Lake Hodges Pumped Storage Hydroelectric Facility
Specialized Mechanical Maintenance Contract

Engineering & Operations Committee
October 26, 2017
Background

- Operations and Maintenance performed via contractual service with ProTrans USA

- Contract expires October 31, 2017

- Water Authority will assume operations and maintenance responsibilities
  - Estimated annual savings of $0.5M
Request for Proposals

- Services for specialized mechanical preventative and corrective maintenance, inspection, testing, and repair services
- Two-year term, with option to extend for an additional two years
- Total not-to-exceed contract amount of $1.3 million
Request for Proposals & Contract

- Request for Proposals issued in August 2017

- On September 21, 2017, the WA received one proposal from Hydro Consulting and Maintenance Service Inc. (HCMS)

- HCMS is the current vendor at the Facility

- HCMS rates are competitive and comparable to similar Water Authority service contracts
Recommendation

Authorize the General Manager to execute a services contract with Hydro Consulting and Maintenance Services for specialized mechanical preventative and corrective maintenance, inspection, testing, and repair services through November 20, 2019, with an option to extend the contract for an additional two years, for a total not-to-exceed amount of $1,300,000.
Mission Trails Flow Regulatory Structure II and Flow Control Facility project

Engineering & Operations Committee Meeting
October 26, 2017

Mike Conner, Senior Engineer
Area Map

- Red Cedar Crossing
- Second Aqueduct
- SR52 Crossing
- Mission Trails Tunnel & Proposed FRS II
- Proposed Flow Control Facility
- Navajo Vent
- 30-inch P3/P4 Interconnect

Legend:
- Water Authority Pipeline
Project Purpose

- Regulatory storage to manage flow changes
- Flow Control Facility to match member agency flow requests
- Connection to Mission Trails Tunnel
- Removal of eight existing vent stacks in MTRP
Vent Stack Removal in MTRP
Professional Services Contract

- CH2M HILL
- Design Services
  - Civil, Mechanical, Geotechnical, Structural, and Electrical Engineering
  - Bidding Phase Support
  - Construction Phase Support
Staff Recommendation

- Authorize the General Manager to award a professional services contract for a not-to-exceed amount of $1,870,629 to CH2M HILL to provide design services for the Mission Trails Flow Regulatory Structure II and Flow Control Facility project for a duration of three and one half years.
Statewide Mercury Control Program for Reservoirs

Water Planning Committee
October 26, 2017

Lesley Dobalian
Principal Water Resources Specialist
Background on Proposed Program

- Proposed amendment to state regulatory plan
- Informal public review draft
- Purpose is to meet mercury fish tissue objectives
  - Protect humans and wildlife that consume fish
  - Not about drinking water quality
Sources of Mercury to Reservoirs

- **Primary sources**
  - Historical mines
  - Atmospheric deposition

- **Secondary sources**
  - Wastewater discharges
  - Urban runoff

- **Mercury becomes methylmercury in lakes**
  - Usually in sediments under anoxic conditions
  - Bioaccumulates in larger, older fish
SWRCB staff identified 132 reservoirs as impaired
  - Exceed mercury fish tissue objectives

San Diego proposed impaired reservoirs
  - Hodges, El Capitan, Jennings, Sutherland
  - Primary source is atmospheric deposition

Ongoing monitoring may result in future listings
Key Elements of Draft Program

- Source control to reduce mercury through permit requirements and cleanup orders
- Reservoir owners identified as responsible parties for water chemistry management
  - Phase 1: Pilot tests
  - Phase 2: Implementation
- Recommendations to state and federal agencies
  - DFW: fisheries management
  - Air Resources Board: mercury emissions
Key Issues

- SWRCB authority to regulate reservoir owners is questionable
- Source control for atmospheric mercury deposition and nutrients not adequately addressed
- Inadequate coordination between DFW and SWRCB on fisheries management
- Reservoirs identified as impaired outside of formal public process
- Significant long-term implications for all reservoir owners
Next Steps

- Participate in SWRCB workshops
  - October 11 in Big Bear
  - November 2 in Sacramento

- Member agency technical workgroup

- ACWA water quality subcommittee

- Advocate at SWRCB

- Formal comment period mid-2018
California WaterFix Assumptions: Contractors’ Participation Level

