Annual Storage Assessment

Water Planning Committee Meeting
July 26, 2018

Jeremy Crutchfield
Principal Engineer - Water Resources
Major San Diego County Reservoirs

- 24 Reservoirs
- 743,588 acre-feet capacity
- 50% full (as of Apr. 2018)
- 8 Reservoirs connected to Water Authority Aqueduct:
  - San Vicente
  - Lower Otay
  - Sweetwater
  - Olivenhain
  - Miramar
  - Lake Murray
  - Lake Poway
  - Lake Dixon
Water Authority Storage

- Olivenhain Reservoir
- Lake Hodges
- San Vicente Reservoir
Typical Reservoir Storage Pools

- Freeboard
- Operational Storage
- Carryover Storage
- Emergency Storage
- Dead Storage
Carryover Storage

- Dedicated storage in San Vicente Reservoir and in ground water basins in Central Valley

  - Utilization Trigger
  - Planned use over five consecutive dry years
  - Withdraw evenly
  - Not available to TSAWR customers
  - Annual storage evaluation
## Current Carryover Storage Levels

Status as of June 2018

<table>
<thead>
<tr>
<th>Location</th>
<th>Capacity - Total (AF)</th>
<th>Volume Stored (AF)</th>
<th>Capacity - Remaining (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carryover Storage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Vicente Reservoir</td>
<td>105,563</td>
<td>93,591</td>
<td>11,972</td>
</tr>
<tr>
<td>Semitropic-Rosamond Water Bank Authority</td>
<td>40,000</td>
<td>0</td>
<td>40,000</td>
</tr>
<tr>
<td>Semitropic Original Water Bank</td>
<td>30,000</td>
<td>16,117</td>
<td>13,883</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>175,563</strong></td>
<td><strong>109,708</strong></td>
<td><strong>65,855</strong></td>
</tr>
</tbody>
</table>
Management of Carryover Storage

- Carryover storage assessment considerations
  - Current hydrologic conditions
  - Availability of Water Authority and member agency supplies
  - Water demand trend
  - Current storage levels

- Planned withdrawals totaling approximately 13,000 AF from storage reserves through May 2019
  - Deliveries from storage necessary to offset untreated water capacity loss from Nov. 2018 to Apr. 2019 due to Pipeline 5 relining project

- No storage puts through May 2019 to offset San Vicente Reservoir storage evaporation and seepage losses
Emergency Storage

- Protect region against catastrophic events
- Assures minimum 75% level of service for M&I customers:
  - 2-month event is a complete outage of imported supplies
  - 6-month event is a partial outage of imported State Water Project/Colorado River supplies
- TSAWR customers will reduce use at twice the rate of M&I customers
Emergency Storage Pools

Status as of June 2018

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<thead>
<tr>
<th>Location</th>
<th>Capacity - Total (AF)</th>
<th>Volume Stored (AF)</th>
<th>Capacity - Remaining (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Storage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Vicente Reservoir</td>
<td>52,100</td>
<td>28,463</td>
<td>23,637</td>
</tr>
<tr>
<td>Lake Hodges</td>
<td>20,000</td>
<td>0</td>
<td>20,000</td>
</tr>
<tr>
<td>Olivenhain Reservoir</td>
<td>18,000</td>
<td>18,000</td>
<td>0</td>
</tr>
<tr>
<td>Sub Total</td>
<td>90,100</td>
<td>46,463</td>
<td>43,637</td>
</tr>
</tbody>
</table>

- Current ESP storage is more than sufficient to meet ESP delivery obligations of approximately 20,000 AF
Management of Emergency Storage

- Emergency storage analysis considerations
  - Operational flexibility
  - Projected economic growth
  - Conservative perspective on emergency reserves

- Withdraw 7,000 AF from emergency storage during calendar year 2019 to bring storage more in-line with current modeled requirement
Next Steps

- Execute planned storage withdrawals
- Evaluate long-term need for Central Valley groundwater storage accounts
Claude “Bud” Lewis Carlsbad Desalination Plant
Intake and Discharge Modifications

Water Planning Committee Meeting
July 26, 2018
Bob Yamada, Director of Water Resources
Background

- Water Purchase Agreement approved by the Board in November 2012
  - Risk transfer to the private sector
- Expected closure of NRG Encina Power Station by December 2018 will ultimately require a new, permanent stand-alone intake for CDP.
- Closure was anticipated in Water Purchase Agreement
- Plant intake and discharge must also now comply with 2015 Ocean Plan Amendments.
Current Intake and Discharge Configuration
Permitting Status for New Intake

- Poseidon presented 21 Alternatives to State and Regional Water Boards
- Regional Water Board staff plan to recommend Alternative 21:
  - Wedgewire screen system located at bottom of lagoon
  - Comparable cost to other alternatives
  - Innovative technology that has not been proven in a lagoon environment
Proposed Intake and Discharge Configuration

Location of new intake screens
Proposed Intake Improvements
Alt. 21 Submerged Intake Screens
Phased Operations and Pilot Testing

