

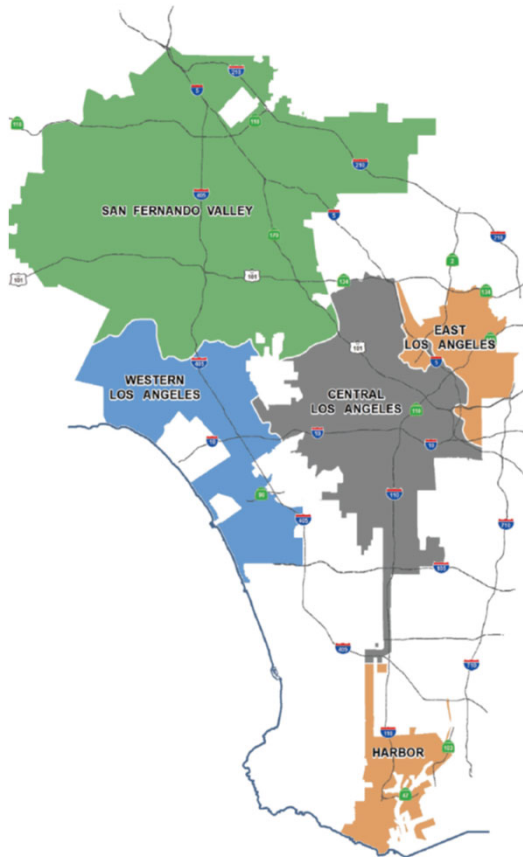


Water Supply Update

MOU Meeting

April 2, 2022

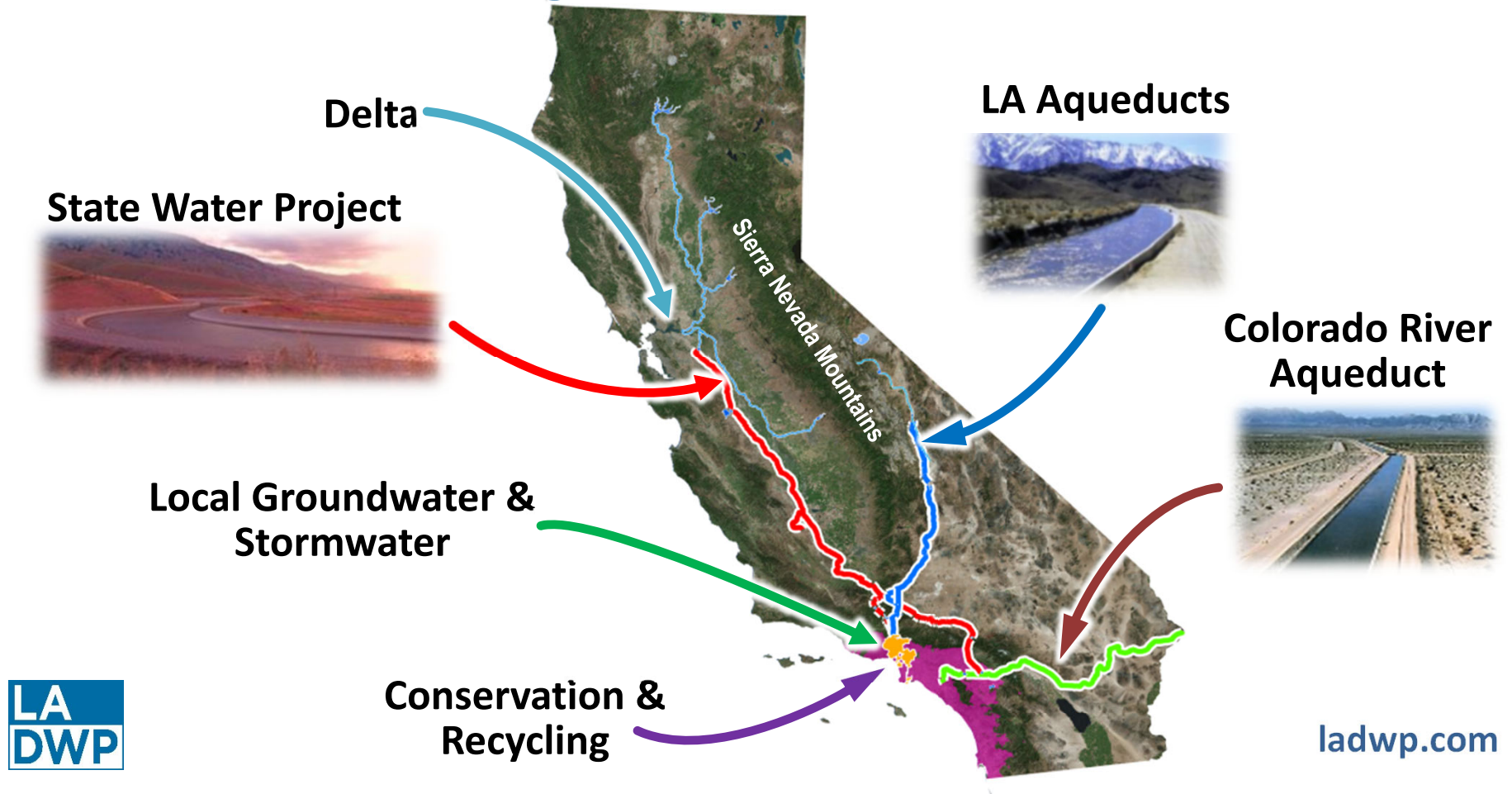
LADWP Today



- Provide water and power to 4 million people every day
- Serve drinking water and recycled water to an area of approximately 473 sq. mi.
- Approx. 450 million gallons of drinking water delivered per day – 500,000 acre-feet per year