CA WaterFix Total Cost
$16.7B

- SWP 55% ($9.2B)
- CVP 45% ($7.5B)
California WaterFix Assumptions: Contractors’ Participation Level

CA WaterFix Total Cost: $16.7B

- SWP 55% ($9.2B)
  - Westlands: Opted-out
- CVP 45% ($7.5B)
  - Friant Water: “generally supportive”
  - Other CVP Contractors: ??
California WaterFix Assumptions: Contractors’ Participation Level

CA WaterFix Total Cost
$16.7B

SWP 55%
($9.2B)

12 Contractors “support”

CVP 45%
($7.5B)

Westlands: Opted-out

Friant Water: “generally supportive”

Other CVP Contractors:??
<table>
<thead>
<tr>
<th>SWP Contractors¹ Voted to &quot;Support&quot; WaterFix</th>
<th>Date</th>
<th>Expessed Level of Participation</th>
<th>Projected Financial Contribution ($ in billions)</th>
<th>Construction &amp; Finance JPAs</th>
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<td>$0.09</td>
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<tr>
<td>Coachella Valley Water District</td>
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<tr>
<td>Crestline-Lake Arrowhead WA</td>
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<td>Desert Water Agency</td>
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<td>Metropolitan Water District</td>
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<td>Mojave Water Agency</td>
<td>Sep 28</td>
<td>1.16%</td>
<td>$0.19</td>
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<td>San Bernardino Valley MWD</td>
<td>Oct 3</td>
<td>1.30%</td>
<td>$0.22</td>
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<tr>
<td>San Gorgonio Pass Water Agency</td>
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<td>0.23%</td>
<td>$0.04</td>
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<tr>
<td>Santa Clara Valley Water District³</td>
<td>Oct 17</td>
<td>1.38%</td>
<td>$0.23</td>
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<tr>
<td>Zone 7 Water Agency</td>
<td>Sep 20</td>
<td>1.09%</td>
<td>$0.18</td>
<td>✓</td>
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<tr>
<td><strong>TOTALS for 12 agencies</strong></td>
<td></td>
<td><strong>42.11%</strong></td>
<td><strong>$7.03</strong></td>
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</tr>
</tbody>
</table>

1. 5 Northern SWP contractors “excused” from participating  
2. Committed to 49% of Table A entitlement  
3. Conditional support for one tunnel only; funding from SWP side only
California WaterFix: Contractors’ Participation Level

CA WaterFix Total Cost
$16.7B

SWP 55%
$9.2B
12 Contractors “support”

CVP 45%
$7.5B
Westlands: Opted-out
Other CVP Contractors: ??

$9.5B (57%) of $16.7B remain uncommitted
Lake Mead End-of-December Elevation

Surplus Conditions

Adoption of the 2007 Interim Guidelines

Normal or ICS Surplus Conditions

Level 1 Shortage Condition

IBWC Minute 318

IBWC Minute 319

Level 2 Shortage Condition

Level 3 Shortage Condition and Reconsultation under the 2007 Interim Guidelines

PSCP and LB Drought MOU

December 31, 2017 elevation projected by the August 24-Month Study


U.S. ICS

Other Voluntary Contributions

Actual Elevation

Mexico Deferred Delivery

System Conservation Water

Hypothetical Elevation w/out Conservation Programs

* End of calendar year 2017 balances of U.S. ICS and Mexico deferred delivery, system conservation water, and other voluntary contributions to Lake Mead reflect plans as of August 2017 and are subject to change.
Risk of Lake Mead Reaching Critically Low Elevations (1,025')

- **Risk as assessed when 2007 Interim Guidelines were adopted**
- **Comparative current risk assessment as of August 2017 based on full historical hydrologic record**
- **Adjusted current risk assessment as of August 2017 based on the last 28 years of historical hydrology (i.e., assuming last 28 years are representative of future hydrology)**
Liquidity Facility Renewal
Supporting Commercial Paper, Series 9
Agenda

- Debt Portfolio Snapshot
- Criteria and Goals
- Bank of America Renewal Overview
- Recommendation
Debt Portfolio

Variable Rate and Short-Term Debt ($432.7 Million)