- Poseidon will have five years after issuance of new NPDES permit to come into full compliance with the Ocean Plan
- 24 month pilot test planned for new intake design
- Phased implementation/operation planned:
  - Temporary 12-month operation of NRG Pumps (2019)
  - Interim new circulation pump system (2020-2023)
  - Permanent intake/discharge facilities (2023+)
Next Steps

- Draft Permit Release Summer/Fall 2018
- Board Update Fall 2018
  - Permit conditions
  - Updated costs
- Temporary Stand-Alone Ops January 2019
Agreement for Water Service to the Sycuan Band of the Kumeyaay Nation

Water Planning Committee
July 26, 2018

Dana Friehauf
Water Resources Manager
California Water Code Section 71611.5

- Added to code with passage of AB2470 (Gonzales) in 2016
- Requires Padre Dam, Water Authority and Metropolitan (Agencies) to provide service to Sycuan
  - Under substantially the same terms applicable to other customers within Padre Dam’s service area
- Requires Sycuan to accept, by agreement, the Agencies’ terms as if fully annexed
Water Service Agreement - Key Provisions

- Full cost recovery for service to Sycuan
  - Annual in-lieu payment of property related assessments (i.e. taxes, standby)
  - Billed for water as if Padre Dam customer
  - Pay annexation application fee ($10,340)
  - Already purchased water meter and paid capacity charges

- Sycuan grants limited waiver of sovereign immunity from suit solely for enforcement of agreement

- Subject to water use or volume restrictions imposed by Agencies or state
Sycuan Lands to be Served by Agreement

Sycuan Original Reservation

Area to be served under agreement
Water Authority Annexation Policy

Annexation of Tribal Lands
Before approval of annexation, tribal government shall enter into a contract which, in addition to other items, shall address:

1. Payment to the Water Authority in-lieu of taxes, assessments, and other charges from within tribal lands that would otherwise be exempt.
2. Tribal government waiver of sovereign immunity from suit for purposes of enforcing contractual arrangement.

Service Agreement is consistent with Policy
Water Authority Annexation Policy

Protection of Member Agency Supply Reliability
Board may deny an annexation if it would adversely affect member agency supply reliability

Service Agreement is consistent with Policy
- Entering into agreement will not adversely affect member agency supply reliability
  - An estimate of water demands for Sycuan lands receiving service under agreement are included in 2015 Urban Water Management Plan
  - Agreement states that water service to Sycuan lands is subject to any water-use or volumetric restrictions imposed by the Agencies or established by federal or state laws or regulations
## Schedule - Consideration by Agreement Parties

<table>
<thead>
<tr>
<th>Date</th>
<th>Entity</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 18, 2018</td>
<td>Padre Dam MWD</td>
<td>Board approved</td>
</tr>
<tr>
<td>July 26, 2018</td>
<td>Water Authority</td>
<td>TBD</td>
</tr>
<tr>
<td>August 21, 2018</td>
<td>Metropolitan</td>
<td>TBD</td>
</tr>
<tr>
<td>September 5, 2018</td>
<td>Sycuan Tribal Council</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Staff Recommendation

Authorize the General Manager to execute an Agreement for Water Service to the Sycuan Band of the Kumeyaay Nation
Implementation of New State Laws Pertaining to Urban Water Use Efficiency Objectives and Water Management

Water Planning Committee
July 26, 2018

Dana Friehauf
Water Resources Manager
New State Laws (SB 606 & AB 1668)

- Signed by Governor Brown in May 2018
  - Improve sustainability of state’s water resources

- Requires long-term objectives and CII performance measures for the efficient use of water

- Contains new planning requirements
  - Urban Water Management Plan
  - Shortage contingency plan

Senator Hertzberg, Governor Brown and Assemblymember Friedman
Urban Water-Use Efficiency Objective

- Does not establish water-use targets for individuals or businesses

- Objective applies to retail water supplier’s system-wide, aggregate water use

- Compare objective with actual water use to determine if agency’s system-wide water use is efficient

- Very complex calculation
Urban Water-Use Objective Calculation

Aggregate Residential Indoor Use

Aggregate Residential and CII Outdoor Use*

Aggregate System Water Loss

Aggregate Variances

Potable Reuse Incentive
(Up to 15% of objective)

*CII landscapes with dedicated meter. Excludes commercial agriculture.
CII Performance Measures

- No volumetric target for Commercial, Industrial and Institutional water use sector

- Focus on best management practices for CII customers
  - Examples include water audits and installation of dedicated irrigation meters
  - Must be technically and financially feasible
  - Support economic productivity of California’s CII sector
  - Process water is exempt

- Water agencies are required to implement performance measures
Implementation Timeline

Oct 2021
DWR recommends standards, variances and performance measures

June 2022
SWRCB adopts standards and performance measures

Nov 2023
Suppliers calculate objective and report
SWRCB begins progressive enforcement

Nov 2027
Water suppliers subject to fines if unable to meet objective, performance measures
Water-Use Objective - Public Input

