T	13.49	0.08	1.41
426T	11.81	0.09	-0.24
469T	22.42	-0.33	-0.75
572T	10.30	-2.52	1.60
798T, BP1	13.08	1.56	2.97
799T, BP2	19.57	-0.26	-1.06
567T, BP3	13.40	-0.34	0.56
800T, BP4	11.49	1.00	2.10
Taboose Aberdeen			
417T	29.21	-0.60	-2.24
418T	8.40	0.29	-0.17
419T, TA1	6.29	0.72	0.34
421T	35.11	1.73	-0.76
502T	10.61	0.73	-3.12
504T	9.75	1.27	1.02
505T	20.99	-0.58	-2.39
586T, TA4	7.81	0.58	0.51
801T, TA5	15.60	0.51	-2.08
803T, TA6	10.60	-0.74	-1.90

Station ID, Monitoring site	DTW April 2022	Change from April 2021	Deviation from Baseline in 2022
Thibaut Sawmill			
415T	13.11	-0.76	5.39
507T	5.69	-1.07	-1.02
806T, TS2	10.99	-0.60	2.19
Independence Oak			
406T	4.11	-0.08	-2.54
407T	11.81	0.24	-4.51
408T	5.44	0.16	-2.31
409T	7.07	0.31	-5.47
546T	8.01	-1.74	-4.58
809T, IO1	13.41	-2.42	-6.84
Symmes Shepherd			
402T	11.00	-0.20	-2.97
403T	7.36	-0.25	-2.03
404T	6.37	0.02	-2.80
447T	36.10	-0.68	-14.23
510T	7.67	-0.05	-2.67
511T	7.46	0.43	-2.83
V009G, SS1	17.68	-0.19	-10.85
Bairs George			
398T	7.77	-1.79	-1.42
400T	6.29	0.09	0.01
812T, BG2	18.11	-1.95	-4.65

Table 2. Comparison of the range in average predicted water level changes in 2022-23 for LADWP minimum and maximum proposed pumping using the LADWP set of indicator well models (Table 1.7 of the Draft Plan) and the set of models used by ICWD. Data are in ft of change and negative values denote decline.

Wellfield	**LADWP models**	**ICWD models**
Laws	-3.4 to -3.9	-2.6 to -3.1
Big Pine	-1.6 to -2.3	-1.9 to -2.3
Taboose-Aberdeen	-0.3 to -1.8	-0.8 to -2.7
Thibaut-Sawmill	-0.7 to -1.0	-0.5 to -0.8
Independence-Oak	-0.4 to -1.3	-0.7 to -1.2
Symmes-Shepherd	+0.1 to -1.0	+0.1 to -0.4
Bairs-George	+0.0 to -0.5	+0.2 to -0.9

Table 3. Pumping totals by wellfield evaluated using the regression models. Annual amounts for Bishop and Lone Pine were estimated based on recent pumping history to equal the total for the Owens Valley presented in Table 1.7 of the Draft Plan. Regression modeling is not completed for Bishop because pumping in that wellfield must comply with the Hillside decree and for Lone Pine because the proposed pumping is for mitigation and town supply only.

Wellfield	**LADWP Min (67,210 AF)**	**LADWP Max (86,300AF)**	**In-Valley Min (55,900 AF)**	**ICWD Reduced (59.540)**
	Ac-ft/year	Ac-ft/year	Ac-ft/year	Ac-ft/year
Laws	8,900	10,710	8,000	8,000
Bishop	12,000	12,000	12,000	12,000
Big Pine	20,200	23,100	18,120	18,120
Taboose-Aberdeen	6,000	14,850	300	2,500
Thibaut-Sawmill	10,080	10,920	8,400	8,800
Independence-Oak	7,000	8,800	6,420	6,420
Symmes-Shepherd	1,200	2,910	1,200	1,500
Bairs-George	930	2,110	460	1,200
Lone Pine	900	900	1000	1000

AGENDA ITEM #6

INYO/LOS ANGELES STANDING COMMITTEE

Dedicated to the advancement of mutual cooperation

MEMORANDUM

Date May 12, 2022

To: Inyo/Los Angeles Standing Committee

From: LADWP

Subject: Agenda Item #6 - Request for Irrigation Reductions

Recommendation

The LADWP requests that, pursuant to the Water Agreement Section IV. A, that the Standing Committee agree to approve a reduction in irrigation from LADWP to its Owens Valley leases during the 2022-23 irrigation season as follows:

(1) Allotments specified as 5 acre-feet per acre shall be reduced to 4 acre-feet per acre.

(2) There shall be no reductions to enhancement and mitigation projects.

(3) For allotments less than 4 acre-feet per acre, there shall be no reductions.

The LADWP proposes the above-described program for reasonable reductions in irrigation, which is in response to successive dry runoff years (2019-20, 2020-21, and 2022-23), and considering the strained water supplies available from the State Water Project. Similar programs were implemented in the first two runoff years of the Water Agreement (1991-92 and 1992-93) implementation.

Background

The Agreement states that successive dry years could result in insufficient water supply to meet all needs. Section 1V.A of the Agreement provides:

"It is recognized that successive dry years could result in insufficient water to meet all needs. During periods of dry year water shortages, the Technical Group will evaluate existing conditions. A program providing for reasonable reductions in irrigation water supply for Los Angeles-owned lands in the Owens Valley and for enhancement/mitigation projects may be implemented if such a program is approved by the Inyo County Board of Supervisors and the Department, acting through the Standing Committee."

The Greenbook, which is the technical appendix to the Inyo/Los Angeles Water Agreement, further describes factors that are to be considered in Section I.B.4.a. stating:

"The Agreement recognizes that successive dry years could result in insufficient water supply to meet all needs. Section 1V.A of the Agreement provides that during periods of water shortages, a program to reduce the amount of irrigation water supply for Los Angeles-owned lands may be implemented if such a program is approved by the County Board of Supervisors and the Department. Factors that will be considered in determining if such a program is to be implemented include: 1) water use, supply, and conservation in Los Angeles; 2) flows in the Los Angeles Aqueduct System; 3) surface water runoff conditions; 4) level of groundwater extractions; and 5) extent of well turn-offs implemented for purposes of environmental protection."