- Series 8, Bank of Tokyo Mitsubishi
  - $110.0
  - 26%

- 5-Year Fixed Rate Bond
  - $87.7
  - 20%

- Series 9, Bank of America
  - $135.0
  - 31%

- Series 1, ECP
  - $100.0
  - 23%

Total Debt ($2,025.3 Million)

- 21% Short-term Debt
- 79% Long-term Debt

$135 Million of Liquidity Facilities (LF) Expiring
Liquidity Facility Criteria and Goals

Criteria:
- Fees and projected overall cost
- Terms and conditions and credit ratings
- How well bank credit paper trades in the market
- Presence in public finance
- Diversification of banks supporting the program

Goals:
- Minimize cost of funds
- Maintain bank and debt product diversification
- Stagger expiration/maturity dates
- Maintain similar interest rate risk profile
Reduction of fees from 40 basis points (bps) to 38 bps
Fee reduction results in a savings of ~$27K annually
Avoids legal and advisory costs associated with administrative processes
Meets goals of staggering bank facility expiration dates, and maintaining bank diversification
Today’s Actions

Approve the extension of the Bank of America liquidity facility agreement and adopt Resolution 2017–__ authorizing the amendment of the Bank of America agreement
2017-2021 Business Plan Performance Update

Administrative and Finance Committee
October 26, 2017

Maureen A. Stapleton
General Manager
10+ years of proven success

Awarded 2012 ICMA Certificate of Achievement for Performance Measurement in Strategic Planning

Goal Success Rate

2004: 74%
2008: 63%
2012: 79%
2015: 81%
2016: 84%

San Diego County Water Authority
2017-2021 Business Plan Overview

- Three Key Focus Areas
- Broadened Programs
- Updated Management Strategies
- New Objectives and Tactics
- Key Performance Indicators
2017-2021 Business Plan

Key Focus Areas – 102 Objectives

Water Supply
27 Objectives
- Imported Water
- Local Water
- Resource Planning

Water Facilities
32 Objectives
- Infrastructure/Capital Improvement Program
- Sustainability
- Water System Management

Business Services
43 Objectives
- Communication and Messaging
- Financial Management
- Technology
- Workforce Management
Water Supply

- **Imported Water**
  - Ensuring appropriate cost allocation and long-term viability of imported water supplies
    - Bay-Delta, Colorado River and Metropolitan Water District

- **Local Water**
  - Developing local projects to support the region’s diversification program
    - Seawater desalination and potable reuse

- **Resource Planning**
  - Advancing water planning and water use efficiency practices
Water Supply Objectives

1. Completed: 4
   - Water Shortage Contingency Plan
   - Comments on State Board’s feasibility report for Direct Potable Reuse

2. On Track: 19
   - Exchange and Transfer Agreement analysis
   - Centralized database for water-use efficiency programs

3. Not On Track: 1
   - Enhanced flexibility for annual IID transfer volumes

4. Delayed (Outside WA Control): 3
   - Carlsbad Desal Intake Modifications Design and Construction
Water Supply
Key Performance Indicators

QSA Quarterly Stakeholder Briefings

- FY17: Actual 18
- FY18 (to date): Actual 5
- FY19, FY20, FY21: Target
**Water Supply Key Performance Indicators**

Carlsbad Desalination Plant Water Delivery Orders

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
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<tbody>
<tr>
<td>FY17</td>
<td>50,398</td>
</tr>
<tr>
<td>FY18 (to date)</td>
<td>14,939</td>
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</table>

Acre-Feet

- **Actual**
- **Target**
Water Facilities

- Infrastructure/CIP
  - Asset Management, Infrastructure Planning, New Facilities
- Sustainability
  - Climate Change, Environmental Management
- Water System Management
Water Facilities Objectives

1. Completed: 9
   - Miramar Pump Station Rehabilitation
   - Environmental awareness training

2. On Track: 17
   - Hodges Pump Storage facility O&M
   - Update energy management policy

3. Not On Track: 3
   - ESP – North County Pump Station project

5. Delayed (Outside WA Control): 3
   - Carlsbad 5 Flow Control Facility project
Water Facilities
Key Performance Indicators

