



# **LADWP Restoration in the Mono Basin**

October 27, 2020



## LADWP's Longstanding Presence and Stewardship of Mono Basin





# The Snapshot

## 1940

SWRCB granted water permits to allow the City to divert water into its aqueduct system

## 1980s

After years of diversions it was determined that past allocations may be inconsistent with current needs and LADWP's allocations were reevaluated

## 1998 - 2010

Ongoing ecosystem restoration is underway in the Mono Basin

## 2010

State Water Resources Control Board appointed "stream scientists" released a multi-year study of environmental conditions in the Mono Basin where they found:

- Stream ecosystems are healthy and continuing to recover;
- Fish populations are reproducing naturally and are producing large brown trout in some locations;
- Several species of migrant songbirds have colonized the riparian forests; and
- High flows intended to reshape the stream channels and floodplains are functioning well.

## 2010 - present

Environmental restoration still underway in the Mono Basin, there are currently 66 ongoing, in progress or complete projects

# A Comprehensive Approach to Sustainability in Mono Basin

## 01 Decrease Water Exports and Usage

LADWP has made significant investments in conservation and local supply projects in Los Angeles to reduce reliance on exports. Since 1985, exports from Mono Basin have been reduced by 80%.

## 02 Protect and Enhance Natural Ecosystems

Restoration efforts in Mono Basin have returned stream systems to their pre-diversion health.

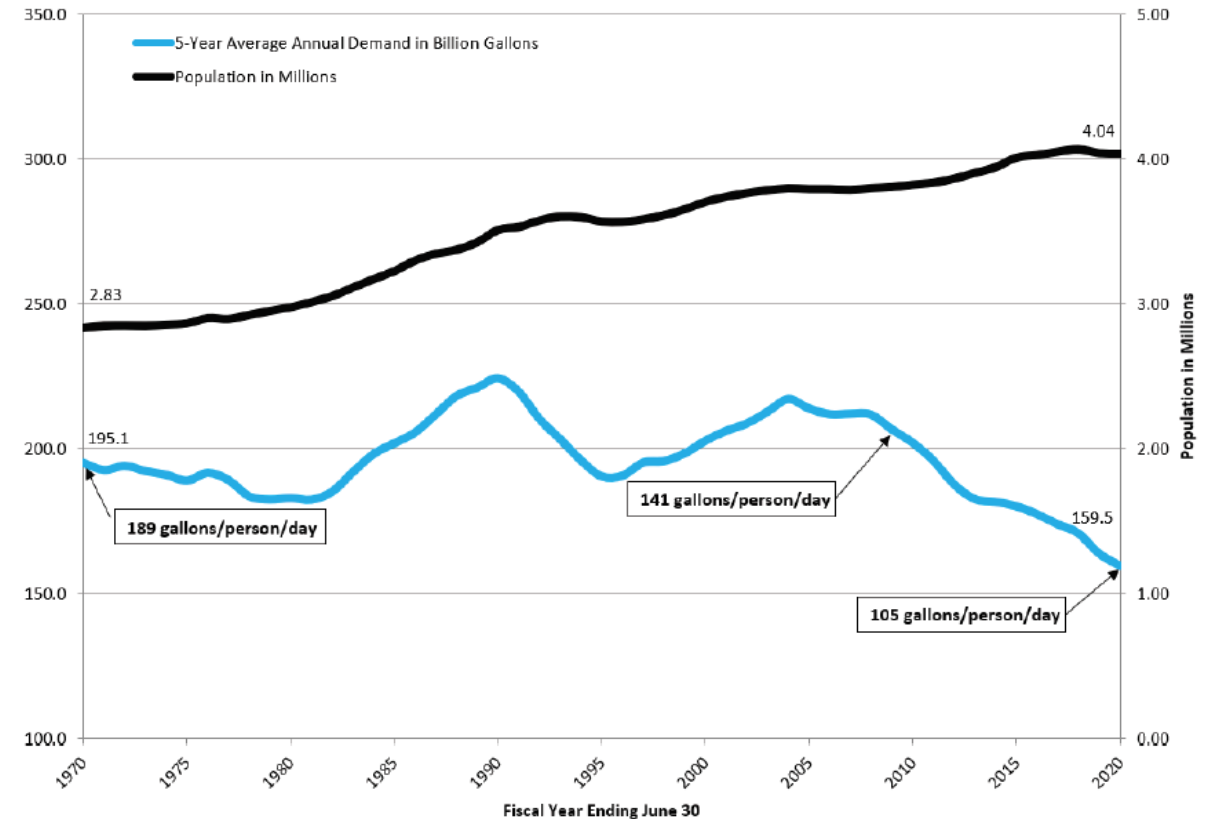
## 03 Capital and Infrastructure Investments

LADWP is now preparing to enhance the Grant Lake Reservoir Spillway that will be the capstone to decades of restoration work.