Summary of Green Book Factors for Consideration of Irrigation Reduction Program

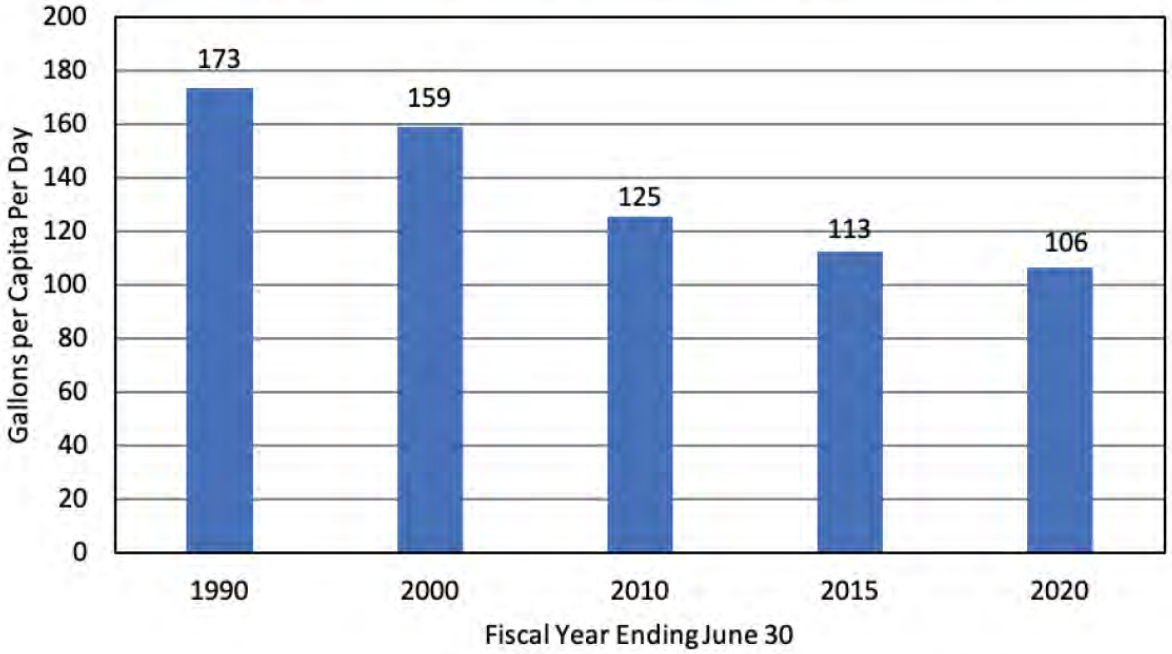
The Green Book describes five factors that are to be considered during the determination of whether to implement a program to reduce the amount of irrigation water supply for Los Angeles-owned lands. At this time, for all five factors, consideration of implementing an irrigation reduction program appears warranted.

1. Water Use, Supply, and Conservation in Los Angeles

The consideration is water use, supply, and conservation in Los Angeles. Los Angeles has been a leader in conservation efforts as water use in Los Angeles is lower than it has been in 40 years while population has increased by over 1 million people. Since 1990, there has been a reduction of over 60% water use on a per capita basis reducing from 173 gallons per capita per day (gpcd) to 106 gpcd. Los Angeles now ranks among the most water efficient cities in the United States and has goals of reducing water usage to 100 gpcd by 2035. Water supply to Los Angeles has historically been provided by flows in the LAA, MWD water purchases, and local groundwater supply. Recently, LADWP has developed its water recycling and storm water capture programs to help reduce reliance on imported water supplies.

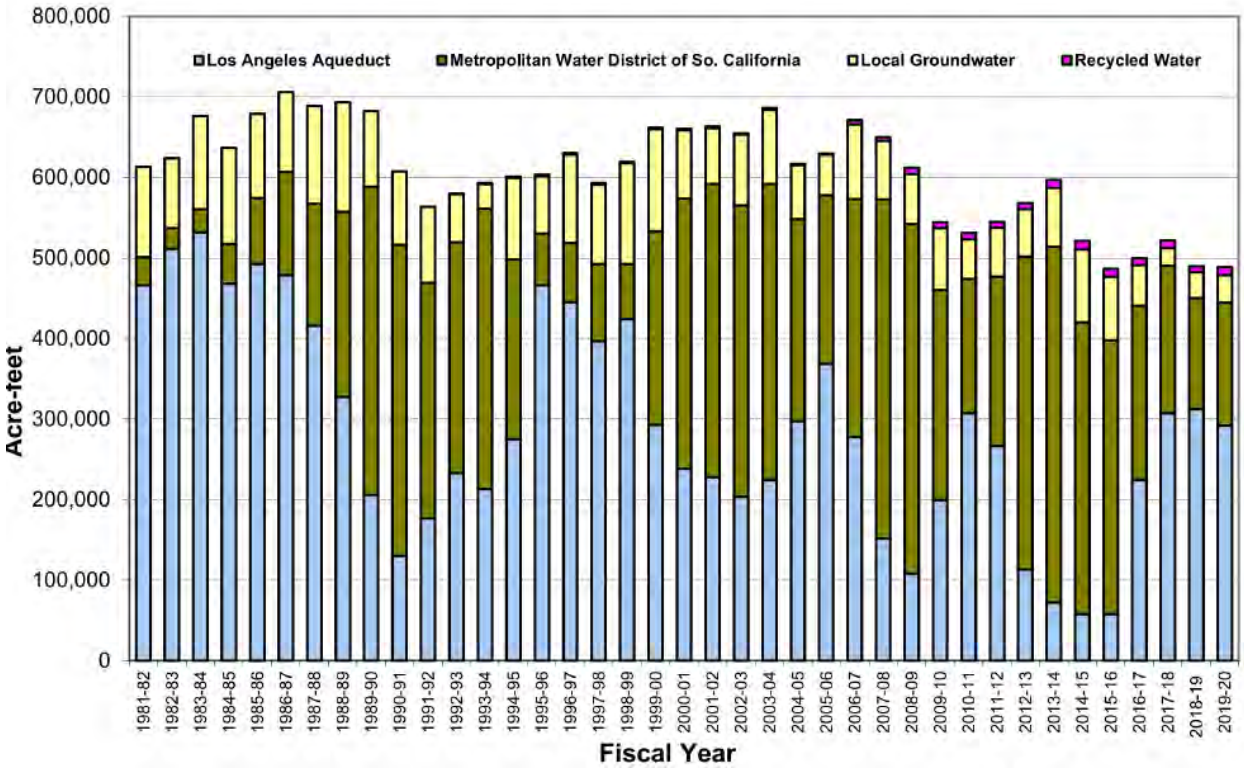
On May 10th, 2022, Los Angeles Mayor Eric Garcetti announced that outdoor watering will be limited for LADWP customers to two days per week, with watering required to occur in the evening or early morning.