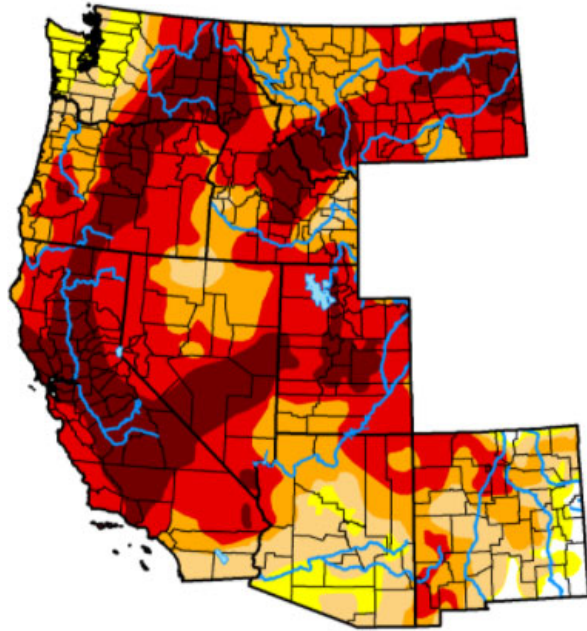


Los Angeles Water Supplies

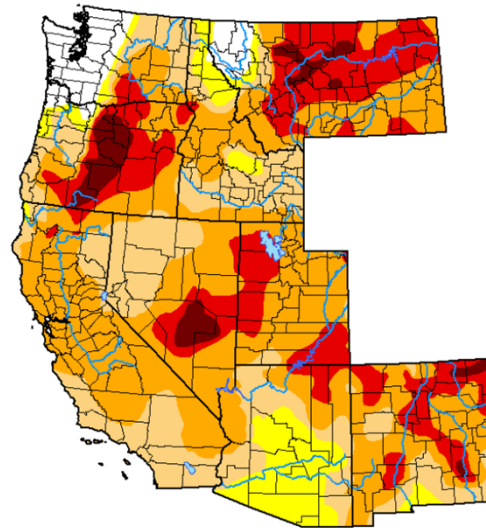


Drought Conditions Worsening

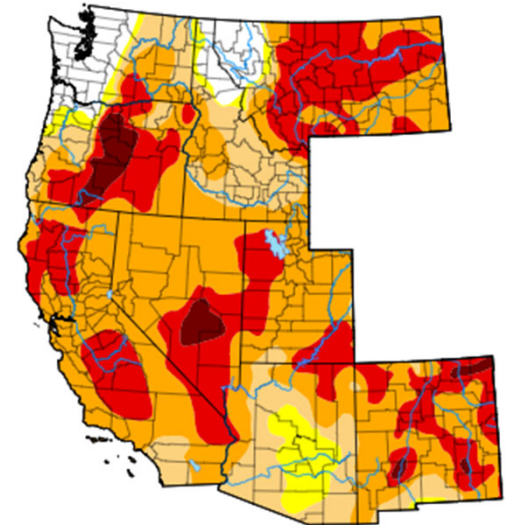
September 28, 2021



February 17, 2022



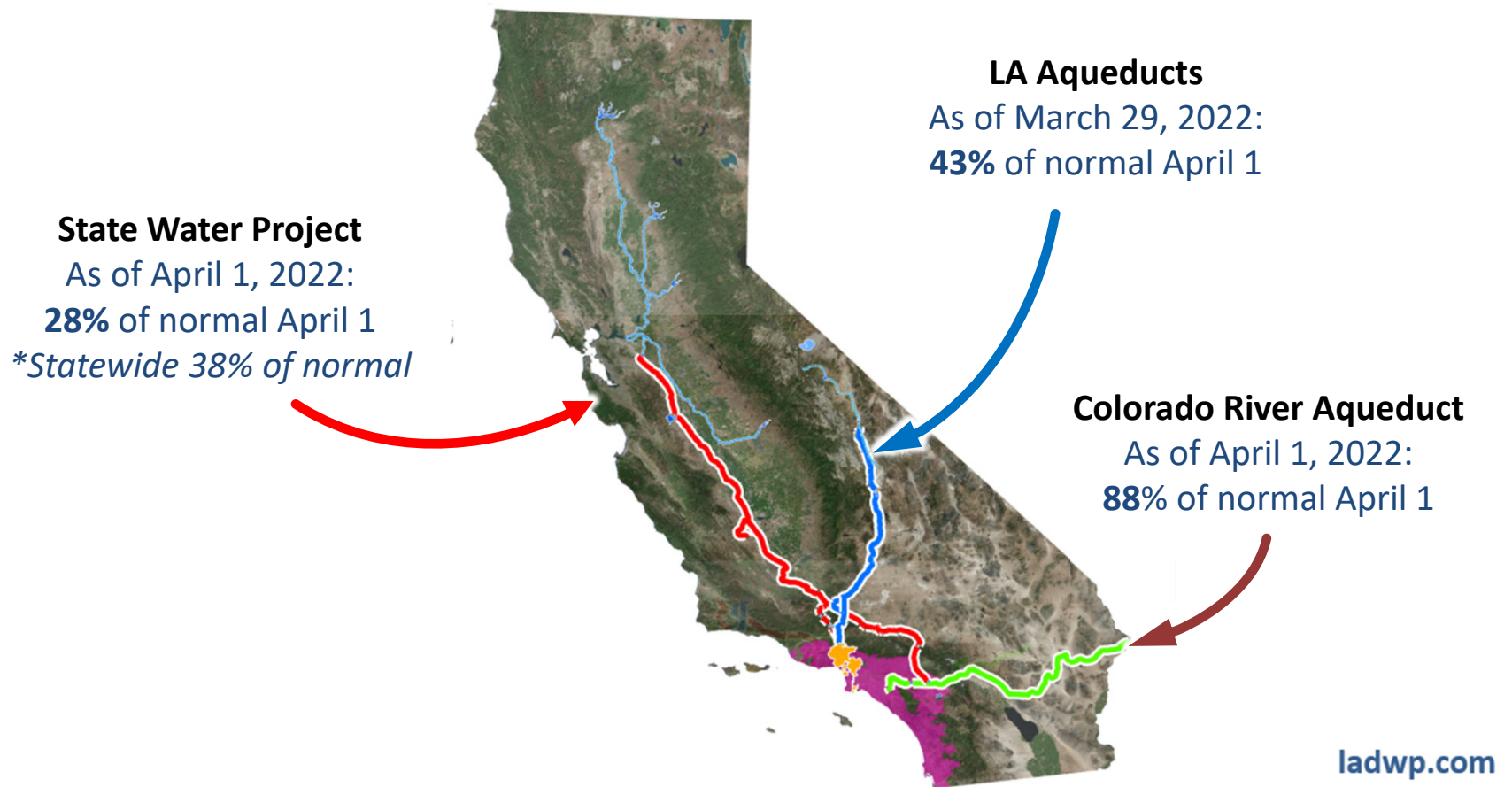
March 17, 2022



Intensity



Water Supply Conditions



Where We Are Today

- 2021: Governor Statewide and Metropolitan Water District (MWD) Regional Drought Emergency Proclamations
 - Calls for voluntary 15% conservation
- December 1: CA State Department of Water Resources (DWR) announces initial 0% 2022 State Water Project (SWP) Table A allocation
- January 1: First Lower Colorado River Basin shortage
 - 2022 Cutbacks affect Arizona, Nevada, and Mexico
- January 4: SWRCB adopted emergency regulations
 - Prevents wasteful use of water
- January 20: DWR announces 15% 2022 SWP allocation
- March 18: DWR reduces 2022 SWP allocation to 5%
- March 28: Governor issues Executive Order
