Supply Reliability through Efficiency and Drought-Resilient Supplies

Southern California Water Dialogue

February 22, 2017

San Diego County Water Authority

Presentation by:
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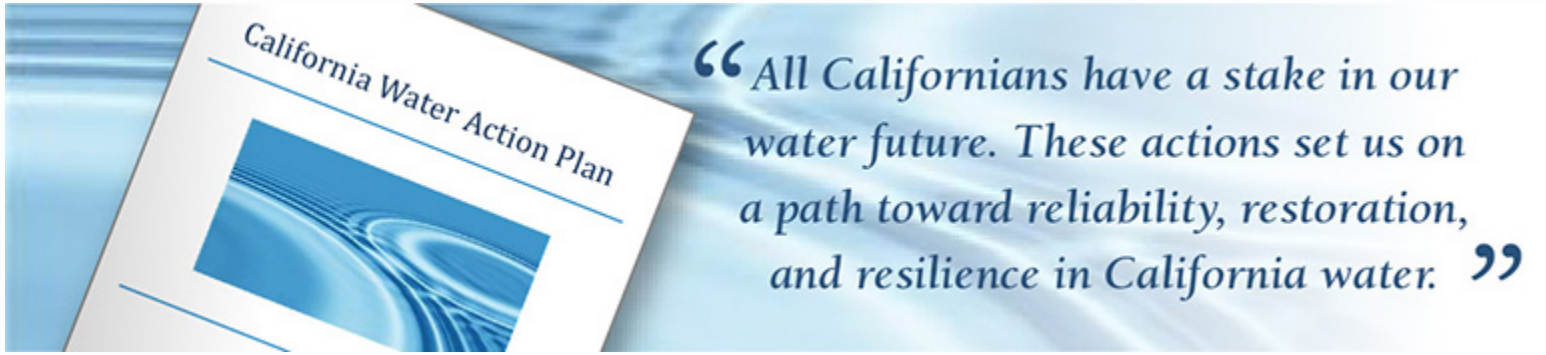
San Diego County Water Authority
Mission Statement

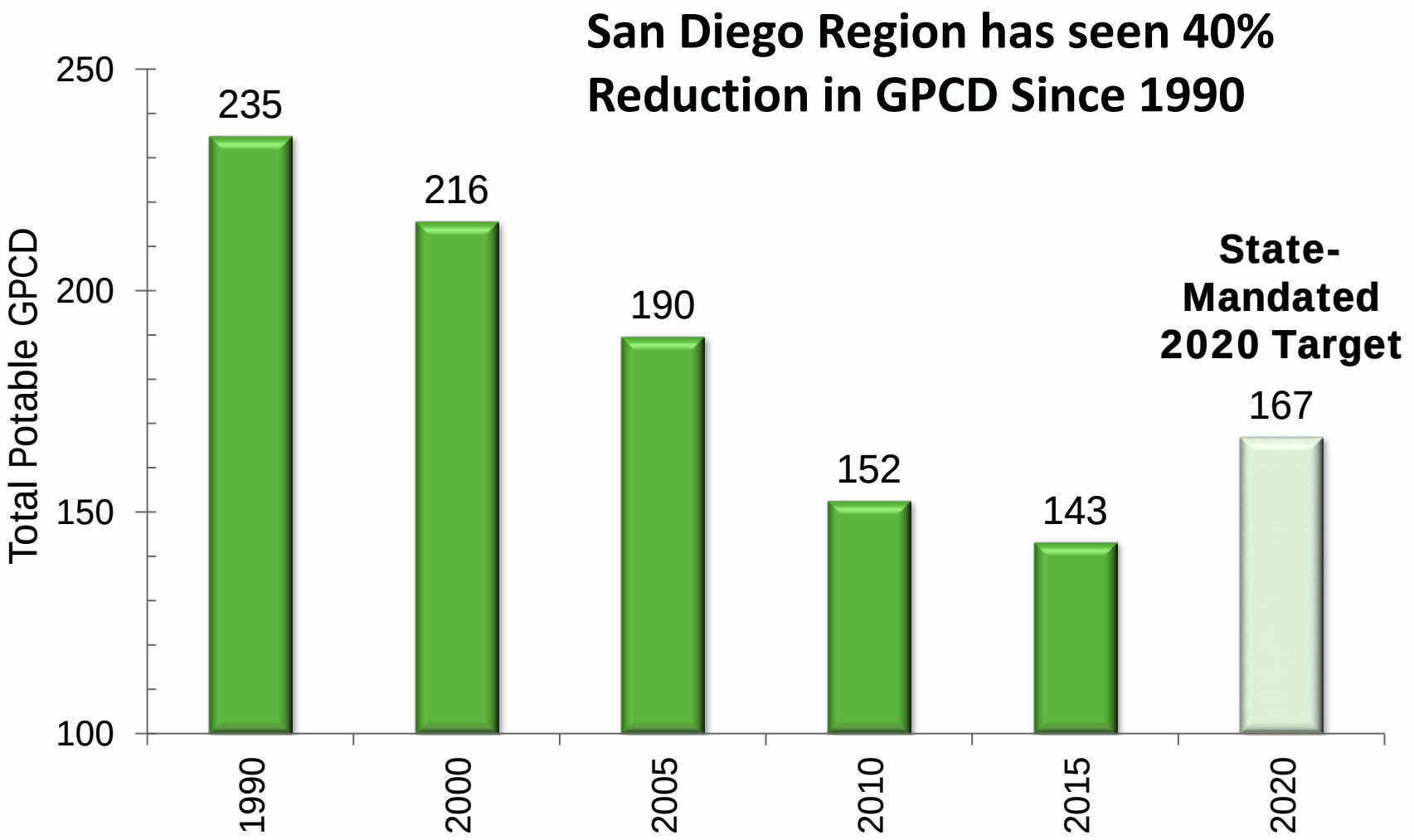
To provide a safe and reliable supply of water to its member agencies serving the San Diego region.