Historical Per Capita Water Use in LADWP's Service Area



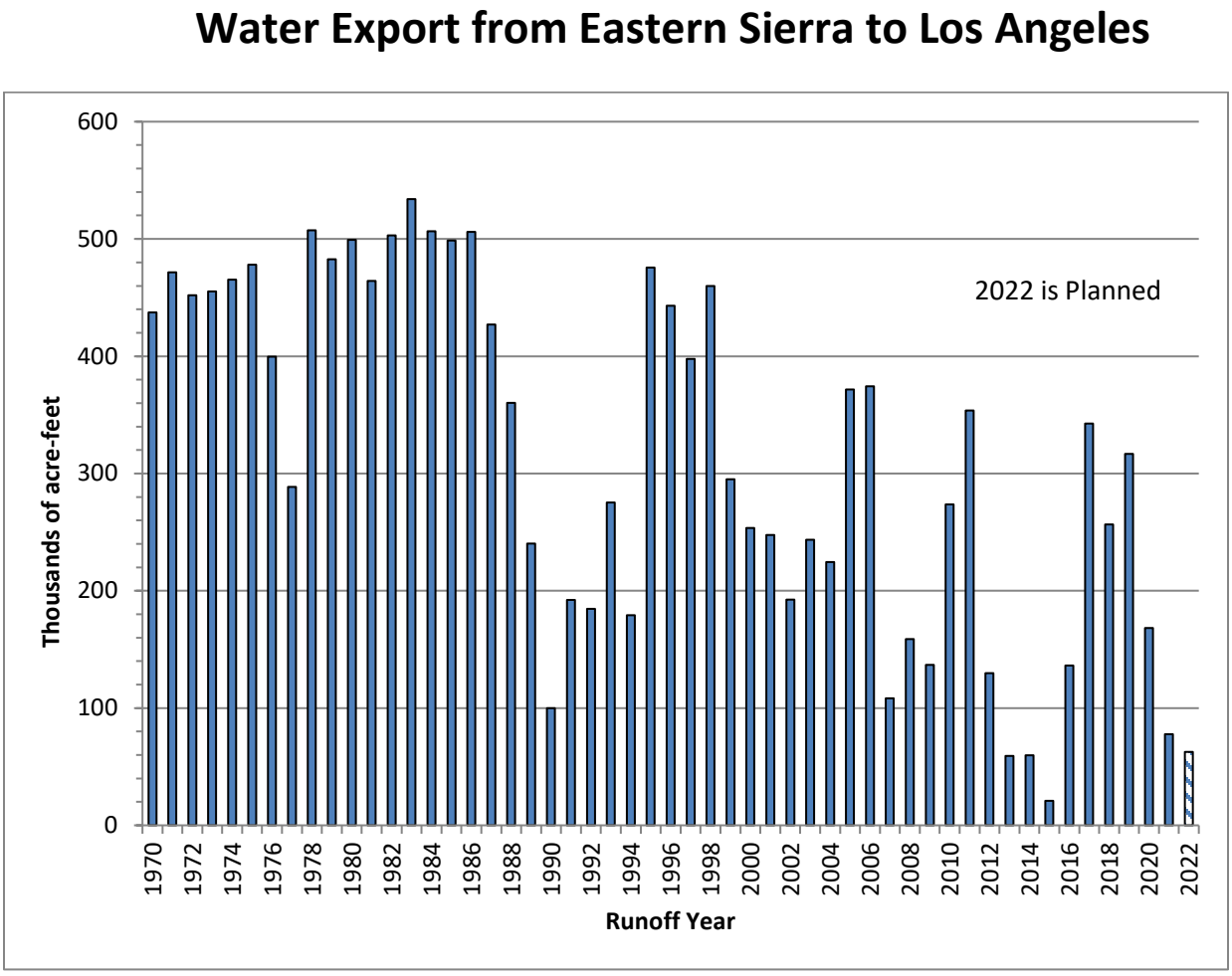
City of Los Angeles Water Supply

LADWP Historical Water Supply Sources FY 1980/81 to 2019/20



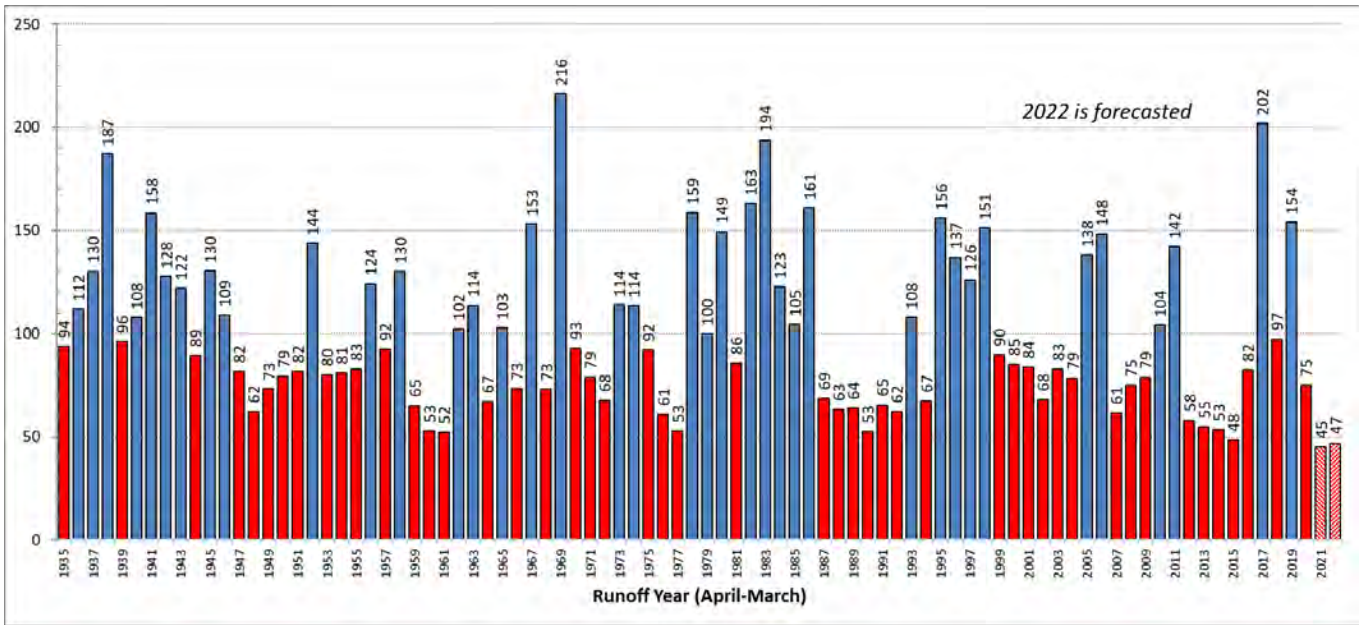
2) Flows in the Los Angeles Aqueduct System