CIP Schedule Performance

<table>
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<tr>
<th>Year</th>
<th>Actual</th>
<th>Target</th>
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<td>89%</td>
<td>90%</td>
</tr>
<tr>
<td>FY18 (to date)</td>
<td>95%</td>
<td>90%</td>
</tr>
<tr>
<td>FY19</td>
<td>100%</td>
<td>90%</td>
</tr>
<tr>
<td>FY20</td>
<td>100%</td>
<td>90%</td>
</tr>
<tr>
<td>FY21</td>
<td>100%</td>
<td>90%</td>
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</table>

Target: 90% of CIP Projects
Water Facilities
Key Performance Indicators

System Uptime

<table>
<thead>
<tr>
<th>Percent Uptime</th>
<th>FY17</th>
<th>FY18 (to date)</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
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</thead>
<tbody>
<tr>
<td>Actual: 100.00%</td>
<td>99.97%</td>
<td>100.00%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
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<tr>
<td>Target: 100% Uptime</td>
<td>100.0%</td>
<td></td>
<td></td>
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</table>

100.0% 99.9% 99.8% 99.7% 99.6% 99.5%

12
Business Services

- Communication & Messaging
  - Continuing effective communications with external stakeholders

- Financial Management
  - Implementing long-term financial plans for rates and charges, accounting, debt, and investment management

- Technology
  - Adopting pioneering technology and protecting against cybersecurity threats

- Workforce Management
  - Attracting, retaining, and developing a high-performing workforce
Business Services Objectives

1. Completed – 11
   - Cost of Service Study, updated annexation fees and capacity charges
   - Mentoring Program development

2. On Track – 27
   - Operational IT Resource Deployment Plan
   - Cybersecurity Review
   - Citizens Water Academy participation and outreach

3. Not On Track – 5
   - Water Billing Software
Business Services

Key Performance Indicators

Critical Information Services Availability

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Target</th>
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<tbody>
<tr>
<td>FY17</td>
<td>99.97%</td>
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<tr>
<td>FY18 (to date)</td>
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<td>FY19</td>
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<tr>
<td>FY20</td>
<td>99.97%</td>
<td>99.9%</td>
</tr>
<tr>
<td>FY21</td>
<td>99.97%</td>
<td>99.9%</td>
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</tbody>
</table>
Business Services
Key Performance Indicators

Investment Portfolio Performance

- Actual: 1.06%
- Actual: 1.36%
- Actual: 1.41%

Bank of America Merrill Lynch 0–3 year US Treasury & Agency Index
Benchmark: 0.55% Portfolio Performance
2017-2021 Business Plan Performance Status as of September 30, 2017

Objectives

1. Goal has achieved the overall performance target.

2. Goal is either on track or ahead of schedule to meet the near-term and overall performance targets by the original target date.

3. Goal is not on track to meet the near-term and overall performance targets by the original target date.

4. Goal has been deleted or delayed due to a decision by the Water Authority Board.

5. Goal has been deleted or delayed due to factors outside of the Water Authority’s control.
Mission, Vision, Values, & Strategies

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

Business Plan

The 2017-2021 Business Plan is the guiding document used by the Water Authority to implement the Board of Director’s strategic direction. The Plan provides a common set of objectives for the organization, focuses Water Authority staff on achievable actions, and guides investments in resources.

The Business Plan is a rolling five year plan that is updated every two years to ensure the Water Authority stays on track in accomplishing its business goals. An assessment of the Business Plan’s performance metrics is reviewed quarterly by Water Authority management and presented to the Board annually.
Sacramento: Year in Review

Legislation and Public Outreach Committee
October 26, 2017

Glenn Farrel, Government Relations Manager
End of 2017 Legislative Session

- Governor completed action on legislation on October 15
- Legislature will reconvene on January 3, 2018 to begin second year of two-year legislative session

Governor Brown’s Action on Bills

![Chart showing Governor Brown's action on bills from 2011 to 2017. The chart displays the total number of bills, the number of bills chaptered, and the number of bills vetoed.](chart.png)
Number of Water Authority Position Bills Over Past 11 Years

# of Water Authority Position Bills


26
# End of 2017 Legislative Session

<table>
<thead>
<tr>
<th>Water Authority Board Position</th>
<th>Number of Bills</th>
<th>Amends Taken?</th>
<th>Chaptered</th>
<th>Vetoed</th>
<th>2-Year Bill</th>
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<td>6</td>
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<td>5</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>26</strong></td>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
<td><strong>1</strong></td>
<td><strong>19</strong></td>
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Highlights from 2017 Legislative Session