San Diego Region is Implementing Governor Brown's Water Action Plan

Key Actions	Water Agencies Implementing?
Make conservation a way of life	✓
Increase regional self-reliance and integrated water management	✓
Manage and prepare for dry periods	✓
Expand water storage capacity	✓



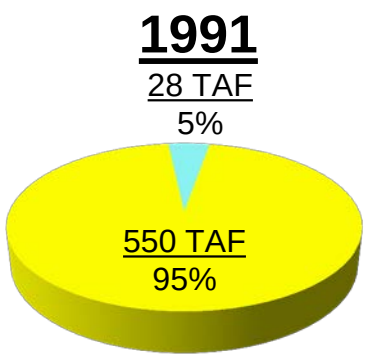
Implementing Gov. Brown's Water Action Plan
Making Conservation a Way of Life



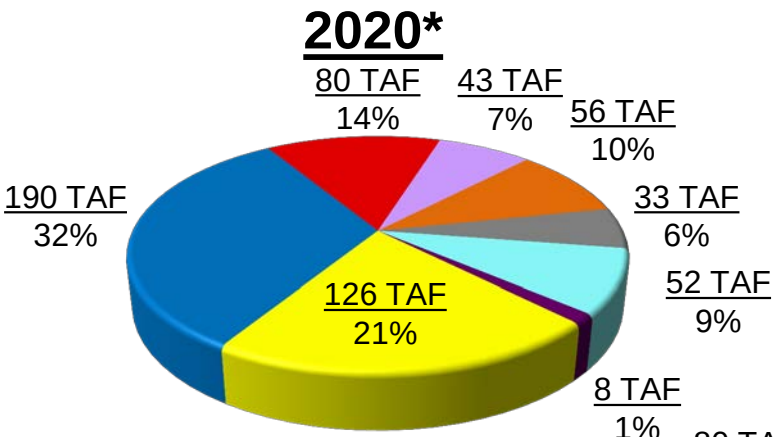
San Diego County Water Authority

Implementing Gov. Brown's Water Action Plan

Increasing San Diego County's Regional Self-Reliance



Total = 578 TAF



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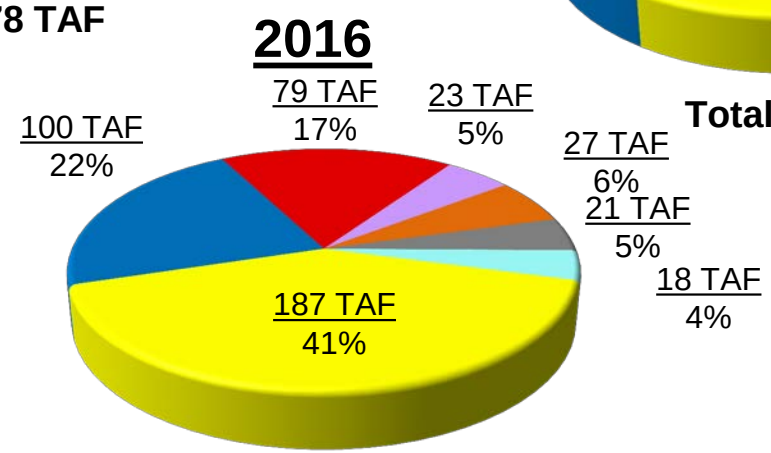
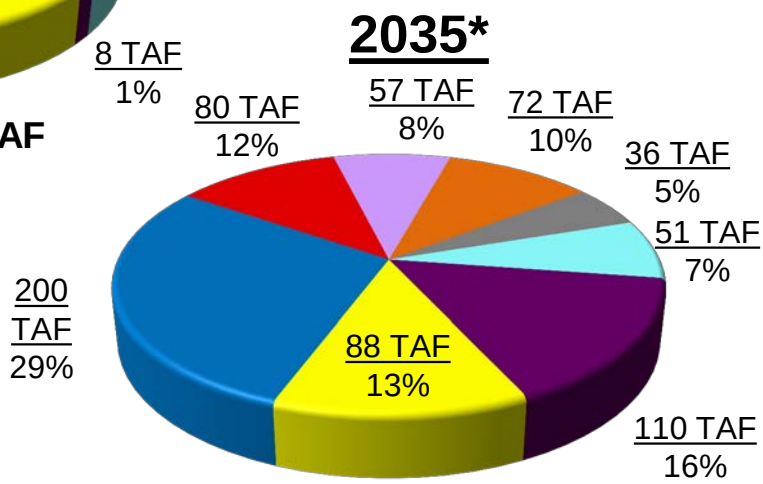


Total = 455 TAF

(Region under State-Mandated Drought Restrictions)



Total = 694 TAF

Metropolitan Water District | **All American & Coachella Canal Lin** | **Seawater Desalination** | **Local Surface Water**

Imperial Irrigation District Transfer | **Recycled Water** | **Groundwater** | **Potable Reuse**

* Includes verifiable and additional planned local supply projects from 2015 UWMP

(TAF=Thousand Acre-Feet)

Next Increment of Supply: Potable Reuse Sampling of Proposed Projects

Member Agency	2035 Estimated Yield (AF/YR)
City of San Diego	93,000
Padre Dam MWD	11,500
City of Oceanside	3,000
Santa Fe Irrigation District	1,000