Flow in the Los Angeles Aqueduct for water supply for the city of Los Angeles ties in to the second factor identified in the Green Book. The current multi-year drought is impacting the entire State of California and deliveries from the State Water Project have been set at a 5% allocation. The Los Angeles Aqueduct is expected to only provide 13% of the supply to the City of LA for the 2022-23 runoff year. This is only 35% of the recent average of Los Angeles Aqueduct supplies. Water purchases from the Metropolitan Water District of Southern California, groundwater from the Los Angeles area aquifers, stormwater capture in the Los Angeles basin, and recycled water will supply the remainder of the City's water needs.



3) Surface Water Runoff Conditions

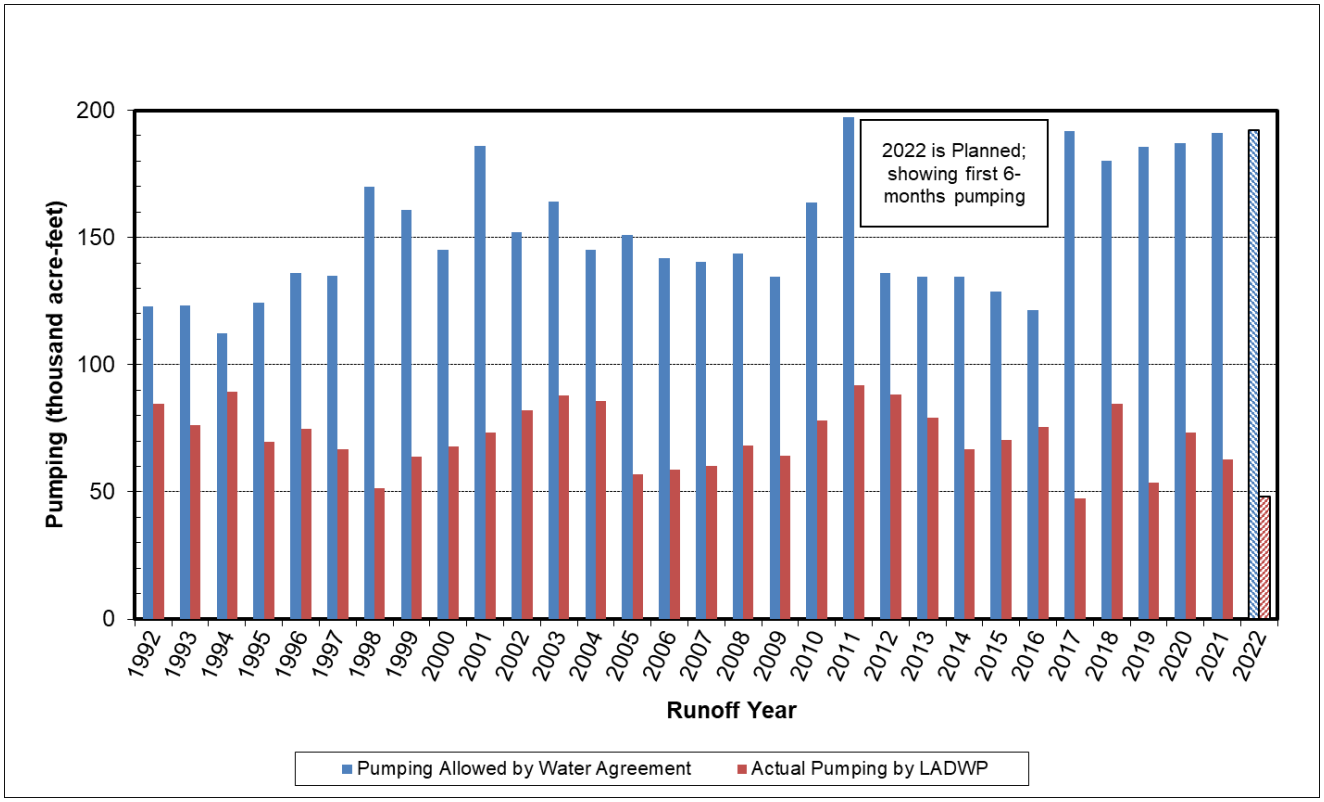
The third factor for consideration is the surface water runoff conditions. The April 1 forecast for Eastern Sierra runoff for 2022-23 runoff year is 47% long term average annual runoff value. This is following the driest year for the period of record and this year will be the third year of the drought.



4) Level of Groundwater Extractions

The level of groundwater extractions in the Owens Valley is the fourth factor to consider. Approximately 192,110 acre feet of water is available for groundwater pumping from Owens Valley wellfields under the terms of the Water Agreement during the 2022-23 runoff year, however, LADWP anticipates groundwater pumping will be less than 50% of this allowable capacity. The 1991 EIR called for 110,000 acre-feet of pumping per year, and pumping even in the dire supply conditions experienced now will fall below that number. Groundwater extraction plans and practices since the early 1990's have been environmentally sensitive to avoid lowering groundwater tables and the pumping plan for this year will be consistent recent plans and practices.