# Los Angeles – Leading the Way for Long-Term Water Supply Reliability

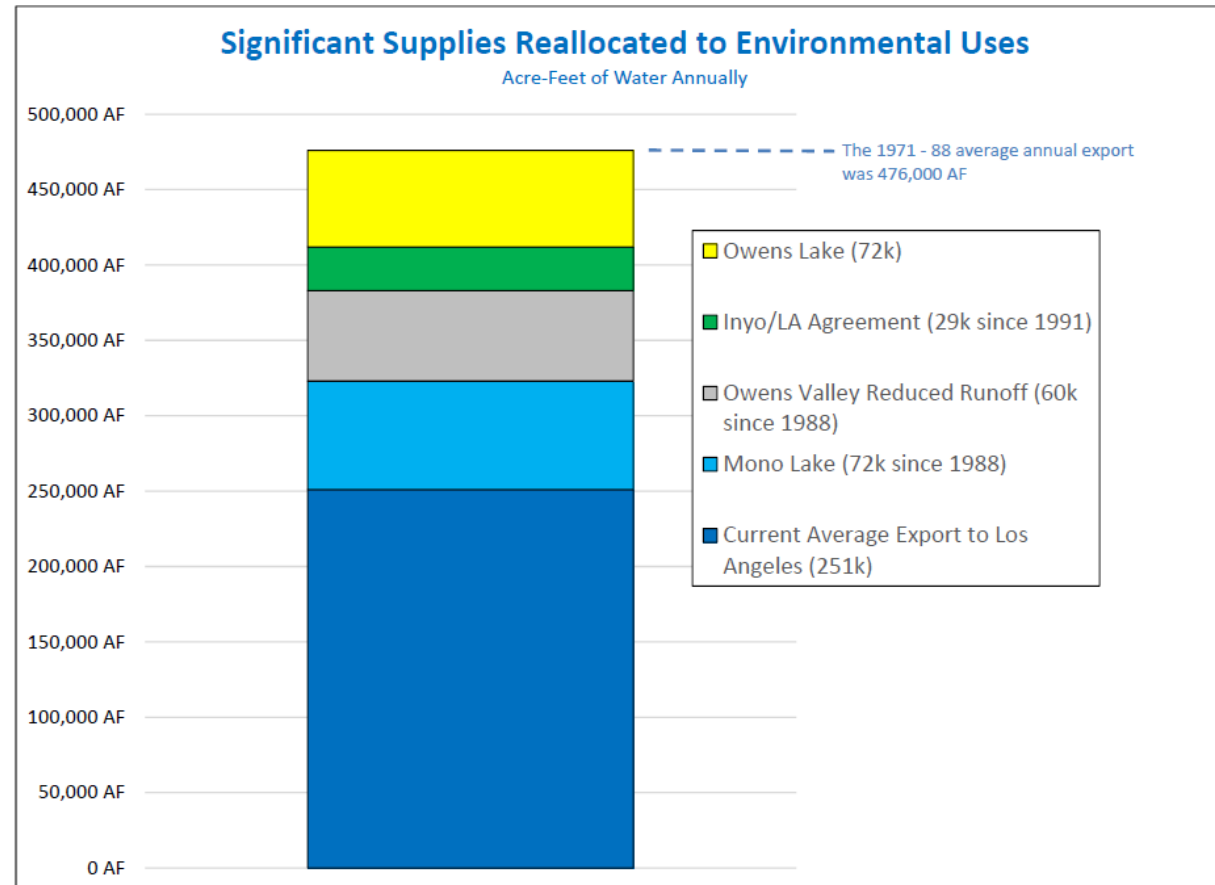
- 1. Maintain and Diversify Local Supplies:** Significant investments in local supply projects are reducing dependence on imported, purchased water.
  - Water Recycling
    - Operation NEXT will work to achieve the goal of recycling 100% of supply from the Hyperion Water Reclamation Plant by 2035
  - Stormwater Capture
  - Groundwater Replenishment & Remediation
- 2. Reduce Water Use:** LADWP's investments in conservation helped customers cut water usage by 40% even as the City's population increased by a million people.
  - One of the lowest per capita usage rates for large US cities
  - On track to achieve the Mayor's goal of 100 gallons per person per day by 2035
  - As Los Angeles' population continues to grow, water demand will be offset by additional conservation efforts

## LADWP CUSTOMERS CUT WATER USE BY 44% IN LAST 30 YEARS



# Reducing Exports and Reliance on Mono Lake

- Since 1985, exports have been reduced by 80%. The water now remains in Mono Basin to support environmental restoration.
- For the last 20 years, water elevation in the lake has been an average of 10 feet higher than its lowest point in 1981.