- Development of use standards and adoption of regulations
  - DWR/SWRCB shall solicit broad public input from stakeholders
  - SWRCB shall hold at least one public meeting prior to taking action
  - Stakeholder workgroups?
Next Steps

- Monitor and participate in DWR and SWRCB meetings
  - Support DWR staff in development of recommended standards and CII performance measures
  - Ensure objectives and CII performance measures are reasonable and equitable for San Diego region

- Coordinate with CUWA and ACWA members

- Work closely with member agencies
  - Water-use objectives apply to retail urban water suppliers
  - Hold workgroup meetings to discuss proposals and gain input
Legislature

- July 6: Summer recess began
- August 6: Legislature reconvenes
- August 31: Final recess begins at midnight
- Governor will have 30 days to act on all bills sent to him during final weeks of legislative session
- Newly-constituted Legislature will convene on December 3
Sponsored Bills: AB 2064 (Gloria)

- AB 2064 is intended to fully address cashflow issues for non-profit organizations and DACs participating in IRWM programs
- AB 2064 is jointly authored by Assemblymembers Todd Gloria and Shirley Weber
- Pending consideration in Senate Appropriations Committee
Sponsored Bills: AB 2371 (Carrillo)

- Co-sponsored with NRDC to advance several Independent Technical Panel (ITP) recommendations to improve landscape irrigation efficiency
- Pending consideration in Senate Appropriations Committee
- Key provisions
  - Landscape contractors examination
  - WUCOLS updates
  - Home inspections
  - Consumer information working group
Water Tax – What’s Next?

- Administration’s proposed budget trailer bill - Safe and Affordable Drinking Water Act
  - Not advanced during 2018 budget deliberations
  - Could still emerge in August

- SB 623
  - Assembly Rules Committee since September 1, 2017
  - Will require procedural actions and possible re-referral to policy and fiscal committees
  - Could re-emerge in August

- Newly-amended bill - some other legislative vehicle could be amended to rejuvenate the water tax debate

- Senator Newman recall election will greatly influence action on water tax

- Nothing is over until midnight on August 31
Special Recall Election - SD 29

<table>
<thead>
<tr>
<th>Question</th>
<th>YES VOTES</th>
<th>NO VOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shall Josh Newman (D) be recalled (removed) from the Office of State Senate District 29?*</td>
<td>58.7%</td>
<td>41.3%</td>
</tr>
</tbody>
</table>

*Candidate to succeed Josh Newman as State Senator

Ling Ling Chang (R) – 34.6%
Key Measures Remaining in 2018 Legislative Session

- **AB 2050 (Caballero)**
  - Small system water authority act
  - Addresses structural deficiencies in service delivery by failing/non-compliant water systems
  - Senate Appropriations Committee - August 6
  - Water Authority Board position: Support

- **SB 998 (Dodd)**
  - Water service shut-offs
  - Prescribes new processes and standards relative to retail water service shut-off authority
  - Assembly Appropriations Committee
  - Water Authority Board position: Oppose Unless Amended
Key Issues Remaining in 2018 Legislative Session

- Wildfire prevention and response
  - Conference committee convened on July 25

- State water contract amendments
  - Statute requires hearing of Joint Legislative Budget Committee for contract extension
  - WaterFix-related amendments are NOT included in the package before the Legislature

- Carlsbad desalination intake facility - Proposition 1 grant eligibility
  - End-of-session effort to ensure eligibility for P3 projects

- Pumped hydropower storage
  - Effort to ensure bulk energy storage can receive appropriate consideration in the broader package to move toward 100% renewables and zero-carbon-emission energy sources
Proposition 1 Storage Funding

- Proposition 1 - 2014 water bond
  - $2.7 B allocation for water storage projects
  - California Water Commission on-point to award funding through competitive public process
    - Emphasis on public benefits, reducing reliance on Delta
    - Projects must provide “measurable improvements to the Delta ecosystem or tributaries to the Delta”
- July 24 - CA Water Commission made final project funding award announcement
  - $2.582 B in funding awards to 8 projects
  - Collectively would add 4.3 MAF of storage in the state (if all fully constructed)
## Proposition 1 Water Storage Funding