Owens Valley Pumping - Provided by Water Agreement and Actual Since 1992



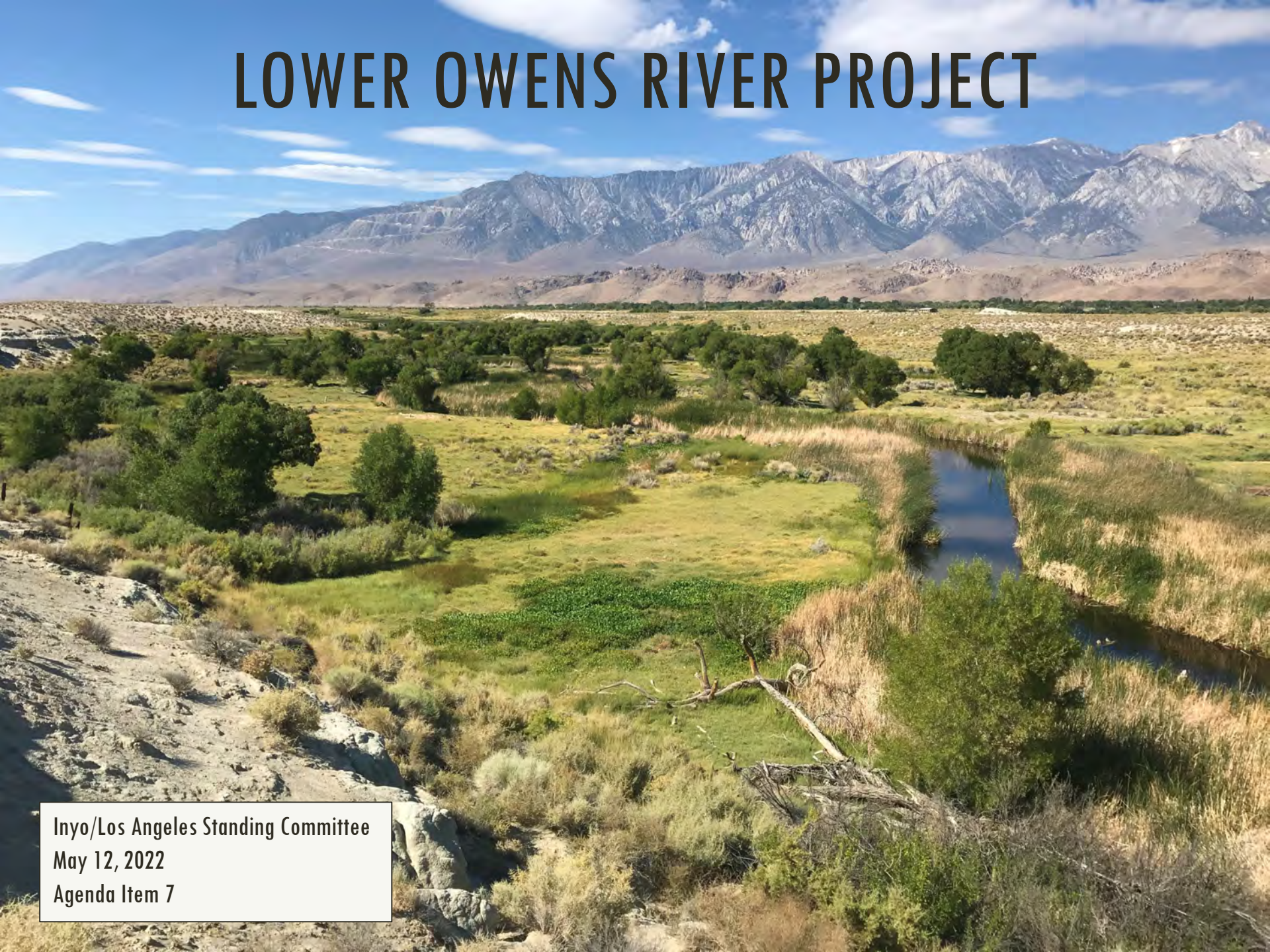
5) Extent of Well Turn-offs Implemented for Purposes of Environmental Protection

The fifth and last factor is the extent of well turn-offs for purposes of environmental protection. Currently, there are 19 wells turned off for environmental protection due to the provisions of the Green Book. LADWP has followed and will continue to follow the on-off provisions of the Green Book.

When considering each of these five factors laid out in the Green Book, this analysis shows proper conditions for the implementation of an irrigation reduction program.

AGENDA ITEM #7

LOWER OWENS RIVER PROJECT



Inyo/Los Angeles Standing Committee
May 12, 2022
Agenda Item 7

7A. CONSULTATION WITH CDFW

Concerning:

7b. Setting the LORP Seasonal Habitat Flow (SHF) and

7c. Establishment of the Blackrock Waterfowl Management Flooded Acreage

Process for both is described in the 1997 MOU and LORP Post Implementation Funding Agreement

May 3, 2022

Ms. Patricia Moyer
State of California
Department of Fish and Wildlife
787 N. Main Street, Suite 220
Bishop, CA 93514

Dear Ms. Moyer:

Subject: 2022 Lower Owens River Project Seasonal Habitat Flow and Blackrock Waterfowl Management Area Flooded Acreage

Lower Owens River Project Seasonal Habitat Flow

The Lower Owens River Project (LORP) annual Seasonal Habitat Flow (SHF) is intended to create a natural disturbance to establish and maintain native riparian vegetation and influence channel morphology as described in the *2004 Lower Owens River Project Environmental Impact Report* (2004 LORP EIR). A primary LORP goal is the establishment of a healthy, functioning Lower Owens riverine-riparian ecosystem. Other goals call for the establishment of a
physical features of the LORP, for the ben
endangered species, while providing for th
recreation, livestock grazing, agriculture, a
riparian system is to create and sustain he
habitats and a healthy warm water recreat
fish (1997 Memorandum of Understanding

The LORP Post-Implementation Funding
process for establishing the SHF and com
and Game (CDFG), now known as Califor
Section II.O.5.a of the Post-Imp Agreemer

*"Soon after the first of April each yea
runoff year forecast for the Owens Ri
will be developed as described in Se
approximately the second or third we
will transmit the recommendation co
and ramping of the seasonal habitat
runoff year forecast for the Owens Ri*

Ms. Patricia Moyer
Page 4
May 2, 2022

10 business days of this letter. At the Standing Committee meeting, CDFW will be provided an opportunity to make a presentation regarding its recommendations.

If you have any questions regarding this submission, please contact Mr. Adam Perez, Manager of the Los Angeles Aqueduct, at (760) 872-1104, or Dr. Aaron Steinwand, Director of Inyo County Water Department, at (760) 878-0001.

