Update on COVID-19 Emergency

Formal Board
May 28, 2020

Sandra L. Kerl
General Manager
Temperature Check-in Station
Temperature Check-in Station
Completion of Pipeline 5 Repair at Moosa Creek

Board of Directors
May 28, 2020

Neena Kuzmich
Engineering Manager
Pipeline 5 Location
## Activity Summary

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 29 - 30</td>
<td>Performed internal inspection</td>
</tr>
<tr>
<td>February 27</td>
<td>GM authorized to take all actions to repair Pipeline 5</td>
</tr>
<tr>
<td>March 2 - 16</td>
<td>Prepared CFRP strengthening design</td>
</tr>
<tr>
<td>March 30 - April 4</td>
<td>Installed two bulkheads</td>
</tr>
<tr>
<td>April 6 - 22</td>
<td>Installed CFRP repair</td>
</tr>
<tr>
<td>May 4 - 7</td>
<td>Removed two bulkheads</td>
</tr>
<tr>
<td>May 8</td>
<td>Resumed normal Pipeline 5 operation</td>
</tr>
</tbody>
</table>
Final Repair Activities

New COVID-19 procedures

Completed carbon fiber installation

Restored project site
Acoustic Fiber Optic Cable Work

Our Region’s Trusted Water Leader
San Diego County Water Authority
Multi-department Effort
Contract Summary

- **Construction Contracts:**
  - Fibrwrap Construction Services, Inc. $612,017.26
  - J.F. Shea Construction, Inc. $515,000

- **Professional Services Contracts:**
  - WSP USA, Inc. $238,420
  - Simpson Gumpertz & Heger, Inc. $223,000
Staff Recommendations

a. Ratify the following contracts:
   i. Fibrwrap Construction Services, Inc. in the amount of $612,017.26
   ii. J.F. Shea Construction, Inc. for a not-to-exceed amount of $515,000
   iii. WSP USA, Inc. for a not-to-exceed amount of $238,420
   iv. Simpson Gumpertz & Heger, Inc. for a not-to-exceed amount of $223,000

b. Authorize the General Manager to accept the carbon fiber repair work as complete, record the notice of completion, and release all funds held in retention to Fibrwrap Construction Services, Inc., following expiration of the notice of completion period.

c. Authorize the General Manager to accept the bulkhead installation and removal work as complete, record the notice of completion, and release all funds held in retention to J.F. Shea Construction, Inc., following expiration of the notice of completion period.
MWD Budget and Rates Update

Board of Directors
May 28, 2020

Amy Chen
Director of MWD Program
Budget & Rates Timeline

Feb. 10 = Budget & Rates Workshop
Mar. 9 = Budget & Rates Workshop
Mar. 19 = WHO declares COVID-19 pandemic
Apr. 14 = CA Stay-At-Home Order Issued
Mar. 19 = Budget & Rates Adopted
Apr. 13 = Budget & Rates Adopted
Feb. 25 = Budget & Rates Workshop
Mar. 11 = WHO declares COVID-19 pandemic
Feb. 2020
Mar. 2020
Apr. 2020
“Updated” appropriations - did not reduce expenses