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>SPONSOR</th>
<th>EST. TOTAL COST</th>
<th>PROP 1 AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chino Basin Conjunctive Use Project</td>
<td>Inland Empire Utilities Agency</td>
<td>$480 M</td>
<td>$207 M</td>
</tr>
<tr>
<td>Kern Fan Groundwater Storage Project</td>
<td>Irvine Ranch WD/Rosedale-Rio Bravo WD</td>
<td>$171 M</td>
<td>$68 M</td>
</tr>
<tr>
<td>Los Vaqueros Reservoir Expansion Project</td>
<td>Contra Costa Water District</td>
<td>$980 M</td>
<td>$459 M</td>
</tr>
<tr>
<td>Pacheco Reservoir Expansion Project</td>
<td>Santa Clara Valley Water District</td>
<td>$969 M</td>
<td>$485 M</td>
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<tr>
<td>Sites Reservoir Project</td>
<td>Sites Project Authority</td>
<td>$5.2 B</td>
<td>$816 M</td>
</tr>
<tr>
<td>South Sacramento County Conjunctive Use Program</td>
<td>Sacramento Regional County Sanitation District</td>
<td>$373 M</td>
<td>$281 M</td>
</tr>
<tr>
<td>Temperance Flat Reservoir</td>
<td>San Joaquin Valley Water Infrastructure Authority</td>
<td>$3 B</td>
<td>$171 M</td>
</tr>
<tr>
<td>Willow Springs Water Bank</td>
<td>Southern California Water Bank Authority</td>
<td>$343 M</td>
<td>$95 M</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$2.582 B</strong></td>
</tr>
<tr>
<td>PROPOSITION #</td>
<td>SHORT TITLE</td>
<td>SUBJECT MATTER</td>
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</tr>
<tr>
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<td>-------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Veterans and Affordable Housing Bond Act of 2018</td>
<td>$4 B in bonds for veterans’ housing</td>
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<tr>
<td>2</td>
<td>No Place Like Home Act of 2018</td>
<td>$2 B in bonds for supportive housing</td>
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<tr>
<td>3</td>
<td>Water Supply and Water Quality Act of 2018</td>
<td>$8.877 B general obligation bond measure for water supply and quality, watershed, fish, wildlife, conveyance, and groundwater sustainability projects</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Children’s Hospital Bond Act of 2018</td>
<td>$1.5 B in bonds to fund construction at hospitals providing children’s health care</td>
<td></td>
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<tr>
<td>5</td>
<td>People’s Initiative to Protect Proposition 13 Savings</td>
<td>Changes requirements for transferring property tax base to replacement residence</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Voter Approval for Increases in Gas and Car Tax</td>
<td>Repeals SB 1 gas tax</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Daylight Saving Time</td>
<td>Repeals California’s Daylight Saving Time Act and authorizes the Legislature by 2/3 vote to eliminate daylight saving if federal law authorizes such a change</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Fair Pricing for Dialysis Act</td>
<td>Limits the amounts that outpatient kidney dialysis clinics may charge for patient care</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Three New States Within the Current Boundaries of California</td>
<td>Divides California into three states</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Affordable Housing Act</td>
<td>Expands local governments’ authority to enact rent control on residential property</td>
<td></td>
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<tr>
<td>11</td>
<td>Emergency Ambulance Employee Safety and Preparedness Act</td>
<td>Requires private sector emergency ambulance employees to remain on-call during breaks</td>
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<tr>
<td>12</td>
<td>The Prevention of Cruelty to Farm Animals Act</td>
<td>Establishes new minimum space requirements for confining certain farm animals</td>
<td></td>
</tr>
</tbody>
</table>
Proposition 3: Water Bond

Legislation and Public Outreach Committee
July 26, 2018

Glenn Farrel
Government Relations Manager
Citizen’s initiative - sponsored by Jerry Meral

Qualified on June 28, 2018

Will appear on November 6, 2018 general election ballot as Proposition 3

$8.877 billion general obligation bond
- Water projects
- Resources/environmental projects
- Includes nearly 100 subcategories for funding, by region and “earmarked” projects
- Continuously appropriated funds - does not require legislative appropriation
Proposition 3 Funding Summary

- Uses of Proposed Bond Funds ($ Millions)

- Water Facility Upgrades $1,227
- Groundwater Management $685
- Flood Protection $500
- Habitat $1,440
- Watershed Lands $2,495
- Water Supply $2,530
- Drinking Water $750
- Recycling $400
- GW Desalination $400
- Conservation $365
- Urban Runoff/Stormwater $550
- IRWM $5
- Water Measurement $60

$8.877 Billion Total
Proposition 3: Overview

- Approximately $1.4 billion directly available for disadvantaged communities + an additional $2.6 billion prioritized for DACs
  - Waiver of local match requirements
- Authorizes state agencies and departments up to 5% of funds for administration
- Prop 3 funds cannot be used for design, construction, operation, mitigation, or maintenance of Delta conveyance facilities
- Unique provision that continuously appropriates portion of state revenue generated from cap-and-trade sales to:
  - MWD
  - DWR
  - Contra Costa Water District
  - San Luis and Delta Mendota Water Authority
  - Could be “tens of millions of dollars annually” (according to Assembly policy committee analysis)
  - Water storage, treatment, conveyance and consumer water conservation programs
Direct Allocations to San Diego County

- **Chapter 5.6**
  - $40 M for projects that reduce the flow of trash and pollutants into near-shore coastal water in San Diego County or into San Diego Bay

- **Chapter 6.1**
  - $40 M to the San Diego River Conservancy
  - $15 M to the State Coastal Conservancy for river parkway projects within the San Diego Bay watershed
  - $15 M to the State Coastal Conservancy for river parkway projects along the Santa Margarita River in San Diego County