 - Calls all urban water suppliers to implement Level 2 of WSCP



Water Shortage Contingency Plan

Shortage Level	Shortage Gap	Conservation Ordinance Phase Restrictions
1	Up to 10%	Permanent Restrictions
2	10% to 20%	3 Day/Wk Outdoor Watering
3	20% to 30%	2 Day/Wk Outdoor Watering
4	30% to 40%	1 Day/Wk Outdoor Watering
5	40% to 50%	No Outdoor Watering
6	Over 50%	Additional Board Action

WATER CONSERVATION ORDINANCE

IN LOS ANGELES, YOU CANNOT:

- Use water to wash any hard surfaces such as sidewalks, walkways, driveways or parking areas, unless flushing is needed to protect health and safety;
- Use water to clean, fill or maintain decorative fountains unless the water is part of a recirculating system;
- Serve water to customers in eating establishments unless requested;
- Permit leaks from any pipe or fixture to go unrepaired;
- Allow for the washing of a vehicle without using a hose with a self-closing, shut-off device;
- Permit watering during periods of rain;
- Irrigate landscaping between the hours of 9 a.m. and 4 p.m.;
- Water outdoors for more than 15 minutes per watering station, 10 minutes for other irrigation systems;
- Allow runoff onto streets and gutters from excessive watering;
- Install single-pass cooling systems in new buildings;
- Install non-recirculating systems in new car wash and commercial laundry systems;
- Permit large landscape areas to water without rain sensors that shut off irrigation systems; and

YOU SHOULD:

- Inform hotels and motel guests of the option to reuse towels;
- Allow for exemptions for using gray water.

Emergency 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.



Know Your
Watering Days

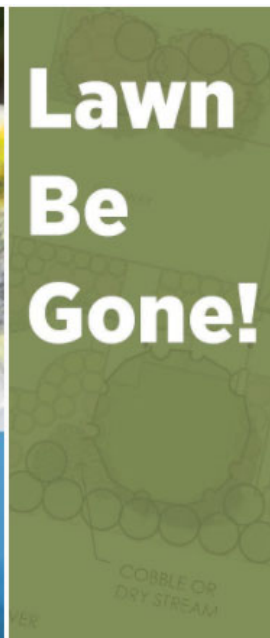
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
ODD Addresses							
EVEN Addresses							

PHASE 3+ (FUTURE POTENTIAL):

- 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.



