# Public Workshop on the Mono Lake Drought Response Considerations



### Item 3: Mono Lake Current Conditions



# Current Conditions at Mono Lake and Their Implications for Public Trust Resources

Alisa Ellsworth, Environmental Program Manager

Robert Hughes, P.E., Senior Engineer
California Department of Fish and Wildlife
February 15, 2023



### California Department of Fish & Wildlife Role

- CDFW is California's Trustee Agency for fish and wildlife resources.
- CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, and native plant species, and the habitat necessary to maintain biologically sustainable populations of these species.
- CDFW has a responsibility to protect public trust resources and uses, including fish and wildlife in the Mono Basin.
- CDFW participated in the 1993/1994 Water Right Hearing to amend water right licenses 10191 and 10192.
- CDFW provided evidence and testimony, including streamflow recommendations, to protect various public trust resources in the Mono Basin.
- CDFW is a Party to the 2013 Mono Basin Settlement Agreement regarding stream restoration.
- CDFW is an active member of the Mono Basin Monitoring Administration Team.

# Current Condition of Mono Lake

Mono Lake's current elevation is 6379.26 feet above sea level, which is more than 12 feet below the Public Trust Lake Level.



#### Current Lake Level and Concern for Public Trust Resources

#### Mono Lake California Gull population

One of the three largest breeding colonies in the world

Largest natural breeding colony in California

Lower lake levels present a threat to the Mono Lake California Gull nesting colonies

Fencing combined with a higher lake level is more protective of the Mono Lake California Gull population

CDFW is available to collaborate with the SWRCB, LADWP, and other parties on potential solutions to protect Mono Lake's public trust resources



#### Current Lake Level and Concern for Public Trust Resources (cont.)

Mono Lake is a unique ecological system that supports millions of migratory birds each year through the production of brine shrimp and alkali flies.

Brine shrimp and alkali flies are the main food source for California gulls and other migratory birds at Mono Lake.

Lower lake levels resulting in higher lake salinity can affect reproduction of brine shrimp and alkali flies



## Mono Lake Public Trust Resources:

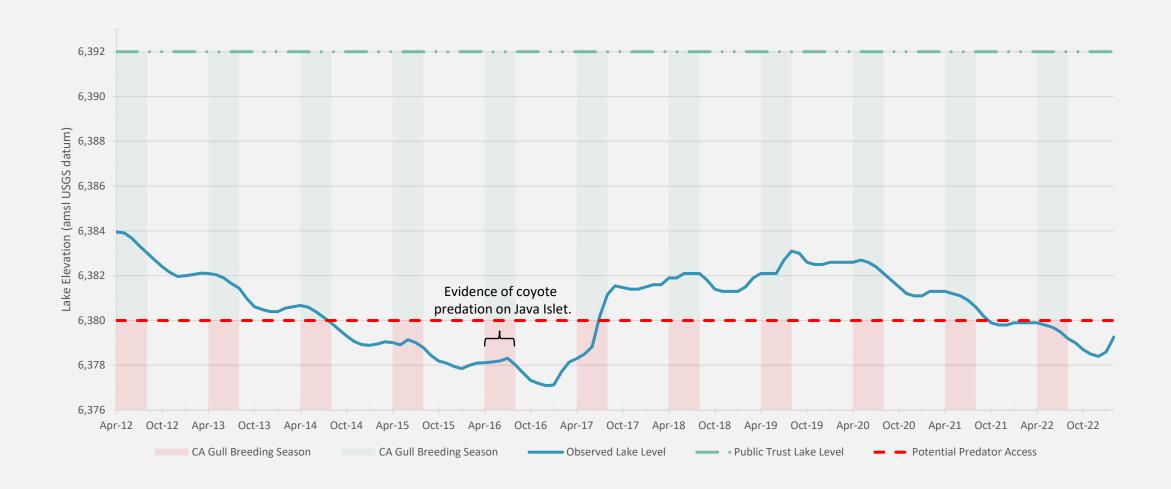
A lake level of 6384 ft is the minimum level necessary to protect the Mono Lake California gull population from predation, as identified in D-1631. A lake level of 6,392 ft is protective of all public trust resources as the State Water Board concluded in D-1631.