Padre Dam MWD's Advanced Water Purification Facility Demonstration Project

City of San Diego's Pure Water Facility Demonstration Project

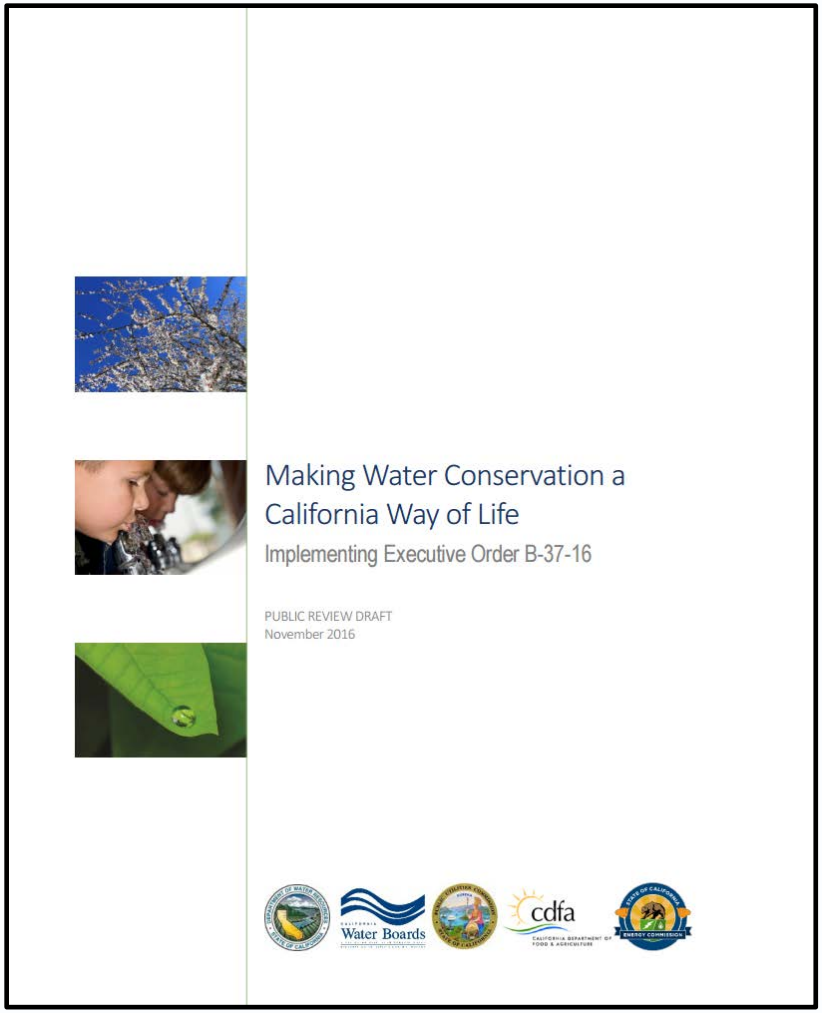
Benefits of Investing in Local Drought-Resilient Supplies

- Increases regional self-reliance
- Reduces demands on imported sources (e.g., Bay-Delta)
- Reduces and mitigates shortages during droughts
- Adaptation strategy to manage climate change
- Saves energy by reducing distance water must be transported
- Provides local control over supply reliability
- Environmental benefits (e.g., reduces wastewater discharges)
- Improves water quality

*List of benefits could vary or be higher based on project and local community

November 2016 Draft Framework Proposal
Making Conservation A Way of Life

- Focus on two areas for urban water agencies:
  - New water use targets
  - Water shortage contingency planning
- Comments submitted Dec 2017
- Release of final Framework expected in Feb 2017
- Implementation will be through legislation and regulatory rulemaking



New Water Use Targets
Water Authority Main Comments

1. Balance demand management and supply development to ensure reliability
   - Efficiency alone will not create a resilient water supply that alleviates severe shortages
   - Setting water use standards should take into account the need to develop drought-resilient supplies
   - Recycling and reuse should be removed from water production calculation (Efficient use of water and already regulated)

2. CII performance measures cannot negatively impact economy
   - Support not having volumetric standards for CII
   - Measures should be developed by workgroup of experts

New Water Use Targets
Water Authority Main Comments

3. Provide alternative target setting approaches
   - Allow choices to address difference between communities
   - Only 3 retail suppliers used budget based approach under SBX7-7
   - Agencies able to select most cost-effective, yet equally effective option

4. Revisions to target calculations beyond 2025 must be through stakeholder process with legislative approval
   - Legislature maintains role in setting statewide water policy

5. Address unintended consequences of imposing new water use targets (e.g., impact to wastewater systems)
   - Costs to mitigate will likely increase customers' water rates

Water Authority Board Approved Sponsorship of Long-Term Water Use Target Legislation

- AB 1323 introduced by Assemblymember Weber
- Uncertainties regarding content of final Framework and stakeholder consensus
- Require state to convene stakeholder workgroup to finalize target methods to be incorporated into legislation


Assemblymember Shirley Weber

- Workgroup would consider following factors:
  - Recommendations from Governor's Framework
  - Existing provisions in state water code pertaining to target setting methods (SBX7-7)
  - Unintended consequences that could negatively impact economy, wastewater infrastructure, or investments in drought-resiliency

Questions?