- **Indirect Allocations benefiting the San Diego region**
  - **Chapter 6.1**: $200 M to implement the Salton Sea Management Program to comply with the terms of QSA-implementing statutes
Support and Opposition

- **Support (partial list):**
  - Association of California Water Agencies
  - Bay Area Council
  - California Waterfowl Association
  - Community Water Center
  - Metropolitan Water District of Southern California
  - Northern California Water Association
  - Salton Sea Authority
  - Southern California Water Coalition
  - Western Growers

- **Opposition (as of July 19, 2018):**
  - Sierra Club
  - Food and Water Watch
Staff Recommendation

- Adopt a resolution endorsing Proposition 3, the Water Supply and Water Quality Act of 2018, on the November 6, 2018 general election ballot
Summer launch event sparks wide interest

- Partners
- Stakeholders
- Media
Making a splash!
Videos promote importance of water

Eight videos highlight water in key sectors: Tourism, Manufacturing, Brewing and Agriculture.
Advertising expands program

Digital Streaming
15 & 30 second videos
Started: July

Social Media
Facebook
LinkedIn
YouTube
Started: July

Rough & Tumble
Started: July

TV
KFMB/8
30-second ads
Starts: September
Partnerships extend program reach

The Water Authority and its member agencies are working together to make the most of every drop. Using your towels more often is one way to reduce water use, and simple steps can save energy and generate cost savings. To reuse your towels, hang them over the shower curtain rod. To replace towels, place soft towels on the bathroom floor or in the tub.

Thank you for subscribing to BPS’s Quarterly Sustainability Program newsletter. You will find updates and highlights for the second quarter of 2021.

Program Highlights

Brought to You by Water

You can help us bring clean, safe, reliable water to all residents by sharing this newsletter with your friends and family.

Valleicos Water @valleicoswater · Jul 17
We’ve got lots of great coffee in #SDCounty...and all of it is brought to you by clean, safe, reliable water! See why great coffee needs great water @ bit.ly/2Np0R0. #BroughtByWater

The Importance of Water Reliability to San Diego’s Economy

Today, we have a chance to says thank you to the hard work and dedication of our essential workers who are keeping our community safe. Thank you to all who are working hard to ensure that we have reliable water supply. The importance of clean water cannot be overstated. It is essential for public health, economic development, and environmental sustainability. Thank you for your commitment to protecting our water resources.

Best of Oceanside Business Journal

Today, we have an additional reminder that good coffee is a form of art and craftsmanship. It takes a special blend of ingredients to make a perfect cup. Your dedication to quality is remarkable. The rich aroma and flavors that you create make our mornings brighter and our days more enjoyable. Thank you for sharing this passion with us. Your commitment to excellence inspires us to strive for greatness in all we do.
Connecting with the community

- Beach Ball World Tour
  - Santee
  - Oceanside
  - North Park
  - Chula Vista
Next steps enhance engagement

- Member agency and partner toolkits
- Events
  - Elected official forum (Vallecitos)
  - SD North EDC Water Forum (Oct.)
  - Manufacturing Month (Oct.)
  - Brewers Guild (Nov.)
News platform shows long-term value

1,000+ video views
Public Opinion Research Assessment

Legislation and Public Outreach Committee
July 26, 2018

Jason Foster, Director of Administrative Services
Craig Balben, Public Affairs Representative
Presentation Summary

• Background
• Member Agency Survey Highlights
• Poll Methodology
• Other Opportunities
• Discussion/input
Why Assess?

These are 2 reasons why Americans have gotten skeptical of polling

Survey Research, Its New Frontiers and Democracy

Scott Keeter, Director of Survey Research

CBS, New York Times hit for polling standards

The Internet of Things Is Changing the Way We Gather Customer Insights

By STEVEN SHEPARD | 08/01/2014 02:47 PM EDT

Rick Kelly, Vice President of Product, FUEL CYCLE

Our Region’s Trusted Water Leader
San Diego County Water Authority
SDCWA Public Opinion Polls

Our Region’s Trusted Water Leader
San Diego County Water Authority

% = Margin of Error
*Equivalent only for hybrid poll
Current Poll Frequency?

Answered: 21  Skipped: 0

- Too frequent
- Appropriate/just right
- Too infrequent
- No opinion
Poll Size?

15* of 21 agencies (71%) indicated support for samples of 800 or greater

*Includes responses in “other”
What would make poll more useful?

- More M.A. input on poll
- More local relevance
Interest in Coordination?

Q7 Are you interested in coordinating with the Water Authority to conduct joint public opinion polling and research in the future (if feasible)?

Answered: 17  Skipped: 4

- Yes
- No
- Depends

Top factors: cost, local relevance
Trends in Polling Industry Methodology

• Review of polling industry
  • Landlines vs. mobile phones
  • Phone vs. online panel
Beyond Polling

• Opt-in survey tools

Do you have one minute to help make CVWD better?