<table>
<thead>
<tr>
<th></th>
<th>Original</th>
<th>Updated</th>
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</thead>
<tbody>
<tr>
<td><strong>2020/21 Appropriations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Budget*</td>
<td>$1,385.4</td>
<td>$1,387.4</td>
</tr>
<tr>
<td>Debt Service</td>
<td>298.7</td>
<td>298.7</td>
</tr>
<tr>
<td>CIP**</td>
<td>250.0</td>
<td>250.0</td>
</tr>
<tr>
<td><strong>2020/21 Total</strong></td>
<td>1,934.1</td>
<td>1,936.1</td>
</tr>
<tr>
<td><strong>2021/22 Appropriations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Budget*</td>
<td>1,421.5</td>
<td>1,423.5</td>
</tr>
<tr>
<td>Debt Service</td>
<td>307.0</td>
<td>307.0</td>
</tr>
<tr>
<td>CIP**</td>
<td>250.0</td>
<td>250.0</td>
</tr>
<tr>
<td><strong>2021/22 Total</strong></td>
<td>1,978.5</td>
<td>1,980.5</td>
</tr>
<tr>
<td><strong>Total Biennium</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Budget*</td>
<td>2,806.9</td>
<td>2,810.9</td>
</tr>
<tr>
<td>Debt Service</td>
<td>605.7</td>
<td>605.7</td>
</tr>
<tr>
<td>CIP**</td>
<td>500.0</td>
<td>500.0</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>$3,912.6</td>
<td>$3,916.6</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Tier 1 Full Service Untreated ($/AF)</td>
<td>$780</td>
<td>$777</td>
</tr>
<tr>
<td>Tier 1 Full Service Treated ($/AF)</td>
<td>$1,131</td>
<td>$1,104</td>
</tr>
<tr>
<td>Exchange Rate ($/AF)</td>
<td>$534</td>
<td>$534</td>
</tr>
<tr>
<td>RTS Charge ($ in Millions)</td>
<td>$136</td>
<td>$130</td>
</tr>
<tr>
<td>Capacity Charge ($/cfs)</td>
<td>$11,200</td>
<td>$10,700</td>
</tr>
<tr>
<td>“Overall” Rate Increase</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>
## Adopted Rates & Charges - September Review

<table>
<thead>
<tr>
<th>Rates &amp; Charges Effective January 1</th>
<th>Adopted: 2020</th>
<th>Adopted 2021</th>
<th>% Change from Prior Year</th>
<th>Adopted 2022</th>
<th>% Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 Full Service Untreated ($/AF)</td>
<td>$755</td>
<td>$777</td>
<td>2.9%</td>
<td>$799</td>
<td>2.8%</td>
</tr>
<tr>
<td>Tier 1 Full Service Treated ($/AF)</td>
<td>$1,078</td>
<td>$1,104</td>
<td>2.4%</td>
<td>$1,143</td>
<td>3.5%</td>
</tr>
<tr>
<td>Exchange Rate ($/AF)</td>
<td>$482</td>
<td>$534</td>
<td>10.8%</td>
<td>$556</td>
<td>4.1%</td>
</tr>
<tr>
<td>RTS Charge ($ in Millions)</td>
<td>$136</td>
<td>$130</td>
<td>-4.4%</td>
<td>$140</td>
<td>7.7%</td>
</tr>
<tr>
<td>Capacity Charge ($/cfs)</td>
<td>$8,800</td>
<td>$10,700</td>
<td>21.6%</td>
<td>$12,200</td>
<td>14.0%</td>
</tr>
<tr>
<td>“Overall” Rate Increase</td>
<td></td>
<td></td>
<td>3.0%</td>
<td></td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Due to concerns over potential economic impacts from the COVID-19 response, the MWD Board amended staff’s recommendation, adding an opportunity to “review the budget and rates” at or before its September meeting, and directed staff to “revisit and consider” several cost saving measures by the end of August.
Cost and Rate Impact

Potential Rate impact of increased costs

- $100M increase in O&M costs
  - FY 2021 Revenue Requirement = $1,644 M
  - $100/1644 = 0.61% overall rate impact
- $100M increase in capital costs
  - Financed with 30-yr, fixed rate debt at 4%
  - Annual debt service cost = $5.8M
  - FY 2021 Revenue Requirement = $1,644 M
  - $5.8/1644 = 0.35% overall rate impact

When setting rates and charges many other factors should be considered including funding sources, debt limits, required reserves, COS and financial policies such as coverage targets.
## Cost Savings Opportunities Discussed

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Potential Annual Savings</th>
<th>Estimated Annual Rate Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Labor Costs</td>
<td>$17M</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Reduce Supply Programs Costs</td>
<td>$16M</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Decrease CIP &amp; PAYGo</td>
<td>$9.4M (2021) $33M (2022)</td>
<td>-0.6% (2021) -2.0% (2022)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$50.6M (2021)</strong></td>
<td><strong>-3.1% (2021)</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$74.2M (2022)</strong></td>
<td><strong>-4.5% (2022)</strong></td>
</tr>
</tbody>
</table>