Conservation Messaging



Residential Rebate Program

Residential Incentives:

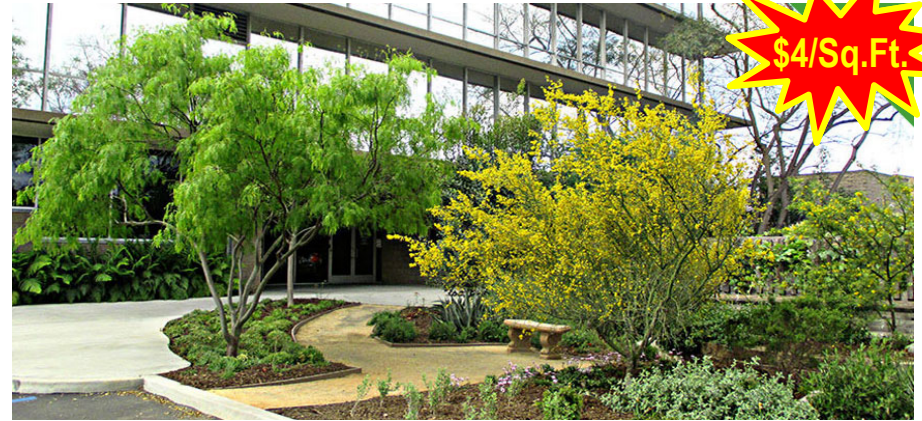
- Premium High Efficiency Toilet: \$250
- High Efficiency Clothes Washer: \$500
- Turf Replacement Program: \$3.00 per sq. ft. up to 5,000 sq. ft.
- Rotating Sprinkler Nozzles: \$6 per nozzle
- Weather-Based Irrigation Controller: Up to \$200
- Rain Barrel/Cistern: \$50-\$500 (depending on size)



Conservation Program Updates - Rebates

Public Agency Landscaping Rebate Changes

- Increased turf replacement rebate to \$4/SF up to 200,000 SF for public agencies
- Also starting project assistance service to help with project development and application



Commercial/Multifamily Rebate Changes

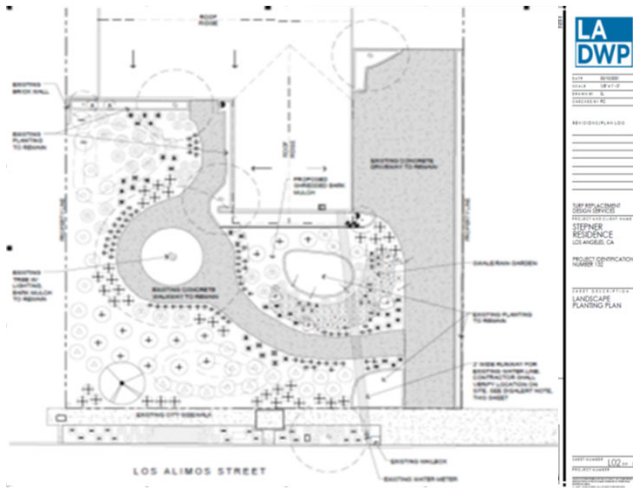
- Increased Premium High Efficiency Toilet Rebate to \$300/toilet
- Increases intended as a push to drive contractors to smaller multifamily units, and also assist small commercial businesses



Additional Services

Turf Replacement Design Services

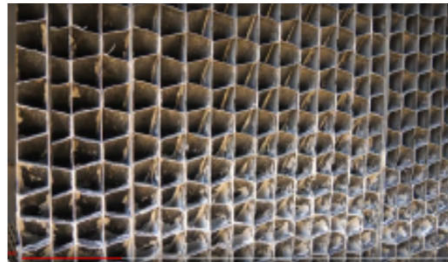
- Free Turf Replacement design services for single family residential customers
- Customized designs that incorporate customer preferences into rebate eligible designs
- Customer surveys showed this as being a major barrier/challenge to replacing their turf



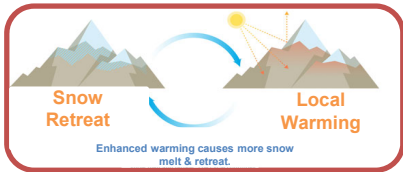
Additional Services

Cooling Tower/Water Fixture Assessments

- Targeted at increasing cooling tower upgrade projects
- Provide customers with free assessments to evaluate cooling tower/water fixture efficiencies
- Help CII customers with available incentives