[Yes] [No]

CVWD wants your feedback. Sign up today!

www.flashvote.com/CVWDwater
(775) 235-2240

CVWD is using FlashVote, a web-based survey tool, to provide quick and easy monthly surveys via email or mobile phone, to gain valuable input from customers like you. Just one minute a month will help us continue to provide Service Beyond Expectation. And you get to see the results!
Beyond Polling

• Social sentiment/listening

This map shows emotions about weather expressed on Twitter. Statuses are colored based on proportion of positive and negative emotions. Metro areas are represented by circles sized based on the amount of Twitter chatter about weather.
Next Steps

• **September**: Complete industry review

• **Fall 2018**: Complete assessment and future public opinion research recommendations
Position Statement on California WaterFix & Updated Bay-Delta Policy Principles

Imported Water Committee
July 26, 2018

Amy Chen, Director of MWD Program
Water Authority and Bay Delta

- Long history of active support for a Bay-Delta fix
- Reduced dependency on Bay-Delta, consistent with state policy
- Adopted Bay-Delta policy in 2012
  - Supply reliability
  - Ecosystem restoration
  - Finance & funding
  - Facilities
  - Governance
- Interdisciplinary team review of BDCP
- Did not take a formal position on WaterFix
Recent MWD Board Activities

- October 2017: Supported WaterFix funding of up to 25.9% of project costs ($4.3 billion)
Recent MWD Board Activities

- October 2017: Supported WaterFix funding of up to 25.9% of project costs ($4.3 billion)
- February 2018: DWR announced a “staged” single tunnel approach to match financial interest
  - Construct second tunnel when funding can be obtained

Single Tunnel Phased Approach
Cost: $11.1B

MWD 47.1% (Proportional Share of SWP)
$5.2B
Recent MWD Board Activities

- October 2017: Supported WaterFix funding of up to 25.9% of project costs ($4.3 billion)
- February 2018: DWR announced a “staged” single tunnel approach to match financial interest
  - Construct second tunnel when funding can be obtained
- April 2018: Increased funding to 64.6% ($10.8 billion)
- July 2018: Rescinded April vote and re-voted to support 64.6% ($10.8 billion)
WaterFix impacts on Water Authority’s Ratepayers

- How MWD recovers WaterFix costs may uniquely impact Water Authority
- Water Authority does not derive any unique benefit from WaterFix that should cause it to pay more than other MWD member agencies

<table>
<thead>
<tr>
<th>MWD assigns WaterFix Costs to</th>
<th>Increase in household monthly bills*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>$0.55-$0.80</td>
</tr>
<tr>
<td>Transportation</td>
<td>$13.27-$21.07</td>
</tr>
</tbody>
</table>

* Based on demand forecast reset; nominal $ based on MWD’s projected share of $10.8B (assumes no cost overruns), interest rates of 4% and 8%, single family household using 0.4 AF of Water Authority’s water annually
Water Authority May Board Action

- May 2018: draft Bay-Delta policy update to address WaterFix implementation impact
  - Staff directed to develop position statement and policy principles to support current WaterFix design and construction while protecting Water Authority ratepayers
Activities between May and July

- Following Board direction, staff sought input on draft Policy Principles from member agency managers
  - Presented/discussed at member agency managers meetings June 19 and July 17
  - Emails on June 20, July 3 and July 13
  - Received input, including one written assessment
- Updated policy and position statement postponed in June to accommodate Special Board workshop
- Position statement and policy update revised this week at the suggestion of IWC Chair Weston
WaterFix Policy Principles

- Support current design and construction plans for WaterFix provided costs are properly allocated
- Support beneficiary pays cost allocation approach
- WaterFix costs be characterized and allocated as supply costs by MWD and DWR
- Support independent oversight function to monitor and provide regular updates on implementation progress
- Oppose actions that result in San Diego ratepayers paying for unsubscribed WaterFix costs
Modification Proposed by Chair Weston

- Support current design and construction plans for WaterFix provided costs are properly allocated
- Support beneficiary pays cost allocation approach
- WaterFix costs be characterized and allocated as supply costs by MWD and DWR
- Support independent oversight function to monitor and provide regular updates on implementation progress
- Oppose actions that result in San Diego ratepayers paying for unsubscribed WaterFix costs

Page 199 pf July Board Packet
Position Statement on WaterFix

- The Water Authority Board of Directors supports the WaterFix project, as currently proposed, conditioned upon the Metropolitan Water District (MWD) allocating the costs of the project as conservation, or supply charges as similar facilities historically have been defined in MWD’s SWP contract with DWR, and San Diego ratepayers not paying for unsubscribed WaterFix costs that benefit third parties.
The Water Authority Board of Directors supports the WaterFix project, as currently proposed, conditioned upon the Metropolitan Water District (MWD) allocating the costs of the project as conservation, or supply charges as similar facilities historically have been defined in MWD’s SWP contract with DWR, and San Diego ratepayers not paying for unsubscribed WaterFix costs that benefit third parties.
Staff Seeing Board Direction

- Staff is seeking Board direction on position statement and updated policy principles.
Cybersecurity Efforts and Resource Deployment Plan

