Solutions for San Diego and the Southwest

San Diego County Farm and Nursery Expo
Nov. 6, 2019

Sandy Kerl
Acting General Manager
Wholesale agency created by the state Legislature in 1944

- Serves 3.3 million people and region’s $231 billion economy through 24 member agencies
- Provides about 75% of water used across the metropolitan area
... With Few Natural Water Assets

- 1946 was the last year regional supplies met regional demand.
Sierra Nevada is an Important Source of Supply

- Statewide snowpack on April 1 was 175% of average.
Water Year 2020 Starts with Strong Reserves

- California reservoirs at 128 percent of average statewide on Oct. 1, 2019.
- Repairs complete at Lake Oroville; state’s largest reservoir starts year at 102% of average.
- Early snowpack is well below normal.
- Too early to predict water supplies.
### Storage and Hydrology (October 2019)

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<th></th>
<th>% Full</th>
<th>Million AF</th>
<th>Elev.</th>
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<tbody>
<tr>
<td>Lake Powell</td>
<td>54%</td>
<td>13.1</td>
<td>3,613'</td>
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<tr>
<td>Lake Mead</td>
<td>39%</td>
<td>10.3</td>
<td>1,083'</td>
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<td>Total System</td>
<td>52%</td>
<td>31.3</td>
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- **2019 Peak Snowpack**: 133% of normal
- **2019 Runoff to Powell**: 120% of normal
Water is Critical for Region’s Ag Economy

- 242,500 acres in production
- Nursery and cut flower products are 71% of total value ($1.2B)
- Avocados are largest by acreage
- National leader certified organic farms
Water Authority Efforts Benefit Farmers

- Free ag water system assessments
  - More than 2,300 irrigation evaluations since 1991
  - Work performed by the Mission Resource Conservation District at www.missionrcd.org
Special Water Rates Support San Diego Ag

- Provide lower-cost water to farmers in exchange for lower reliability
- Started in 2008 to replace MWD program
- 13 participating agencies/25,000 AF in FY2019
- Current program sunsets Dec. 31, 2020
Price Break Helps Local Farmers

- M&I “All-In” Treated: $1,686/AF
- TSAWR Treated: $1,231/AF
- Difference: $455/AF

All figures for 2020.
Key Issues for Future Ag Rates

- Define a reasonable, actionable level-of-service difference
  - Source of supply, supply reliability, severity of delivery cutbacks, storage
- Create criteria for expansion
  - Provide certainty to help farm investment decisions
  - Allow new users to join
  - Streamline annual validation process
  - Meet cost-of-service requirements
Four Ag Water Alternatives Under Review

- Task force selected four alternatives for further review and analysis by staff and cost-of-service consultant.
- All four options extend the program.
- Farm Bureau proposal among the alternatives.
Why Supply Reliability is Critical

- In 2016, drought reduced imported water to San Diego County by 15%.
- The Water Authority still had sufficient supplies to meet demands.
Conservation and Transfers

- The nation’s largest ag-to-urban conservation-and-transfer agreement benefits San Diego County and the entire Southwest.
Carlsbad Desalination Plant

- Opened in 2015, the nation’s largest seawater desalination plant produces 50 MGD of drought-proof supplies.
San Vicente Dam Raise

- The dam raise, completed in 2014, produced the largest increase in water storage in San Diego County history.
Conservation and Efficiency

- Per capita water use in San Diego county has dropped from 235 gpcd in 1990 to 120 gpcd today.
A Diversified Water Supply Portfolio (2020*)

Total = 537 TAF

- **190 TAF** (35%)
- **80 TAF** (15%)
- **56 TAF** (10%)
- **43 TAF** (8%)
- **33 TAF** (6%)
- **16 TAF** (3%)
- **16 TAF** (3%)
- **52 TAF** (10%)
- **59 TAF** (11%)
- **8 TAF** (2%)

*Based on Interim Demand Forecast Reset and includes verifiable and additional planned local supply projects from 2015 UWMP; to be updated in 2020 UWMP.*

- **Metropolitan Water District**
- **Imperial Irrigation District Transfer**
- **All American & Coachella Canal Lining**
- **Seawater Desalination**
- **Recycled Water**
- **San Luis Rey Water Transfer**
- **Groundwater**
- **Local Surface Water**
- **Potable Reuse**

TAF = Thousand Acre-Feet
San Diego’s Portfolio Takes Center Stage

- San Diego County’s investments make it a statewide model for water portfolio planning in line with Gov. Newsom’s mandate.
- Decades of strategic planning put the San Diego region in position to provide solutions for the Southwest.
Planning for Tomorrow

- Pumped Energy Storage Project at San Vicente Reservoir
- Potential regional water conveyance system
- Storing Water Authority supplies in Lake Mead
Boosting Clean Energy for California

- Pumped storage could help state meet clean-energy goals, provide on-demand power, and save ratepayers money.
Delivering QSA Supplies to San Diego

- Water Authority pays MWD to transport all QSA water - 280,000 acre-feet in 2021.
- Water Authority has rights to canal lining water for 110 years, and transfer water for up to 75 years.
- Alternative conveyance could prove to be more cost-effective and a better deal for ratepayers.
Regional Conveyance System Study

- Two-phase study looks at regional benefits:
  - Protecting ratepayers while adding reliability
  - Exploring partnerships
  - Assessing geotechnical, financial, operational and other aspects
  - Phase 1 ends summer 2020
Boosting Water Levels in Lake Mead

- Intentionally Created Surplus (ICS) program raises Lake Mead water level, helps avoid shortages.
- Water Authority has eligible supplies and is seeking a Lake Mead storage account.
Serving San Diego for 75 Years ... and Counting