CDFW is requesting the SWRCB to hold the hearing required by Condition 9(d) of the amended Licenses this year, or in the alternative take emergency action under Condition L of the amended License to implement the post-transition water diversion criteria set by D1631 and Condition 9 of the Amended Licenses on an interim basis to protect Public Trust Resources until the Condition 9(d) hearing can be completed.

Alternatively, CDFW is requesting the Water Board to take emergency action to alter diversions or take other actions as necessary to raise the lake level to protect public trust resources until the hearing required by Condition 9(d) of the amended Licenses is completed.



## Mono Lake: Risk of Not Taking Action



 "Based on the evidence in the record, the SWRCB concludes that a lake level of 6,384 feet would protect the gulls from coyote access to Negit Island and nearby islets, and would maintain a buffer for continued protection during periods of extended drought." [page 106]



"... A water level of 6,390 would completely inundate the landbridge between Negit Island and the shore, and would provide additional deterrence to potential terrestrial predators." [page 106]



## Mono Lake – Simulation of Export Suspension

#### **Amended Licenses 10191 & 10192**

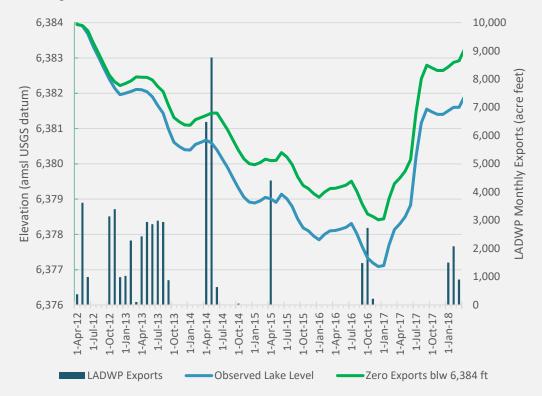
Conditions 14.b(2) and 15(d) require:

• LADWP to share a copy of their "locked" eSTREAM model.

CDFW still has not been given access to the eSTREAM model.

CDFW has informed SWRCB staff of this concern.