Administrative and Finance Committee
July 26, 2018

Jason Foster, Director of Administrative Services
Jim Fisher, Director of Operations & Maintenance
Damage Costs

Cyber crime damage costs to hit $6 trillion annually by 2021
Security Spending

Cybersecurity spending to exceed $1 trillion from 2017 to 2021
Unfilled cybersecurity jobs will triple -- predicted to reach 3.5 million by 2021
Human

Human attack surface to reach **6 billion** by 2022
Ransomware attacks rose 250% in 2017, hitting U.S. hardest.
Threats & Impact

A Cyberattack Hobbles Atlanta, and Security Experts Shudder

City of Atlanta needs $9.5M to fund fallout from ransomware attack

Incident Of The Week: FBI Attempts To Dissolve Botnet Wielding 500K Routers
Cyber Activity Linked To Russian Hacking Group

03.15.18

The FBI makes it official: Russia is attacking U.S. energy, water, and critical systems
Background-Water Authority Systems

Business Network Connected to the world

SCADA Network
No Internet Access
Cybersecurity - Major Budget Initiative

People

Products

Partners

Processes
Security Initiatives

Mobile Device Management

Application Whitelisting

Anti-Virus
Anti-Malware

Secure Web Gateway

Security Awareness

Dedicated Security Staff
Security Initiatives

Security Patching

Vulnerability Scanning

Event Logging

Policies & Procedures

Cyber Insurance

Multifactor Authentication
Resource Deployment Plan Benefits

- Enhance planning and preparedness
- Ensure proper coordination and implementation
- Sustain operational excellence in all areas
## Organizational Changes

<table>
<thead>
<tr>
<th>Position</th>
<th>Action</th>
<th>Estimated Costs (Savings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Security Officer</td>
<td>Reclassify vacant Operations &amp; Maintenance Manager</td>
<td>($9,000)</td>
</tr>
<tr>
<td>SCADA Supervisor</td>
<td>Reclassify vacant Engineer II</td>
<td>$15,000</td>
</tr>
<tr>
<td>SCADA Process/Network Specialist (2)</td>
<td>Reclassify existing Senior Electrical/Electronics Technicians</td>
<td>$40,000</td>
</tr>
<tr>
<td>SCADA Programming Specialist</td>
<td>Reclassify vacant Electrical/Electronics Technician I and terminate ACS contracts</td>
<td>($260,000)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>($214,000)</strong></td>
</tr>
</tbody>
</table>
Consultant Services

Cost-effectively cover time-intensive best practices:

- 24/7 remote systems monitoring
- Threat detection and reporting
- Regular security assessments
Fiscal Years 2018 & 2019
Mid-Term Budget Update

Administrative and Finance Committee
July 26, 2018
Agenda

- Accomplishments
- Mid-Term Budget
- Recommendations
Accomplishments

First full contract year for Poseidon WPA

Increase in Preferential Rights

Awarded Proposition 1 Funding $5.5M

MWD’s Water Stewardship Rate not applied to exchange agreement

Developed Interim Demand Forecast Reset

Ramp up of QSA water from 100 to 130 TAF annually

Board adoption of Water Shortage Contingency Plan

Submitted 6 LRP applications to MWD on behalf of Water Authority Member Agencies

Water Supply
Accomplishments

- Physical security assessments in coordination with Homeland Security
- In-house operation and maintenance of Lake Hodges began
- APWA Project of the Year Award for Nob Hill Improvements
- Corrosion protection and condition assessments on pipelines
- Protection of easement rights, resolve encroachments
- APWA Project of the Year Award for Miramar Pump Station
Accomplishments

- Completed Construction Carlsbad 6 Flow Control Facility
- Nob Hill Improvements construction complete
- Visual inspection of Carlsbad Conveyance Pipeline
- Design of Pipeline Structure Rehabilitation
- Pipeline 3 Relining Lake Murray to Sweetwater
- Design of Pipeline 5 Relining

Capital Improvement Program
Accomplishments

- Bond Defeasance - Saving $2.09M
- Extensive outreach on La Mesa - Sweetwater relining project
- Modernized Intranet Site
- Excellence in Financial Reporting Award for CAFR
- Excellence in Operational Budgeting & Distinguished Budget Presentation Award
- Citizens Water Academy
- Enhanced Cybersecurity Development
- Energy and Green Initiatives - EV charging, Sustainable Landscaping
- Citizens Water Academy Excellence in Financial Reporting Award for CAFR
Water Sales

- Sales 4.6% lower than anticipated
- Greater than projected use of local water supplies
- Commencement of deliveries through Indian Water Authority to Vista & Escondido
Water Purchases and Treatment are 5.3% lower than budgeted.

Actual purchases and treatment are trending toward current projections.