- **Other Options**
  - Suspend Inspection Trips
  - Suspend car, truck, and utility vehicle purchases
  - Reduce sponsorships
  - Reduce Professional Services

- **Total** $50.6M (2021) $74.2M (2022) -3.1% (2021) -4.5% (2022)
## MWD Cost Increase to Water Authority

<table>
<thead>
<tr>
<th></th>
<th>MWD $ @ 2020 Rates</th>
<th>MWD $ @ 2021 Rates</th>
<th>% Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>MWD Full Service Untreated</td>
<td>$755</td>
<td>$777</td>
<td></td>
</tr>
<tr>
<td>Forecasted Acre-Feet</td>
<td>32,442</td>
<td>32,442</td>
<td></td>
</tr>
<tr>
<td><strong>MWD Supply Cost</strong></td>
<td>$24.5M</td>
<td>$25.2M</td>
<td>2.9%</td>
</tr>
<tr>
<td>MWD System Access</td>
<td>$346</td>
<td>$373</td>
<td></td>
</tr>
<tr>
<td>MWD System Power</td>
<td>$136</td>
<td>$161</td>
<td></td>
</tr>
<tr>
<td>QSA Supplies (AF)</td>
<td>282,700</td>
<td>282,700</td>
<td></td>
</tr>
<tr>
<td><strong>QSA Exchange Cost</strong></td>
<td>$136.3M</td>
<td>$151.0M</td>
<td>10.8%</td>
</tr>
<tr>
<td><strong>MWD Supply + QSA Exchange</strong></td>
<td>$160.8M</td>
<td>$176.2M</td>
<td>9.6%</td>
</tr>
<tr>
<td>MWD RTS (net standby)</td>
<td>$12.9M</td>
<td>$11.7M</td>
<td>-9.2%</td>
</tr>
<tr>
<td>MWD Capacity Charge</td>
<td>$8.0M</td>
<td>$9.2M</td>
<td>14.2%</td>
</tr>
<tr>
<td><strong>MWD Fixed Costs</strong></td>
<td>$21.0M</td>
<td>$19.3M</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Supply + Exchange + Fixed</td>
<td>$181.7M</td>
<td>$197.1M</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

MWD water purchases account for about 9% of forecasted operating expenditures; all MWD costs represent 36% ($197.1M) of operating expenditures, or an 8.5% ($15.4M) cost increase.
MWD’s CIP Trends

- CIP funded @ 100% of Engineer’s Est. but implemented @ ~71% of Engineer’s Est.
- CIP funded @ ~80% Engineer’s Est. matching implementation schedule

Recommend funding & implementing CIP @ 80% Engineer’s Est.
PAYGo @ 50%

* Projected
Questions?
Fiscal Years 2020 & 2021
Mid-Term Budget Update

Board of Directors
May 28, 2020

Sandra L. Kerl
General Manager
Agenda

- Overview
- FY 2020 & 2021 Budget recap
- Accomplishments in FY 2020
- Mid-term budget factors and approach
- Mid-term budget actions
FYs 2020 & 2021 Budget Sources of Funds

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sales</td>
<td>$1,306,919</td>
<td>77%</td>
</tr>
<tr>
<td>Net Fund Withdraws</td>
<td>$143,581</td>
<td>9%</td>
</tr>
<tr>
<td>Infrastructure Access Charges</td>
<td>$81,656</td>
<td>5%</td>
</tr>
<tr>
<td>Capacity Charges</td>
<td>$33,220</td>
<td>2%</td>
</tr>
<tr>
<td>Build America Bonds &amp; Investment Income</td>
<td>$32,605</td>
<td>2%</td>
</tr>
<tr>
<td>Property Taxes &amp; In-Lieu Charges</td>
<td>$28,304</td>
<td>2%</td>
</tr>
<tr>
<td>Water Standby Availability Charges</td>
<td>$22,221</td>
<td>1%</td>
</tr>
<tr>
<td>All Other Revenue Sources</td>
<td>$39,060</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,687,566</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Totals may not foot due to rounding.
### FY 2020 & 2021 Budget Uses of Funds