Water Supply Challenges



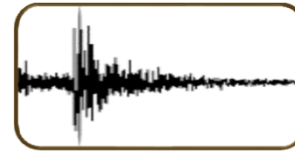
Climate Change



Bay-Delta Uncertainty



Local Groundwater Contamination



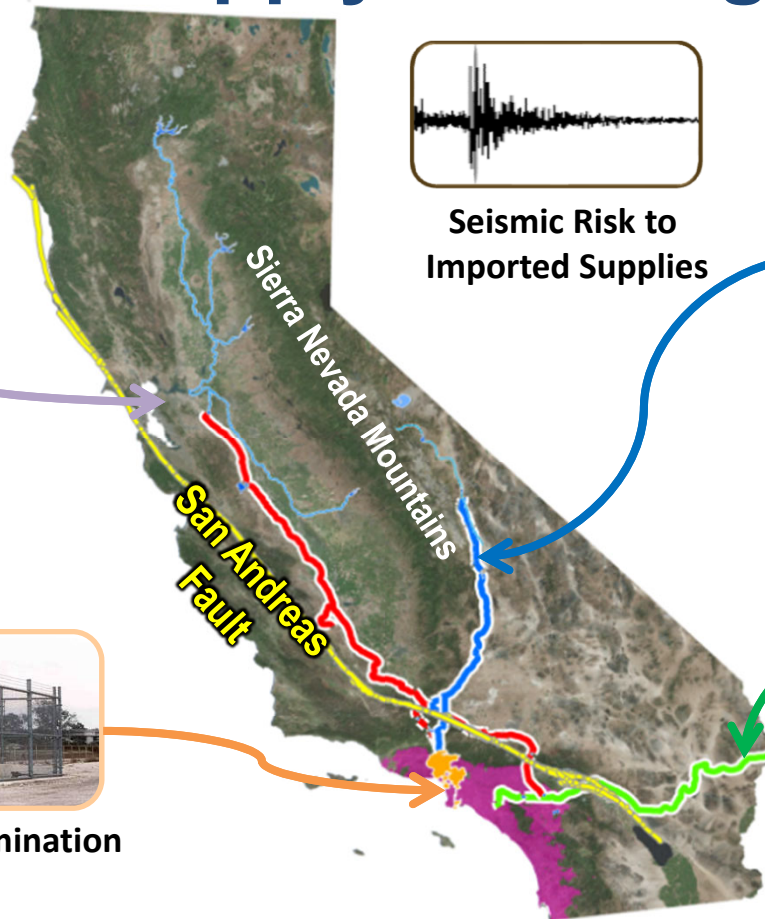
Seismic Risk to Imported Supplies



Los Angeles Aqueduct:
Supply reduction due to environmental mitigation



Colorado River Aqueduct



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Water Supply Programs

Imported Supply



Los Angeles
Aqueducts



MWD

Local Supply



Conservation / Water
Use Efficiency



Stormwater



Groundwater
Treatment



Purple Pipe



Operation NEXT

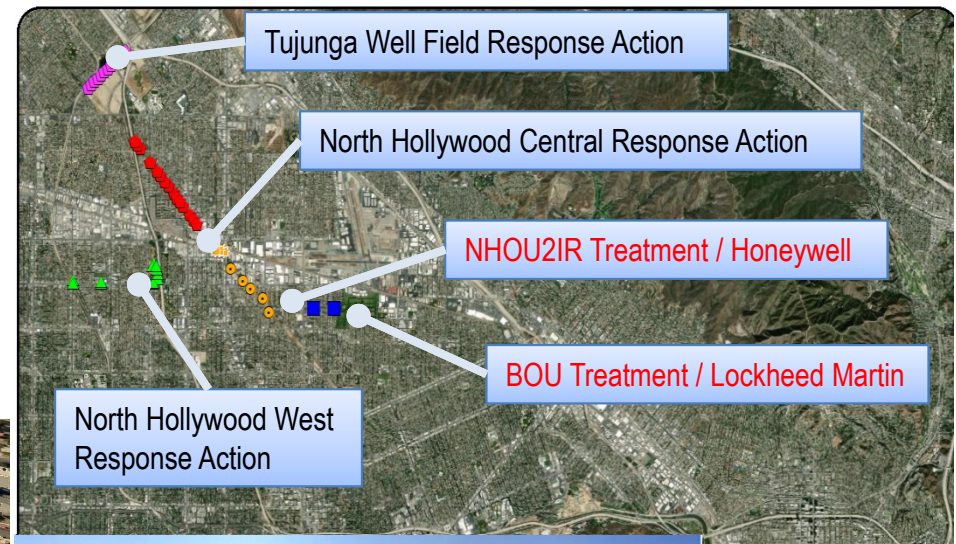


Groundwater
Replenishment