# Restoring Stream Flows into Mono Lake

1998 SWRCB established the goal of “self-sustaining” stream systems

- Healthy riparian habitats
- Stable fish populations
- Improved bird life
- Increased lake levels



## Restoring Stream Flows into Mono Lake

*Rush Creek at Old 395 - After Restoration*



After more than two decades of monitoring, analyzing and controlling the flows from Grant Lake, in 2010 scientists declared the stream ecosystems as **healthy and continuing to recover**.



*Rush Creek at  
Old 395 - 1987*



## Mono Basin's Thriving Fish Populations

- Fishery restoration is now entering its 24<sup>th</sup> year of study.
- In 2010, scientists determined that fish populations are reproducing naturally.
- In 2019, Upper Rush Creek supported ~2,647 newborn Brown Trout compared to ~1,572 in 2018.



## Bird Life in Mono Basin



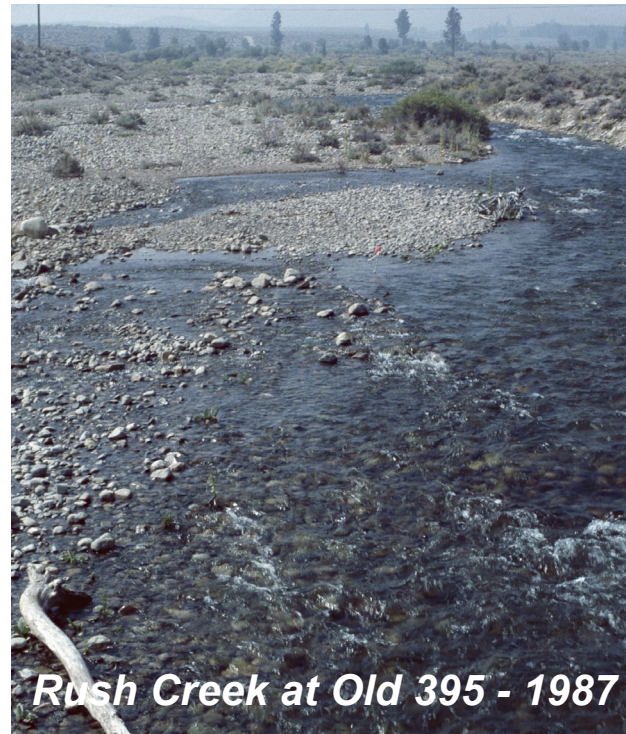
Restoration of the streams and the increase in Mono Lake water levels have led to significant improvements in the region's bird life.

- Several species of migrant songbirds have colonized riparian forests.
- In 2011, the State Water Resources Control Board found that the ecosystem is healthily supporting the Waterfowl.
- During 1998 to 2005, the Point Reyes Bird Observatory recorded the densest nesting population in the state of Yellow Warbler, a California Species of Special Concern.





*Rush Delta - 1987*



*Rush Creek at Old 395 - 1987*



*Mono Return Ditch - 1987*



*Rush Delta - 1987*



*Rush Delta - After  
Restoration*



*Rush Creek at Old  
395 - After  
Restoration*



*Mono Return Ditch -  
After Restoration*



*Rush Delta - After  
Restoration*

## What's Next in Mono Basin Restoration?

66

66 ongoing, in progress or complete projects in Mono Basin

01

Advancing capstone project to decades of stream & wildlife restoration





## Mono Basin Landmark Settlement

- In 2010, when stream scientists released their report demonstrating the restoration progress, they also recommended a new set of flow recommendations for the streams.
- LADWP had concerns around the recommendations and their potential negative impacts to the environment.
- In 2013, LADWP reached a landmark settlement agreement with Mono Lake Committee, Cal Trout and the California Department of Fish and Wildlife regarding the final stages of stream restoration in Mono Basin.



# Fulfilling Commitment to the Agreement & Advancing One of the Largest Environmental Restoration Projects in Mono Basin



- Since 2013, LADWP and the settling parties have been working with regulators to ensure the successful completion of an enhanced spillway at Grant Lake Reservoir.
- LADWP is officially beginning the environmental review process and advancing a plan that will achieve all the department's environmental commitments outlined in the agreement:
  - Ecological restoration of the streams that flow into Mono Lake;
  - Construction of a structure to help meet state requested stream flows; and
  - Continued scientific monitoring of the streams.
- Completing this project is a reflection of the City of Los Angeles' commitment to protecting California's natural resources and LADWP's sources of safe, reliable drinking water for ratepayers.