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Purchases &amp; Treatment</td>
<td>$1,083,174</td>
<td>64%</td>
</tr>
<tr>
<td>Debt Service</td>
<td>$297,432</td>
<td>18%</td>
</tr>
<tr>
<td>CIP Expenditures</td>
<td>$162,222</td>
<td>10%</td>
</tr>
<tr>
<td>Operating Departments</td>
<td>$108,503</td>
<td>6%</td>
</tr>
<tr>
<td>Equipment Replacement</td>
<td>$6,024</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Other &amp; Grants</td>
<td>$30,211</td>
<td>&gt;1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,687,566</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*64% of TOTAL BUDGET = 92%*
FY 2020 & 2021 Budget Focus Areas

- Colorado River initiatives
- Water supply management
- System & asset management
- Legislative & regulatory advocacy
- Critical plan updates
- Workforce planning
Accomplishments

- Supported state water portfolio
- Completed 14 miles of internal pipeline inspection
- Received 2019 EPA WaterSense Excellence Award
- Fiscal Sustainability Task Force
- COVID-19 Response and Recovery
Major Mid-Term Budget Factors

- Low water demands and sales revenue
- MWD rate increases
- COVID-19 economic impact
Mid-Term Budget Approach

- Evaluated critical functions and operations
- Withhold budgeted supplemental pension payments for FYs 2020 & 2021
- Strategic use of reserves
- Review and evaluate debt portfolio
Mid-term Budget Update

- **Water Sales**
  - FYs 2020 & 2021 sales are expected to be 11.7% lower than budgeted

- **Purchases and Treatment**
  - FYs 2020 & 2021 are 12.3% lower than budgeted
Mid-term Budget Update

- **Capital Improvement Program**
  - Savings of $31.9M from project deferrals
- **Debt Service**
  - Savings of $9.5M will be used to reduce outstanding debt obligations
- **Operating Departments**
  - Transferring previously set aside funds for MOU implementation
  - Forecasting savings of 1.5%
- **Equipment Replacement Fund**
  - Savings of $1.3M from deferring equipment replacement purchases
Mid-Term Budget Actions

- Consideration of mid-term adjustments on June 25, 2020
- Transfer of budgeted funds to Operating Departments Labor and Benefits (net zero impact)
- Amend Classification and Salary Schedule (to reflect adopted budget)
CY 2021 Rate Setting Process Overview

Board of Directors
May 28, 2020

Lisa Marie Harris | Finance Director/Treasurer
Jerry Reed | Engineering Director
Tim Bombardier | Principal Water Resources Specialist
Pierce Rossum | Rate & Debt Manager
Agenda

- Rate Development & COS Review
- Debt and Cash Optimization
- Capital Improvement Program
- Water Demand & Sales Forecast
- Rate Drivers and Rate Mitigation Strategies
- Rate Recommendation & Guidance
- Next Steps
Rates & Charges Development Process

- **Revenue Requirement Analysis**
  - Review total revenues required to fund operations, capital, debt service and coverage and policy requirements

- **Functional Allocation by Rate Category**
  - Allocate revenue requirements and offsetting revenues to the Water Authority’s five water rate and charge categories in a fair and equitable manner

- **Water Rates & Charges**
  - Set rates to recover the revenue requirements from member agencies based on water sales projections

- **Member Agency Allocation**
  - Allocate expenditures to each member agency based on water demand patterns and other key metrics
Water Authority Cost of Service Review Process

- Comprehensive Cost of Service Review by Carollo
  - Rate Methodology
  - Application & Implementation
  - Board Policies
  - Compliance with CA law

- Rates and Charges continue to be “coverage” driven

- Concluded Water Authority rates continued to be in full compliance
Pandemic Causes Historic Economic Upheaval

- 36.5 Million Job loss nationwide since mid-March
  
  SD County 2020 Unemployment Rate

- Executive Order N-42-20 (moratorium on shutoffs)
  - "Precarious position as we have no way of knowing the resulting financial impacts"
  - Consensus rise in bill delinquencies/bad debt expense (2-4x normal), reported during weekly MAFO check-ins