Sincerely,

Mr. Adam Perez
Manager of Aqueduct
Los Angeles Department of Water and Power

300 Mandich Street
Bishop, California 93514-3449

Dr. Aaron Steinwand
Director
Inyo County Water Department

135 South Jackson Street
P.O. Box 337
Independence, CA 93526-0337

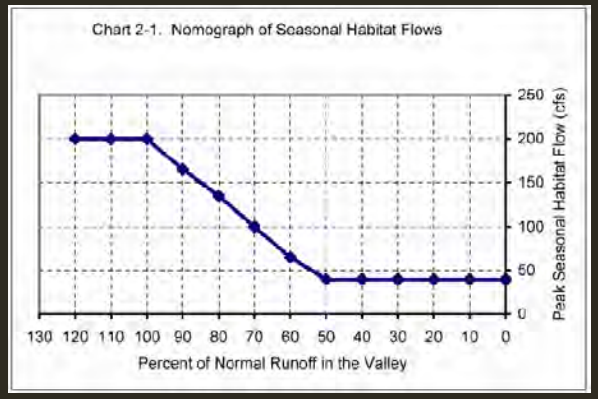
LD:jb
c: Ms. Alyssa Marquez, CDFW
Mr. Nick Buckmaster, CDFW

7B. SETTING THE LORP SEASONAL HABITAT FLOW (SHF)

Background:

The 1997 MOU and the 2009 Post Implementation Funding Agreement require that the Standing Committee set the annual SHF.

The 2004 LORP EIR, Section 2.3.5.3, describes the means for determining the LORP SHF velocity and ramping schedule based on the Owens River Basin Runoff Forecast.



Conditions/Recommendation:

47% of normal runoff conditions, equating to **no SHF in 2022** (less than 50%)

Requested Action:

Approve maintaining 40 cfs baseflow in the Lower Owens River with no SHF in 2022.

7C. ESTABLISHMENT OF BWMA FLOODED ACREAGE

Background:

The 1997 MOU establishes that the BWMA will be flooded up to 500 acres at any given time (year-round) based on runoff forecast.

LADWP and Inyo County began implementation of a 5 year Interim Management and Monitoring Plan in 2021-2022 as ***adaptive management*** geared toward further improving habitat conditions through a seasonal flooding regime.

Conditions/Recommendation:

47% runoff would equate to 235 acres to be flooded year-round under MOU guidance, however our recommendation is to implement Year 2 of the Interim Plan.

Requested Action:

Set the flooded acreage in the BWMA for 2022-2023 at a fixed 500 acres in the fall, winter, and early spring months in accordance with Year 2 of the Interim Plan.

INYO/LOS ANGELES STANDING COMMITTEE

Dedicated to the advancement of mutual cooperation

MEMORANDUM

To: Inyo/Los Angeles Standing Committee

From: Technical Group

Date: May 12, 2022

Subject: Agenda Item 7a: Setting the 2022 Lower Owens River Project Seasonal Habitat Flow

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Lower Owens River Project Seasonal Habitat Flow

Lower Owens River Project (LORP) annual seasonal habitat flows (SHF) are intended to create a natural disturbance to establish and maintain native riparian vegetation and channel morphology as described in the *2004 Lower Owens River Project Environmental Impact Report* (2004 LORP EIR). A primary LORP goal is the establishment of a healthy, functioning Lower Owens riverine-riparian ecosystem. Other goals call for the establishment of a healthy functioning ecosystem in other physical features of the LORP, for the benefit of biodiversity and threatened and endangered species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities. The goal for the riverine--riparian system is to create and sustain healthy and diverse riparian and aquatic habitats and a healthy warm water recreational fishery with healthy habitat for native fish (1997 Memorandum of Understanding).

The *2009 Lower Owens River Project Post Implementation Agreement between the Los Angeles Department of Water and Power and the County of Inyo Concerning Operation and Funding of the Lower Owens River Project,* (Post Implementation Agreement) describes the process for establishing the SHF and consultation with California Department of Fish and Game (CDFG) or (DFG), now known as California Department of Fish and Wildlife (CDFW). Section II.O.5.a requires that:

> *"Soon after the first of April each year, LADWP will develop its annual runoff year forecast for the Owens River Basin. The runoff year forecast will be developed as described in Section 2.3.5.3 of the LORP EIR. By approximately the second or third week in April, LADWP and the County will transmit the recommendation*

concerning the amount, duration, timing, and ramping of the seasonal habitat flow, along with LADWP's annual runoff year forecast for the Owens River Basin, to DFG. DFG will be requested to, within ten business days from the receipt of the recommendation, provide their concurrence with the recommendations or provide their own recommendation as to the amount, duration, timing, and ramping of the seasonal habitat flow along with the scientific basis for its differing recommendation."

The 2004 LORP EIR, Section 2.3.5.3, describes the means for determining the LORP SHF velocity and ramping schedule based on the Owens River Basin Runoff Forecast, which for runoff year 2022-2023 has been determined to be 47% percent of normal. Given runoff is forecast to be less than 50 percent of normal, there will be no SHF in 2022 according to the 2004 LORP EIR. The 40 cubic feet per second (cfs) baseflow will be maintained in the Lower Owens River.

Requested Action

The 1997 MOU and the 2009 Post Implementation Agreement require that the Standing Committee set the annual SHF. Based on guidance from the LORP EIR, the Inyo/Los Angeles Technical Group requests that the Standing Committee approve maintaining 40 cfs baseflow in the Lower Owens River with no SHF in 2022.

INYO/LOS ANGELES STANDING COMMITTEE

Dedicated to the advancement of mutual cooperation

MEMORANDUM

To: Inyo/Los Angeles Standing Committee

From: Inyo/Los Angeles Technical Group

Date: May 12, 2022

Subject: Agenda Item 7b: Establishment of Flooded Acreage in the Blackrock Waterfowl Ma7agement Area/ Implementation of Year 2 Management and Monitoring Plan as Adaptive Management of Interim

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Background

The Blackrock Waterfowl Management Area (BWMA) is one of four physical features of the large-scale river restoration project known as the Lower Owens River Project (LORP). Under the LORP, the primary management objective for the BWMA is to create and maintain diverse natural habitats consistent with the needs of “habitat indicator species.”