- Significant legislative activity in the following areas:
  - Water use efficiency
  - Water finance
  - Recycled water/Potable reuse
  - Salton Sea
  - Drinking water quality
Major Issues Already on the 2018 State Legislative Session Horizon

- Long-term water use efficiency
- Proposition 218 relief/reform
- Water tax
- Renewable energy
Upcoming Changes in San Diego Legislative Delegation

<table>
<thead>
<tr>
<th>Legislator</th>
<th>Termed Out/Vacating Office</th>
<th>Candidates</th>
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</thead>
<tbody>
<tr>
<td>Sen. Joel Anderson</td>
<td>2018</td>
<td>Brian Jones (R) \ Mark Kersey (R)</td>
</tr>
<tr>
<td>Assm. Rocky Chavez (2024)</td>
<td></td>
<td>Assm. Todd Gloria (2028)</td>
</tr>
<tr>
<td>Assm. Lorena Gonzalez (2024)</td>
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<td>Assm. Brian Maienschein (2024)</td>
</tr>
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<td>Assm. Randy Voepel (2028)</td>
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<td>Assm. Marie Waldron (2024)</td>
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<td>Assm. Shirley Weber (2024)</td>
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<tr>
<td>Sen. Ben Hueso (2022)</td>
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</tbody>
</table>

Sen. Ben Hueso (2022)

Sen. Patricia Bates (2022)
Education Program Overview

Legislation & Public Outreach Committee
October 26, 2017
An Array of Opportunities

- Science fair scholarships
- Patch program
- Classroom materials
Fleet Science Center Exhibit

- Updated in 2017
- Next phase of upgrades under way
  - Develop design for new interactives
  - Use design to solicit grant funds
Splash Lab & School Assemblies

- Splash Science Mobile Lab
  - In coordination with San Diego County Office of Education

- Theatrical Assemblies
Legislative Policy Guidelines

Legislation and Public Outreach Committee
October 26, 2017

Glenn Farrel, Government Relations Manager
Legislative Policy Guidelines

- Annual update for 2018 under way
- Legislative Policy Guidelines provide guidance on issues of importance and a framework to evaluate legislative and regulatory issues
- Small member agency working group undertook structural and organizational review during 2017, focused on making LPGs user-friendly
  - Gary Arant – Valley Center Municipal Water District
  - Alisa Nichols – Vista Irrigation District
  - Cathy Pieroni – City of San Diego
Three areas of proposed modification

- Structural/organizational modifications
  - Alphabetized policy guideline categories
  - Addition of subcategories
  - New groupings of policy guideline categories
  - Some re-naming of categories

- Technical/grammatical/non-substantive modifications

- Proposed substantive modifications
  - Energy
  - Fiscal Policy and Rates
  - Jurisdictional Authority
  - Local Autonomy
  - Local Water Resources
  - State Administrative and Regulatory Agencies
  - Water Facilities and Facility Operations
  - Water Quality Issues
  - Water Use Efficiency
Proposed Changes to Guidelines

- Under Energy, revise LPGs to reflect policy guidance related to energy storage and renewable energy generation.
- Under Fiscal Policy and Rates, revise LPG regarding protection of existing federal Title XVI authorizations for the San Diego region.
- Under Local Autonomy, adds new LPG to reflect Water Authority’s interest in protecting the governance autonomy of member agencies.
Proposed Changes to Guidelines

- Under Local Water Resources, revise LPGs to reflect Board’s policy direction related to potable reuse, water use efficiency, water supply shortages, and drought–resilient water supplies

- Under Water Facilities and Facility Operations, add new LPG related to use of grant funds for public–private partnerships
Proposed Changes to Guidelines

- Under Water Quality Issues, add new LPGs to reflect Board’s policy direction related to potable reuse, pollution liability, and permit streamlining, and revise LPG relating to drinking water standards.

- Under Water Use Efficiency, revise LPG to properly reflect Board’s policy direction related to implementation of water conservation practices within the CII sector.
Next Steps on Legislative Policy Guidelines

- Staff is requesting suggestions for revisions from Board members and member agencies.
- Please return to Glenn Farrel by November 10.
- Final proposed Legislative Policy Guidelines to be presented for Board’s consideration of approval on December 7.