- Global economic uncertainty created a severe liquidity crunch across all credit markets

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Strategic and Unprecedented Financial Actions

- Savings generated from proposed operating budget cuts
- Refined and updated CIP for potential deferrals and reprioritization
- Debt/Cash Management Strategy
  - Optimize use of cash to restructure near term bond maturities
  - Combination of cash and debt to fund CIP
  - Evaluation of options reviewed as a part of the 2020 LRFP
  - Debt service coverage relief for senior lien
  - Significantly increases rate setting flexibility
- Refunding of Series 2013A and 2011A&B Bonds
  - Combination of taxable and tax-exempt refundings
  - Maximize savings in FY ‘22 through FY ‘24
  - Significant savings based on existing AAA/Aa2/AA+ ratings
Preserving and Enhancing Fiscal Sustainability

Goal: Strong credit ratings achieve greatest interest savings and lowest cost of capital

- History of Board Adopted Long Range Financing Plans
  - Guides the Water Authority’s Prudent Management of Financial Risk
  - Achieves Financial Management Objectives and Policies
  - Focuses on maintain long term fiscal health of the organization
  - Reconstituted Fiscal Sustainability Task Force

- History of Board Adopted Strong Capital Financial Policies
  - Debt Service Coverage (1.5 Times Coverage)
  - Fixed vs Variable Debt Mix & Debt vs Cash Funded CIP
  - Adoption of Smooth and Predictable rates
  - Pension and OPEB strategic funding policies

- Reserves Policies: Guiding Financial Principles
  - Operating Fund - 45 days target
  - Rate Stabilization Fund - Minimum and Max Targets
Significant Reduction in Outstanding Municipal Debt Since Completion of Major Investments

Long-Term, Fixed-Rate Municipal Debt Outstanding ($M)

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt Outstanding ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$1,994</td>
</tr>
<tr>
<td>2011</td>
<td>$1,970</td>
</tr>
<tr>
<td>2012</td>
<td>$1,929</td>
</tr>
<tr>
<td>2013</td>
<td>$1,838</td>
</tr>
<tr>
<td>2014</td>
<td>$1,806</td>
</tr>
<tr>
<td>2015</td>
<td>$1,715</td>
</tr>
<tr>
<td>2016</td>
<td>$1,634</td>
</tr>
<tr>
<td>2017</td>
<td>$1,593</td>
</tr>
<tr>
<td>2018</td>
<td>$1,548</td>
</tr>
<tr>
<td>2019</td>
<td>$1,506</td>
</tr>
</tbody>
</table>
Stacking Long Term Municipal Debt Service Normalizes Annual Expense

Current Municipal Long Term Debt Service Schedule

- Series 1998A
- Series 2011A
- Series 2015A Refunding
- 2005A COPs
- Series 2011B
- Series 2016AB Refunding
- Series 2008
- Series 2012
- Series 2019
- Series 2010A
- Series 2013A Refunding
- Series 2010B BABs
Layering of Financial Actions Smooths Rates and Maintains Financial Health

Planned issuance of $120M new money causes adjusted senior lien to exceed existing
Substantial Investments in Supply Reliability are Complete and in Service

- Twin Oaks Valley Water Treatment Plant: $179 million
- Olivenhain Dam & Reservoir: $198 million
- San Vicente Dam Raise & Related Projects: $811 million
- Lake Hodges Hydroelectric and Pump Station Facility: $208 million
- Pipeline Relining: $493 million
- Carlsbad Seawater Desalination: $1 billion
- All-American & Coachella Canal Lining Project: $447 million ($190 million from Water Authority)
Proven Track Record for Completing Projects

- Use of Best Management Practices including:
  - Tracking commodity and resource prices
  - Following American Association of Cost Engineers (AACE) best practices
  - Performing independent cost estimates and constructability reviews
  - Coordinating bidding with local agencies
  - Prioritizing CIP projects based on risk
Recommended FYs 2020 & 2021 CIP Appropriation