**FY2018 Water Purchases and Treatment Budget vs Actual (in Millions $)**

- Budget (July-May) $443.1
- Actual (July-May) $397.2
2018 & 2019 Mid-Term Budget Update

- Operating Departments
  - Projecting 2.3% Savings through FY2019
  - Vacancies currently 7%

- Capital Improvement Program
  - Transfer of $125,000 from Infrastructure Rehabilitation to System Vulnerability Assessment - Net Zero Impact
  - Transfer of $150,000 from Carlsbad Desalination Project to Twin Oaks Valley Water Treatment Plant Expanded Service Area Project - Net Zero Impact
Staff Recommendations

- Transfers between CIP projects for Net Zero Impact
- Approve the recommended mid-term budget adjustments for a net zero impact to the Water Authority’s Fiscal Years 2018 and 2019 budget.
Pipeline 5 Relining
Delivery Point to Sage Road

Engineering and Operations Committee
July 26, 2018

Mike Heu
Engineer PE
Bid Summary

Advertised Bid Range: $18 to $24 Million

<table>
<thead>
<tr>
<th>NO.</th>
<th>GENERAL CONTRACTOR</th>
<th>BID AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>J.F. Shea Construction, Inc.</td>
<td>$ 25,304,375</td>
</tr>
<tr>
<td>2</td>
<td>Kiewit Infrastructure West Co.</td>
<td>$ 31,087,000</td>
</tr>
</tbody>
</table>
Authorize the General Manager to award a construction contract to J.F. Shea Construction, Inc. in the amount of $25,304,375 for the Pipeline 5 Relining, Delivery Point to Sage Road project.
Rancho Peñasquitos Pressure Control and Hydroelectric Facility Improvements

Engineering and Operations Committee
July 26, 2018
4 Flow Control Valves and 8 Isolation Valves
Pressure Control - Assessment

- Turbulent Water Flows
- Lining loss
- Corrosion
- Shortened Valve Life
- Facility Layout
Pressure Control - Recommendations

- Replace 4 Flow Control Valves and 2 Isolation Valves
## Plunger Valve Bid Summary

<table>
<thead>
<tr>
<th>NO.</th>
<th>SUPPLIER</th>
<th>TOTAL BID PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COST ESTIMATE</td>
<td>$1,000,000 - $1,250,000</td>
</tr>
<tr>
<td>1.</td>
<td>B&amp;K Valves &amp; Equipment, Inc.</td>
<td>$637,287.14</td>
</tr>
<tr>
<td>2.</td>
<td>Water Technology Resources</td>
<td>$643,137.50</td>
</tr>
<tr>
<td>3.</td>
<td>R &amp; B Automation Inc.</td>
<td>$683,295.00</td>
</tr>
<tr>
<td>4.</td>
<td>Cascade Consultants LLC</td>
<td>$759,689.50</td>
</tr>
<tr>
<td>5.</td>
<td>J&amp;S Valve, Inc.</td>
<td>$888,774.53</td>
</tr>
<tr>
<td>6.</td>
<td>Autrans Corporation</td>
<td>$957,870.00</td>
</tr>
<tr>
<td>7.</td>
<td>Core &amp; Main</td>
<td>$987,985.37</td>
</tr>
</tbody>
</table>
Full Port Butterfly Valve

- Mitigates Turbulent Water Flows
- Provides Drip Tight Isolation for Maintenance
# Pressure Control - Schedule

<table>
<thead>
<tr>
<th>Valve Installations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Award Valve Procurements</td>
<td>July 2018</td>
</tr>
<tr>
<td>Phased Valve Installation</td>
<td>Winter 2019 - Spring 2020</td>
</tr>
<tr>
<td>Full Port Butterfly Valve Trial</td>
<td>Winter 2019 - Winter 2020</td>
</tr>
<tr>
<td>Replace Remaining Isolation Valves</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Hydroelectric - Equipment

- Historical vs. Recent Production
- Paid off in FY2014
Hydroelectric - Assessment

- Turbine Operating Range
- Turbine Efficiencies
- Generator Performance
- Maintenance Improvements
Hydroelectric - Recommendations

- Hydroelectric Upgrades
- Design/Build Contract
  - Estimated Cost $3.8M
  - 4 year Payback
  - Average Annual Revenue $950k
- Performance Specifications
# Hydroelectric - Schedule

<table>
<thead>
<tr>
<th>Turbine Improvements</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve Design-Build Specifications</td>
<td>July 2018</td>
</tr>
<tr>
<td>Award Design-Build Contract</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Design/Manufacture</td>
<td>Winter 2018 - Winter 2019</td>
</tr>
<tr>
<td>Installation</td>
<td>Winter 2019 - Spring 2020</td>
</tr>
</tbody>
</table>
Recommendations

- Authorize the General Manager to award a contract to Cascade Consultants, Inc. in the amount of $759,690 to purchase four pressure and flow control valves for the Rancho Peñasquitos Pressure Control Facility.

- Authorize the General Manager to award a contract to Cascade Consultants, Inc. in the amount of $440,093 to purchase two isolation valves for the Rancho Peñasquitos Pressure Control Facility.

- Approve the Design-Build Performance Specifications to upgrade the Rancho Peñasquitos Hydroelectric Facility equipment.