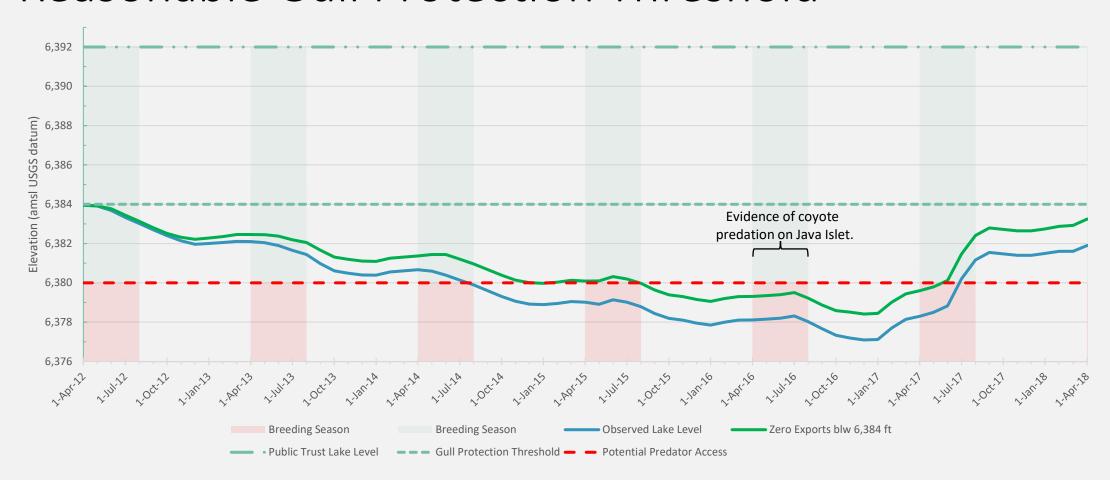
#### Simple Simulation Tool\*



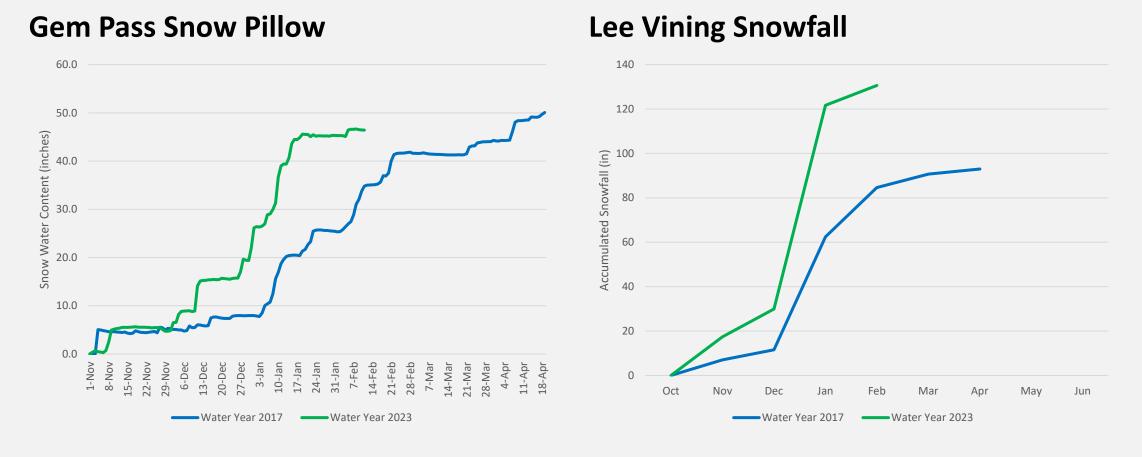
<sup>\*</sup> Excludes approximately 5,000 afa tunnel accretions.

<sup>\*\*</sup> LADWP monthly reports were used to fill-in the export data for the past few months.

# Mono Lake – CDFW Agrees with the SWRCB Conclusion in Decision 1631 that 6,384 is a Reasonable Gull Protection Threshold

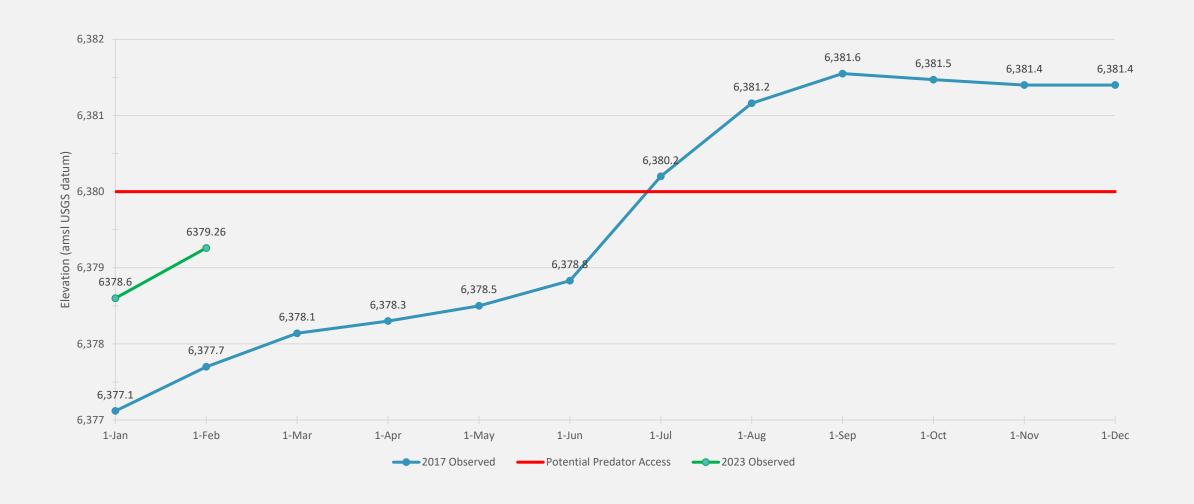


## Hydrologic Comparison – 2017 vs 2023



So far this year, the snowpack is ahead of 2017.