$162.2 Million

- New Facilities: $49.7M
- Asset Management: $66.4M
- ESP: $32.2M
- Master Planning and Studies: $9.9M
- Other: $4.0M
Future CIP Development

- **Current Planning Studies**
  - Pipeline Seismic System Vulnerability Assessment
  - Second Aqueduct at Moosa Creek
  - San Vicente Energy Storage Facility
  - Regional Conveyance System
  - Operations and Maintenance Department Facility

- **2023 Master Plan Update**
  - Long-Range Demand Forecast - September 2020
  - Urban Water Management Plan - July 2021
  - Water Facilities Master Plan Update - 2023
  - Add any projects to CIP thru FY2024/2025 budget build

- **Moving Forward**
  - Perform facility assessments and update Long Term Asset Management Plan
  - Complete planning studies
  - Monitor market trends - develop individual project budgets
  - Prioritize CIP for FY 2022/2023
  - Coordinate planned expenditures with new Long-Range Financing Plan
Focus of the CIP has Shifted to Asset Management

“OLD” Carlsbad 1 Flow Control Facility

“NEW” Carlsbad 6 Flow Control Facility
Future CIP Development Focuses on Asset Management

1. Inspections
   - Plan (5-year rolling)
   - Technology scan
   - Visual

2. Data Analytics
   - Collect
   - Analyze
   - Visualize
   - Prioritize

3. Recommendations
   - Prioritization
   - Board Approval
Major Investments Complete; Modest Forecast of Future Needs

Projected CIP Expenditures through 2023: ~$263 Million
Water Demand and Sales Forecast - Key Variables

- Weather
- Local reservoir storage
- Local supply development
- Water demand trend
Primary Assumptions

- Normal local rainfall
- Continuation of above-normal temperature trend
- 2.5% increase in total demand for FY 2021
  - After two years of flat demands
- 3% increase in total demand for FY 2022
  - Based on trend back to projected 2030 demand from Interim Demand Forecast Reset
Member Agency Local Supplies

- **Surface water use:**
  - FY 2020: slightly above-normal at 43 TAF
  - FY 2021 and beyond: projected at 40 TAF per year

- **Seawater desalination at 6 TAF per year**
  - Combined Carlsbad and Vallecitos

- **San Luis Rey Water Transfer at 16 TAF per year**
  - Combined Escondido and Vista
Member Agency Local Supplies (continued)

- Additional Planned Project Revisions  
  *(based on member agency input)*

  - Fallbrook groundwater conjunctive use project on-line in FY 2021 at ~3 TAF per year
  
  - City of San Diego Pure Water Program Phase 1 at ~34 TAF per year starting in FY 2024
  
  - East County AWP Project on-line in FY 2025 at ~7 TAF and 13 TAF per year thereafter
Projected Total Water Demands and Sales Forecast

- **East County AWP:** 7 TAF
- **Rosarito Desalination:** 15 TAF
- **PURE Water:**
  - Phase 1 at 34 TAF
  - Phase 2 at 59 TAF

* Based on Interim Demand Forecast Reset
** CY 2021 Rates and Charges Forecast
CY 2021 Rate and Charge Drivers

- Forecasted Sales of 351,900 AF in CY ’21 (15% Rate Impact)
  - Down 14% from prior estimate of 407,000 AF
  - 421,000 AF sold in CY 2018 | 331,000 AF sold in CY 2019
- MWD Rate Adjustments (3% Rate Impact)
  - 10.8% increase on MWD Transportation Rate
  - 8.5% overall increase of MWD expense
- Ramp-up of IID deliveries
  - Final Year of Ramp Up (12,500 AF) (1% Rate Impact)
- Desal Dredging Cost (1% Rate Impact)
- Historical Rate Smoothing
- Coverage Driven Revenue Requirement

*Initial model runs forecasted 20% increase before taking unprecedented measures*
FY20 Sales Forecasted 50,000 AF below Budget

Year-To-Date (April 2020)
- YTD Actual: 286,277 AF
- YTD Budget: 323,909 AF

Budgeted Sales: 394,400 AF
Forecasted Sales: 345,000

Our Region’s Trusted Water Leader
San Diego County Water Authority
Sales Forecast Presents Challenging Reality