Defining Drought

United States Geological Survey:

"The word "drought" has various meanings, depending on a person's perspective…To a water manager, a drought is a deficiency in water supply that affects water availability and water quality"

USGS (https://water.usgs.gov/edu/qadroughts.html)

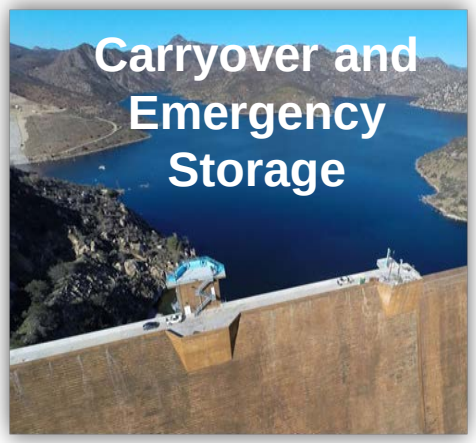
California Department of Water Resources:

"Defining when drought occurs is a function of drought impacts to water users. Drought can best be thought of as a condition of water shortage for a particular user in a particular location"

DWR (http://www.water.ca.gov/waterconditions/background.cfm)

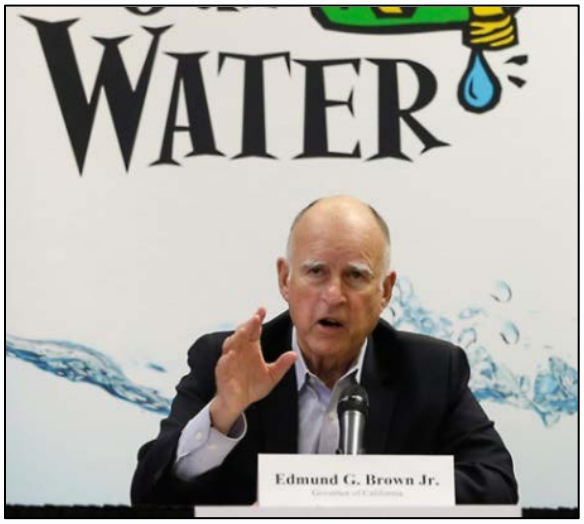
San Diego Region Is Not Experiencing Drought Conditions

- Greatly improved statewide supply situation
- Investments in drought resilient supplies have increased reliability
- Adequate supplies to meet demands (no shortages)
- Even without state reduction mandates, regional potable water use from June 2016 -Jan 2017 is 18 percent below 2013 levels



Governor Water Conservation Framework Next Steps

- Comments on proposed Framework submitted in December 2016
- Governor scheduled to release Framework Feb. 2017
- Implementation will be through legislation and regulatory rulemaking



Draft Framework Proposal
New Water Use Target

- Current 2020 water use targets established in 2009 under SBX7-7
  - Four options to calculate target (e.g., 20% reduction by 2020)

- Proposed new water use target is single agency-wide gpcd target based on efficiency standards for:
  - Indoor residential
    - Initially set at 55 gpcd
  - Outdoor Irrigation
    - Set at current Model Water Efficiency Landscape Ordinance requirements
  - System water lost through leaks

Draft Framework Proposal
Proposed Commercial, Industrial and Institutional Performance Measures

- No volumetric standard, but requires water suppliers to implement three performance measures:
  1. Install separate irrigation meters for existing CII landscapes over a specified size
  2. Classify all CII account and where feasible, develop benchmarks in order to identify water use efficiency improvements
  3. Conduct audits or require water management plans for CII accounts over a specified size, volume, or percentage threshold