Southern California Water Dialogue

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San Diego County Water Supply 1991

Imported Water
Metropolitan Water District
552,000 AF
95%

Local Supplies
26,000 AF
5%

Total = 578,000 AF
1990–92: Bottom of the Basket Falls Out

State to Shut Off Water Delivery to Southland
By VIRGINIA ELLIS and TED ROLPH

Limits on tap water use urged by staff

Community's Response:
“Never Again!”
“No More Water Shortages!”

50% Water-Delivery Cut Will Be Blow to San Diego

■ Drought: Metropolitan Water District directors also vote a 90% cut in allocation for agricultural users.

L.A. Ready to Battle San Diego Over Water

■ Conservation: DWP officials weigh legal action as southern neighbor refuses to impose rationing.

State Water Project cuts off water to farms; urban slash expected

Water: Authority to Vote Today on Mandatory Restrictions
Increasing San Diego County's Water Supply Reliability through Supply Diversification

1991
- Metropolitan Water District: 552 TAF (95%)
- 26 TAF (5%)

Total = 578 TAF

2012
- Metropolitan Water District: 274 TAF (45%)
- Imperial Irrigation District Transfer: 80 TAF (11%)
- All American & Coachella Canal Lining: 70 TAF (11%)
- Conservation (existing and additional): 18 TAF (3%)
- Recycled Water: 61 TAF (10%)

Total = 612 TAF

2020
- Metropolitan Water District: 190 TAF (24%)
- Imperial Irrigation District Transfer: 80 TAF (10%)
- All American & Coachella Canal Lining: 103 TAF (13%)
- Conservation (existing and additional): 61 TAF (10%)
- Recycled Water: 44 TAF (6%)
- Seawater Desalination: 231 TAF (30%)
- Groundwater: 48 TAF (6%)
- Local Surface Water: 27 TAF (4%)

Total = 779 TAF

TAF = Thousand Acre-Feet
Reducing Purchases from MWD

- 1991: 552,000 acre-feet
- 2012: 274,000 acre-feet
- 2020: 231,000 acre-feet: 58% less than 1991
Reducing Dependence on MWD: Water Reliability through Diversification

Diversify supply sources

- **Imported**
  - Imperial Irrigation District transfer through system and on-farm conservation projects (200,000 AF/YR by 2021)
  - Canal lining projects (80,000 AF/YR)

- **Local Supply Development**
  - Conservation (103,000 AF/YR by 2020)
  - Recycling (44,000 AF/YR by 2020)
    - 17 active non-potable recycling projects countywide
    - Potential for indirect and direct potable reuse projects
      - Sponsoring SB 322 (Hueso)
  - Brackish groundwater recovery (27,000 AF/YR by 2020)
  - Seawater desalination (56,000 AF/YR by 2016)
Historic Investments in Infrastructure

San Vicente Dam Raise & Related Projects
$909 million

Twin Oaks Valley Water Treatment Plant
$179 million

Pipeline Relining
$786 million

Carlsbad Seawater Desalination Pipeline Projects
$239 million

All-American & Coachella Canal Lining Projects
$447 million
($190 million from the Water Authority)

Olivenhain Dam and Reservoir
$198 million

Lake Hodges Projects
$208 million

Pump House Detail
Sources of San Diego County’s Water Supply (2008-12 five-year average)

- State Water Project (Bay-Delta): 22%
- Colorado River: 62%
- Local Supplies and Conservation: 16%
Support for Fixing the Bay–Delta

- Water Authority and San Diego business community support a Bay–Delta fix
  - Water Authority and San Diego business leaders worked together to pass 2009 legislation that established coequal goals:
    - Water Supply Reliability
    - Ecosystem Restoration
      - 2014 water bond would provide public funding for ecosystem restoration
- Water Authority board
  - Adopted Bay–Delta Policy Principles to guide review of a Delta fix
  - Has not endorsed a specific conveyance project
    - BDCP and EIR/EIS administrative drafts released in Spring
- Water Authority has review and process for Board consideration later this year
Encourage a Bay Delta solution that promotes local water supply development

Encourage a Bay Delta solution that is cost-effective when compared to other sources of water reliability

Require independent technical analysis of key elements of the Bay Delta solution, including urban and agricultural average/dry year demands

Support “right-sized” facilities to match firm commitments to pay

Support the co-equal goals of water supply reliability and ecosystem restoration
Water Authority Board of Directors’ Bay Delta Policy Principles

- Support a deliberative process that is designed to ensure a meaningful dialog among the various stakeholders
- Work with all stakeholders to ensure a meaningful dialog and that water supply and ecosystem restoration processes are conducted in an open and transparent manner
- Improve the ability of water users to divert more water in wet years, when impacts on the ecosystem are less
- Encourage the development of a statewide water transfer market
MWD is about 25% of Bay Delta Costs

- 50% Central Valley Project Contractors
- 50% State Water Project Contractors
- 28 Other State Water Project Contractors
Water Authority Pays About 25% of MWD’s Spending

Water Authority Member Agencies, by Size of Financial Payments:

- Carlsbad M.W.D.
- City of National City
- City of Poway
- Santa Fe I.D.
- City of Del Mar
- City of Oceanside
- Rainbow M.W.D.
- South Bay I.D.
- City of Escondido
- Olivenhain M.W.D.
- Ramona M. W.D.
- Vallecitos W.D.
- Fallbrook P.U.D.
- Otay W.D.
- Rincon Del Diable
- City of San Diego
- Padre Dam M.W.D.
- Vista I.D.
- Valley Center M.W.D.
- Helix W.D.
- Lakeside W.D.
- Camp Pendleton
- San Dieguito W.D.
- Yuima M.W.D.
Water Authority Concerns over Financing the BDCP

- Metropolitan Water District depends on water sales revenues to pay >80% of its bills
  - Yet, MWD’s member agencies have no obligation to buy any water from MWD
  - MWD sales down 30% since 2007
  - MWD doubled water rates 2006–2014
  - MWD’s member agencies plan to buy even less water in the future from MWD
  - What is the certainty MWD member agencies will pay their fair share of the Delta fix costs?

- MWD rate structure does not account for supply and facility costs of dry-year peaking
  - More agencies plan to peak off of MWD
    - Drives up cost of MWD water in wet/average years
But they are unwilling to do so:

- “…to date, most of our board members have said ‘we’re not so sure about that.’ And, most of our member agencies have said ‘No. Thanks, but no thanks, because we prefer this the way it is.’”
- “Should people make those firm commitments going into the future? So far, the member agencies have opted not to. They prefer it the way it is.”

-- Excerpts of remarks by MWD General Manager Jeffrey Kightlinger, speaking at an August 10, 2010 public meeting in San Diego on MWD’s draft 2010 Integrated Resources Plan (IRP).
Meeting San Diego’s Future Water Supply Demands
Regional Supply Mix w/Carlsbad Desalination and Potential City of San Diego Indirect Potable Reuse

![Water Supply Demands Graph]

- **MWD Imported Supplies**
- **City of SD RWS (IPR)**
- **Carlsbad Desalination Project**
- **Projected Local Supplies (Verifiable)**
- **Additional Conservation (20% Reduction by 2020)**
- **CR Transfers (QSA Supplies)**
Southern California’s Local Water Supply Development Plans (2012 - 2035)

Up to 1.2 Million Acre-Feet

Does not include 650,000 AF of planned and state-mandated conservation.

Estimated On Line Date
- 2012 - 2015
- 2016 - 2020
- 2021+
- Projects completed in two phases

County Boundaries
MWD Member Agency Boundaries

San Diego County Water Authority
sdcwa.org 4677 Overland Ave. • San Diego, California • 92123-1233
Of up to 1.2 MAF of local supply plans, MWD’s 2010 RUWMP only recognizes 103,000 AF.

Example: Carlsbad Desalination Project not accounted for by MWD.
MWD Member Agencies’ Local Supply Development Not Accounted for in MWD’s RUWMP

Average Year

- MWD RUWMP Firm Demands on MWD
- MWD RUWMP Firm Demands -- less Member Agencies’ Planned Supply
- MWD RUWMP Firm Demands – less Member Agencies’ Planned Supply and Potential Projects
Alternative Solution

- Natural Resources Defense Council contacted a variety of water agencies to seek support for an alternative solution for the Bay Delta
  - A conceptual alternative to the current proposed project for the Bay–Delta Conservation Plan called the “Portfolio Approach”
  - Portfolio Approach is designed to produce comparable or better reliability at a lower cost
- Water Authority was a signatory, along with a group of water agencies, on Jan. 16, 2013 letter asking that the NRDC alternative be evaluated in the BDCP
San Diego County: 1991 vs. 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Water Use (thousand acre-feet)</th>
<th>Jobs (millions)</th>
<th>Population (millions)</th>
<th>GDP (billions)</th>
<th>Cost of Water per Acre-foot (2012 dollars)</th>
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<tbody>
<tr>
<td>1991</td>
<td>578 2.5 1.08 $110* $549*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2013</td>
<td>542 3.1 1.3 $186 $1259</td>
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* 2012 dollars
Questions from SCWD Steering Committee – Question #1

- Based on BDCP’s Financing CH. 8, who will bear the capital costs and debt obligations?
- Answer: Unknown. BDCP (page 8-80) says:
  - “Details of the financing... are still being determined through on-going discussion between the state and federal governments and between the government, the state and federal water contractors and other interests.”

Source: BDCP Web site fact sheet Estimated Funding to Implement the BDCP
Questions from SCWD Steering Committee – Question #2

- Can you address the inconsistencies in demand scenarios based on population growth?
Metropolitan Service Area Population, Historical and Projected

DOF and SCAG RTP-08 with SANDAG Series 12 population estimates were higher than the results of 2010 Census count.

The graph shows population trends from 1990 to 2035, with a comparison between historical and projected data. Notable highlights include:

- **2000 Census**: Population was around 18 million.
- **2010 Census**: Population increased to 20 million.

Lines represent different data sets:
- **Red**: DOF (2000 Census benchmark)
- **Blue**: Revised DOF (2010 Census benchmark)
- **Purple**: RTP-08 with SANDAG Series 12
- **Green**: RTP-12 with SANDAG Series 12

The graph indicates a gradual increase in population with predictions for future years up to 2035.