Our Region’s Trusted Water Leader
San Diego County Water Authority
## Current and Adopted MWD Rates & Charges

<table>
<thead>
<tr>
<th>Proposed MWD</th>
<th>CY 2020</th>
<th>%Δ</th>
<th>CY 2021</th>
<th>%Δ</th>
<th>CY 2022</th>
<th>%Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 Supply ($/AF)</td>
<td>$208</td>
<td>0.5%</td>
<td>$243</td>
<td>16.8%</td>
<td>$243</td>
<td>0.0%</td>
</tr>
<tr>
<td>System Access</td>
<td>$346</td>
<td>6.1%</td>
<td>$373</td>
<td>7.8%</td>
<td>$389</td>
<td>4.3%</td>
</tr>
<tr>
<td>System Power</td>
<td>$136</td>
<td>7.1%</td>
<td>$161</td>
<td>18.4%</td>
<td>$167</td>
<td>3.7%</td>
</tr>
<tr>
<td>Water Stewardship (N/A to QSA)</td>
<td>$65</td>
<td>5.8%</td>
<td>$0</td>
<td>100%</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Tier 1 Untreated</td>
<td>$755</td>
<td>3.3%</td>
<td>$777</td>
<td>2.9%</td>
<td>$799</td>
<td>2.8%</td>
</tr>
<tr>
<td>Treatment</td>
<td>$323</td>
<td>1.3%</td>
<td>$327</td>
<td>1.2%</td>
<td>$344</td>
<td>5.2%</td>
</tr>
<tr>
<td>Tier 1 Treated</td>
<td>$1,078</td>
<td>2.7%</td>
<td>$1,104</td>
<td>2.4%</td>
<td>$1,183</td>
<td>4.6%</td>
</tr>
<tr>
<td>Readiness-to-Serve ($M)</td>
<td>$136</td>
<td>2.3%</td>
<td>$130</td>
<td>4.4%</td>
<td>$140</td>
<td>7.7%</td>
</tr>
<tr>
<td>Capacity Charge ($/cfs)</td>
<td>$8,800</td>
<td>2.3%</td>
<td>$10,700</td>
<td>21.6%</td>
<td>$12,200</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

Due to concerns over potential economic impacts from the COVID-19 response, the MWD Board amended staff’s recommendation, adding an opportunity to “review the budget and rates” at or before its September meeting, and directed staff to “revisit and consider” several cost saving measures by the end of August.
## MWD Cost Increase to SDCWA

<table>
<thead>
<tr>
<th></th>
<th>MWD $ @ 2020 Rates</th>
<th>MWD $ @ 2021 Rates</th>
<th>%Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MWD Full Service Untreated</strong></td>
<td>$755</td>
<td>$777</td>
<td></td>
</tr>
<tr>
<td><strong>Forecasted Acre-Feet</strong></td>
<td>32,442</td>
<td>32,442</td>
<td></td>
</tr>
<tr>
<td><strong>MWD Supply Cost</strong></td>
<td>$24.5M</td>
<td>$25.2M</td>
<td>2.9%</td>
</tr>
<tr>
<td><strong>MWD System Access Rate</strong></td>
<td>$346</td>
<td>$373</td>
<td></td>
</tr>
<tr>
<td><strong>MWD System Power</strong></td>
<td>$136</td>
<td>$161</td>
<td></td>
</tr>
<tr>
<td><strong>QSA Supplies (AF)</strong></td>
<td>282,700</td>
<td>282,700</td>
<td></td>
</tr>
<tr>
<td><strong>QSA Exchange Cost</strong></td>
<td>$136.3M</td>
<td>$151.0M</td>
<td>10.8%</td>
</tr>
<tr>
<td><strong>MWD Supply + QSA Exchange</strong></td>
<td>$160.8M</td>
<td>$176.2M</td>
<td>9.6%</td>
</tr>
<tr>
<td><strong>MWD RTS (net standby)</strong></td>
<td>$12.9M</td>
<td>$11.7M</td>
<td>-9.2%</td>
</tr>
<tr>
<td><strong>MWD Capacity Charge</strong></td>
<td>$8.0M</td>
<td>$9.2M</td>
<td>14.2%</td>
</tr>
<tr>
<td><strong>MWD Fixed Costs</strong></td>
<td>$21.0M</td>
<td>$19.3M</td>
<td>-0.3%</td>
</tr>
<tr>
<td><strong>Supply + Exchange + Fixed</strong></td>
<td>$181.7M</td>
<td>$197.1M</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