Recycled Water

San Fernando Basin Remediation

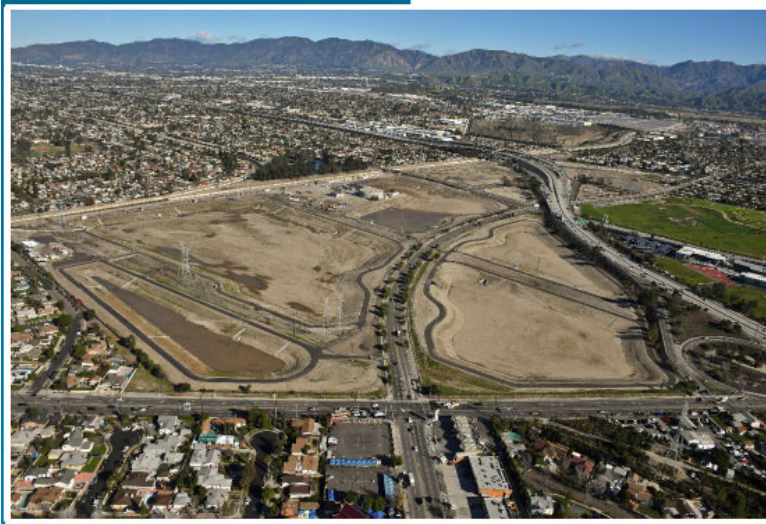
- Contamination has impeded access to clean water
- Restore beneficial use



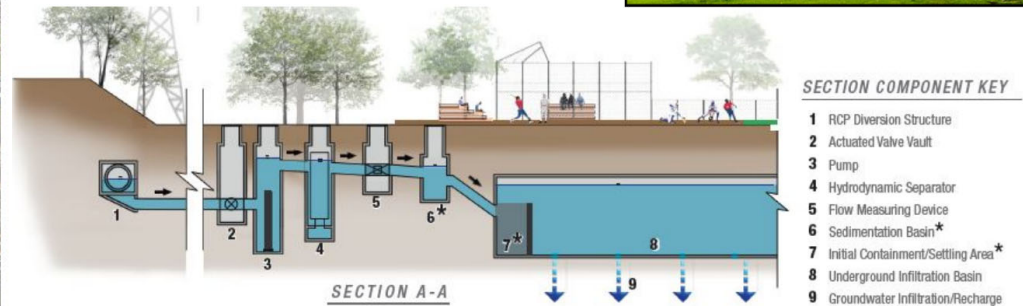
Stormwater Capture

Stormwater Capture Goal: 150,000 AFY of capture capacity by 2035

Tujunga SG completed 2021



Parks Program
Typical Program X-Section



Recycled Water



Groundwater Replenishment

Operation NEXT Water Supply Program

Program Objectives:

- Maximize recycled water production from the Hyperion Water Reclamation Plant
- Build local groundwater storage
- Increase local water supplies
- Collaborate with Regional Partners