In April of 1997 the following entities, organizations and an individual entered into a Memorandum of Understanding ("MOU"). The parties to the MOU are: the City of Los Angeles Department of Water and Power ("LADWP"), the County of lnyo ("County"), the California Department of Fish and Game (now the California Department of Fish and Wildlife ("CDFW"), the California State Lands Commission ("SLC"), the Sierra Club ("SC"), the Owens Valley Committee ("OVC") and Carla Scheidlinger as a representative of the OVC and as an individual. These entities are collectively referred to as the "MOU Parties."

Section II.C.4 of the MOU prescribes the following water management to achieve the primary management objective for the BWMA:

> *Approximately 500 acres of the habitat area will be flooded at any given time in a year when the runoff to the Owens River watershed is forecasted to be average or above average. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the forecasted runoff in the watershed. (The runoff forecast for each year will be DWP's runoff year forecast for the Owens River Basin, which is based upon the results of its annual April 1 snow survey of the watershed.) Even in the driest years, available water will be used in the most efficient manner to maintain the habitat. The Wildlife and*

> *Wetlands Management Plan element of the LORP Plan will recommend the water supply to be made available under various runoff conditions and will recommend how to best use the available water in dry years. The amount of acreage to be flooded in years when the runoff is forecasted to be less than average will be set by the Standing Committee based upon the recommendations of the Wildlife and Wetlands Management Plan and in consultation with DFG.*

In compliance with Section II.C.4 of the MOU, since the implementation of the LORP through 2020, water was released year-round to flood up to 500 acres of the BWMA at any given time throughout the year when runoff is forecasted to be average or above-average. Also, in compliance with Section II.C.4, reductions in water supplies and concomitant acreages have occurred during less than average runoff years.

Implementation of the 5-year Interim Management and Monitoring Plan for BWMA as Adaptive Management

In 2019, LADWP and the Inyo County Water Department evaluated the effectiveness of the BWMA management that has been conducted according to Section II.C.4 of the MOU. The focus of the review was on habitat indicator species use. The evaluation concluded that continuous year-round flooding resulted in excessive and aggressive growth of emergent vegetation leading to a reduction in open water habitat, static water conditions, and a decrease in waterbird use. While the evaluation noted that habitat indicator species continue to use BWMA, continuous inundation has resulted in the dominance of late successional wetland vegetation and significantly reduced suitable habitat for indicator species and migrating waterbirds.

Section II.E of the MOU specifically provides that if monitoring and reporting show 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*.

As a result of evaluation of the conditions in the BWMA, with the goal of improving habitat conditions in the BWMA, the Inyo/Los Angeles Technical Group developed a 5-year Interim Management and Monitoring Plan for the BWMA (Interim Plan), which provides for seasonal rather than year-round flooding and by enhancing forage for indicator species through moist soil management. Also, under the Interim Plan, instead of varying annual flooded acreage targets based on the projected runoff, a fixed 500 acres will be flooded each year with ramping-up to begin September 15th and ramping-down to start after March 1st with complete dry down by May 1st.

The MOU Parties did not object to LADWP and Inyo County implementing the Interim Plan to further improve habitat conditions in the BWMA. As such, the Standing Committee set the acreage to be flooded in BWMA in 2021-2022 at a fixed 500 acres in the fall, winter, and early spring in accordance with the Interim Plan.

LADWP and Inyo County implemented Year 1 of the Interim Plan as adaptive management in 2021-2022 and are seeing very promising results with regard to avian use of the waterfowl units. It is our recommendation to implement Year 2 of this Interim

Plan in 2022-2023, again setting the acreage to be flooded in the BWMA at a fixed 500 acres in the fall, winter and early spring months. Monitoring prescribed in the Interim Plan to track flooded acreage, avian use, and forage production in the waterfowl units will continue as specified.

The following conditions outlined in the May 26, 2021 memo from the Inyo/Los Angeles Technical Group to the Standing Committee apply through the implementation of the Interim Plan:

1. During the five-year period beginning in the 2021 runoff year and ending on April 15th, 2026, the provisions of Section II.C.4 of the MOU prescribing water management for the BWMA will be suspended and the provisions of the Interim Plan including the responses to comments on the Interim Plan will govern water management in the BWMA.
2. Unless the MOU has been amended prior to April 15, 2026 to change the MOU's provisions for management of the BWMA, beginning on April 16, 2026, the provisions of Section II.C.4 of the MOU prescribing water management to achieve the primary management objective for the BWMA shall govern water management for the BWMA.
3. During the five-year period when the Interim Plan is being implemented, the Technical Group shall:
    a. monitor the BWMA and to report the monitoring results in accordance with provisions of the Interim Plan;
    b. include in the LORP Annual Report the annual BWMA monitoring data, an evaluation and analysis of the results of the monitoring, a discussion of the challenges in achieving the goals, and a discussion of any problems with the implementation of the Interim Plan; and
    c. each year during the five-year period of the Interim Plan, hold a meeting with the MOU parties during May or June to discuss the monitoring results and the observations of the BWMA during the preceding year.
5. Each year during the five-year period of the Interim Plan, regardless of the amount of forecasted runoff, the amount of acreage in the BWMA to be flooded is to be set by the Standing Committee in consultation with CDFW.
6. Acknowledge that since the BWMA Plan constitutes an adaptive management measure under the MOU, the Dispute Resolution and Litigation provisions in the MOU (§§ VI, VII) apply to LADWP's implementation and compliance with the Interim Plan.

Requested Action

The Inyo/Los Angeles Technical Group requests that the Standing Committee set the flooded acreage in the BWMA for 2022-2023 at a fixed 500 acres in the fall, winter, and early spring months in accordance with Year 2 of the Interim Plan, with timing and conditions described above.

May 3, 2022

Ms. Patricia Moyer
State of California
Department of Fish and Wildlife
787 N. Main Street, Suite 220
Bishop, CA 93514

Dear Ms. Moyer:

Subject: 2022 Lower Owens River Project Seasonal Habitat Flow and Blackrock Waterfowl Management Area Flooded Acreage

Lower Owens River Project Seasonal Habitat Flow

The Lower Owens River Project (LORP) annual Seasonal Habitat Flow (SHF) is intended to create a natural disturbance to establish and maintain native riparian vegetation and influence channel morphology as described in the *2004 Lower Owens River Project Environmental Impact Report* (2004 LORP EIR). A primary LORP goal is the establishment of a healthy, functioning Lower Owens riverine-riparian ecosystem. Other goals call for the establishment of a healthy functioning ecosystem in other physical features of the LORP, for the benefit of biodiversity and threatened and endangered species, while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities. The goal for the riverine-riparian system is to create and sustain healthy and diverse riparian and aquatic habitats and a healthy warm water recreational fishery with healthy habitat for native fish (1997 Memorandum of Understanding, MOU).