#### Mono Lake Elevation – 2017 vs 2023



#### Preserve the Gains to Protect the Gulls



6,392 ft – The Public Trust Lake Level

"This decision also amends Los Angeles' water right licenses to include specified water diversion criteria which are intended to gradually restore the average water elevation of Mono Lake to approximately 6,392 feet above mean sea level in order to protect public trust resources at Mono Lake." [page 195]



The Board goes on to say: "Among other things, the increased water level will protect nesting habitat for California gulls and other migratory birds, maintain the long-term productivity of Mono Lake brine shrimp and brine fly populations, maintain public accessibility to the most widely visited tufa sites in the Mono Lake Tufa State Reserve, enhance the scenic aspects of the Mono Basin, lead to compliance with water quality standards, and reduce blowing dust in order to comply with federal air quality standards." [page 195]



"... The record indicates that an average water elevation of 6,392 feet would be consistent with protection of a number of important public trust resources including: air quality in the Mono Basin; water quality in Mono Lake; the Mono Lake brine shrimp and brine fly which provide food for migratory birds; secure, long-term nesting habitat for California gulls and other migratory birds; easily accessible recreational opportunities for the large number of visitors to the Mono Lake Tufa State Reserve; and the panoramic and scenic views which attract many people to the Mono Basin." [page 155]



## Interim Use of Post-Transition Water Diversion Criteria

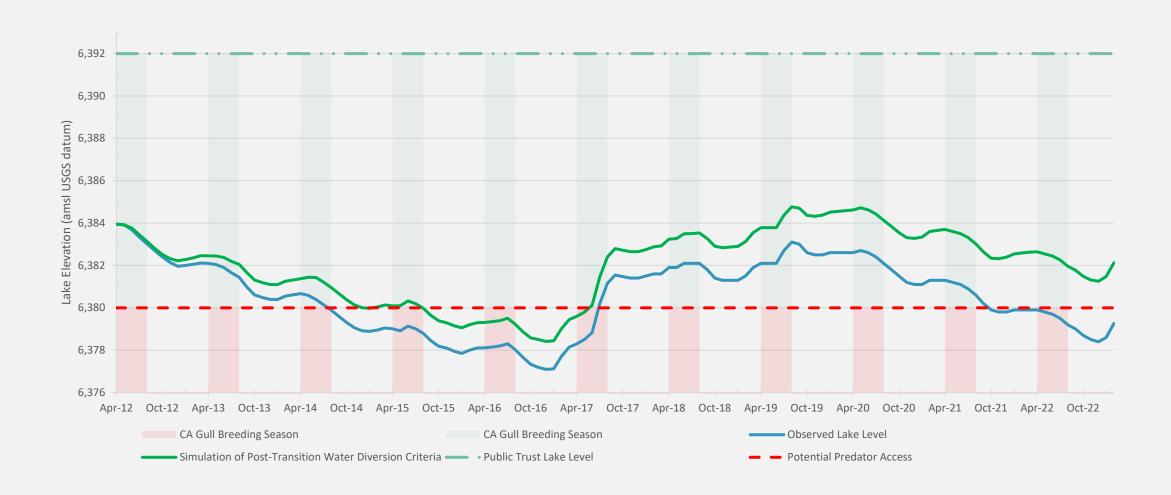
## Post-Transition Water Diversion Criteria

- Condition 9 of Amended Water Right Licenses 10191 and 10192
- Included in Decision 1631
- Impacts previously analyzed during a public review process
- SWRCB originally anticipated would be implemented in 2014
- Accepted as a license condition

#### Benefits

- Provide further progress towards achieving Public Trust Lake Level
- Protect the nesting CA Gulls
- Protects water quality

#### Implementation of Post-Transition Water Diversion Criteria



## Summary

Immediate action is needed this year to protect public trust resources from emergency drought conditions.

If the hearing required by Condition 9(d) of the amended Licenses cannot be completed this year, interim measures should be implemented to improve conditions for public trust resources until the hearing is completed.

Post-transition water diversion criteria would be the most protective interim measure for public trust resources.

At a minimum, interim measures should be taken this year to preserve future gains in lake level and protect California gulls from predation until the Condition 9(d) hearing is completed.

CDFW is available to collaborate with the SWRCB, LADWP, and other parties on potential short-term and long-term solutions to protect Mono Lake's public trust resources.