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Bay-Delta Policies

Emerging Trends



Climate change impacts on hydrology

Increased intensity and frequency of droughts, wildfires, floods



Joint funding and partnerships are occurring statewide

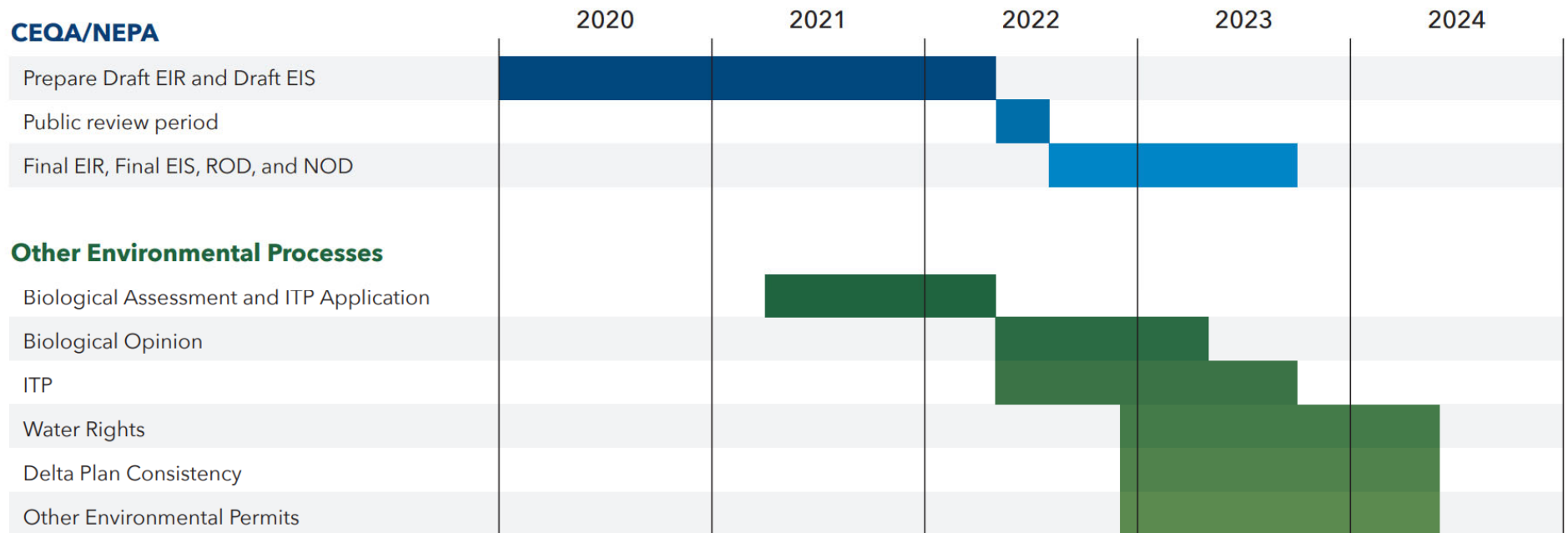
Watershed wide partnerships, multi-agency science partnerships, project partnerships



Delta Sustainability has become even more critical

Strain on environment, multi-benefit projects trending, co-existing environment and water supply needs

Delta Conveyance Project Schedule



Cost of Various Water Sources

Exhibit 11A
Unit Costs of Supplies for LADWP

Water Source	Chapter Reference	Average Unit Cost (\$/AF)
Conservation ^{1,2}	Chapter 3 - Water Conservation	\$60 - \$1,200
Los Angeles Aqueduct ³	Chapter 4 - Los Angeles Aqueduct System	\$859
Groundwater ³	Chapter 5 - Local Groundwater	\$752
Stormwater Capture ⁴	Chapter 6 - Watershed Management	\$1,100 - \$1,550
Recycled Water	Chapter 7 - Recycled Water	\$500 - \$2,000
Metropolitan Water District ⁵	Chapter 9 - Metropolitan Water District Supplies	\$1,104 - \$1,146

¹ Determined from LADWP's Water Conservation Potential Study.

² MWD Funds conservation at \$195/AF, our share is estimated at 15 percent of MWD's cost.

³ Los Angeles Aqueduct supply and groundwater supply are based on FY2015/16 – 2019/20 five-year average.

⁴ Costs presented are not to exceed costs for infiltration and direct use in 2025, respectively. Projects with higher per unit costs may be implemented if outside funding is obtained or partnerships are implemented. Additionally, LADWP may implement higher per unit cost projects on a case by case basis.

⁵ MWD water rates for treated water, tier 1 and tier 2, effective on January 1, 2021.

Thank You

Questions?

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