The LORP Post-Implementation Funding Agreement (Post-Imp Agreement) defines the process for establishing the SHF and consultation with California Department of Fish and Game (CDFG), now known as California Department of Fish and Wildlife (CDFW). Section II.O.5.a of the Post-Imp Agreement requires that:

> *"Soon after the first of April each year, LADWP will develop its annual runoff year forecast for the Owens River Basin. The runoff year forecast will be developed as described in Section 2.3.5.3 of the LORP EIR. By approximately the second or third week in April, LADWP and the County will transmit the recommendation concerning the amount, duration, timing, and ramping of the seasonal habitat flow, along with LADWP's annual runoff year forecast for the Owens River Basin, to DFG. DFG will be*

requested to, within ten business days from the receipt of the recommendation, provide their concurrence with the recommendations or provide their own recommendation as to the amount, duration, timing, and ramping of the seasonal habitat flow along with the scientific basis for its differing recommendation."

The 2004 LORP EIR, Section 2.3.5.3, describes the means for determining the LORP SHF velocity and ramping schedule based on the Owens River Basin Runoff Forecast, which for runoff year 2022-2023 has been determined to be 47% percent of normal. Given runoff is forecast to be less than 50 percent of normal, there will be no SHF in 2022 according to the 2004 LORP EIR. The 40 cubic feet per second (cfs) baseflow will be maintained in the Lower Owens River.

Blackrock Waterfowl Management Area

Similarly, the 1997 MOU and Post-Imp Agreement provide guidance for setting the flooded acreage in the Blackrock Waterfowl Management Area (BWMA). More specifically, Section II.C.4 of the 1997 MOU states:

"Approximately 500 acres of the habitat area will be flooded at any given time in a year when the runoff to the Owens River Watershed is forecasted to be average or above. In years when the runoff is forecasted to be less than average, the water supply to the area will be reduced in general proportion to the forecasted runoff in the watershed. (The runoff forecast for each year will be DWP's runoff year forecast for the Owens River Basin, which is based upon the results of its annual April 1 snow survey of the watershed). Even in the driest years, available water will be used in the most efficient manner to maintain the habitat. The Wildlife and Wetlands Management Plan element of the LORP Plan will recommend the water supply to be made available under various runoff conditions and will recommend how to best use the available water in dry years. The amount of acreage to be flooded in years when the runoff is forecasted to be less than average will be set by the Standing Committee based upon the recommendations of the Wildlife and Wetland Management Plan and in consultation with DFG."

Section II.P.2 of the Post-Imp Agreement states that:

"In order to address the requirement that when runoff is forecasted to be less than average, the amount of acreage to be flooded will be set by the Standing Committee in consultation with DFG the following process will be followed.

a. Soon after the first of April each year, LADWP will develop its annual runoff year forecast for the Owens River Basin. The runoff year forecast will be developed as described in Section 2.3.5.3 of the LORP EIR. In the event the runoff forecast equals or exceeds

> *"normal runoff' as defined in Section 2.3.5.3 of the 2004 Final LORP EIR, no further action is required.*
>
> *b. If the runoff forecast is for less than the normal runoff, the year will be considered a Dry Year, and consultation with the Department of Fish and Game ("DFG") will occur on the development of a Dry Year Blackrock Management Plan. In a Dry Year, by approximately the second or third week in April, LADWP and the County will transmit the recommendation concerning the amount of acreage to be flooded, along with LADWP's annual runoff year forecast for the Owens River Basin to DFG. DFG will be requested to, within ten business days from receipt of the recommendation, provide their concurrence with the recommendation or provide their own recommendation as to the amount of acreage to be flooded, along with the scientific basis for its differing recommendation.*
>
> *c. In dry years when DFG has a differing recommendation, a report on the difference will be provided to the Standing Committee and a Standing Committee meeting will be scheduled. An action item entitled "Establishment of Dry Year Blackrock Management Plan" will be placed on the Standing Committee agenda. The Standing Committee will provide an opportunity for DFG to make a presentation at the meeting concerning its recommendations. Following any such presentation by DFG, the Standing Committee will consider adoption of a Dry Year Blackrock Management Plan".*

Based on a 47 percent of normal runoff year, the acreage to be flooded at BWMA at any given time for the year would be 235 acres.

As you are aware, the Standing Committee set the flooded acreage for BWMA in 2021-2022 in accordance with a 5-year Interim Management and Monitoring Plan for BWMA that incorporates seasonal flooding of a fixed 500 acres of waterfowl habitat in the fall, winter, and early spring months. This Interim Plan is geared toward further improving habitat conditions, preventing further encroachment of aquatic vegetation, and reducing long term maintenance in the BWMA. We appreciate your support of this Interim Plan.

LADWP and Inyo County implemented Year 1 of the 5-year Interim Plan as adaptive management in 2021-2022 and are seeing very promising results with regard to avian use of the waterfowl units. It is our recommendation to implement Year 2 of this Interim Plan in 2022-2023, setting the acreage to be flooded in the BWMA at a fixed 500 acres in the fall, winter and early spring months.

In order to prepare for the May 12, 2022 Standing Committee meeting, we request that CDFW provide its concurrence with the recommendations presented, or CDFW's recommendations along with the scientific basis for the differing recommendation, within

10 business days of this letter. At the Standing Committee meeting, CDFW will be provided an opportunity to make a presentation regarding its recommendations.

If you have any questions regarding this submission, please contact Mr. Adam Perez, Manager of the Los Angeles Aqueduct, at (760) 872-1104, or Dr. Aaron Steinwand, Director of Inyo County Water Department, at (760) 878-0001.

Sincerely,

Mr. Adam Perez
Manager of Aqueduct
Los Angeles Department of Water and Power

300 Mandich Street
Bishop, California 93514-3449

Dr. Aaron Steinwand
Director
Inyo County Water Department

135 South Jackson Street
P.O. Box 337
Independence, CA 93526-0337

LD:jb
c: Ms. Alyssa Marquez, CDFW
Mr. Nick Buckmaster, CDFW