- **MWD’s 9.6% ($15.4M) increase directly impacts SDCWA Melded Supply Rate**

- **Decrease in RTS result of Desal, IID ramp-up, and conservation on 10-yr rolling average**

- **RTS and CC are direct pass-through costs and are not incorporated into the SDCWA Rates & Charges**
Water Authority Rate Mitigation Measures*

- Financial Initiatives
  - Refunding of Existing Debt
  - Cash Optimization
  - New Debt for CIP

- Budget Opportunities
  - Review of FY ‘20 and ‘21 Operating Budgets
  - Review and Reprioritization of CIP
  - Use of Rate Stabilization Fund

- Operational Benefits
  - Use of Operational Storage

- All strategies focus on providing smooth, predictable rates, and continued financial health

*Measures assume existing credit ratings. Downgrade would significantly increase borrowing costs and limit refunding savings.
Water Authority Rate Mitigation Measures

- Financial Initiatives
  - Refunding of Existing Debt (Lowers Storage Rate & IAC)
  - Cash Optimization (Lowers All Rates)
  - New Debt for CIP

- Budget Opportunities
  - Review of FY ‘20 and ‘21 Operating Budgets (Lowers All Rates)
  - Review and Reprioritization of CIP (Lowers All Rates)
  - Use of Rate Stabilization Fund (Melded Supply Rate Benefit)

- Operational Benefits
  - Use of Operational Storage (Melded Supply Rate Benefit)

- Not all rate measures impact rates equally and not all rates are subject to the same benefits
Financial & Rate Scenario Development

Framework: Minimize rate-payer impacts, while maintaining fiscal responsibility and sustainability

- Initial model runs forecasted 20% increase
- All scenarios assume same significant mitigation measures

#1 No Increase on “All-In” Rate
#2 No Increase Maintain CY 2020 Rates & Charges
#3 Staff Recommendation
“All-In” Rate a relative, informal, metric

- All-In rate converts fixed charges (Customer Service, Storage, and SRC) into unit cost ($/AF) equivalent
- Fixed equivalent is added to volumetric rates (Supply, Transportation, and Treatment)
- Designed to account for shifts from volumetric to fixed
- Skewed results based on sale volatility
What If No “All-In” Increase

- Maintain $1,406 All-In Rate

- Given lower demands, Fixed Charges require decrease to maintain equivalent unit cost
- Supply Reliability Charge (SRC) & Infrastructure Access Charge (IAC) held below Board defined amounts

- No mitigation to fundamental financial challenges
- High risk to credit rating and forecast debt savings
- Causes future rate spikes
Maintaining “All-In” Rate Spikes CY 2022 Rate and Creates $38M hole in RSF

"No Increase" All-In Untreated Rate Guidance

- Updated Rate Guidance High - Untreated (2019) ($/AF)
- Updated Rate Guidance Low - Untreated (2019) ($/AF)

Not for approval, but forecasted CY 2022 and CY 2023 provide as fixed reference for rate and reserve impacts.
Excess $38M draw to support No “All-In” increase

"No Increase" RSF Balance Forecast

CY 2021 Rates impact FY ‘21 and FY ‘22 Draws

<table>
<thead>
<tr>
<th>FYE 2019</th>
<th>FYE 2020</th>
<th>FYE 2021</th>
<th>FYE 2022</th>
<th>FYE 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSF Ending Balance</td>
<td>RSF Minimum Target</td>
<td>RSF Maximum Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$158</td>
<td>$121</td>
<td>$87</td>
<td>$36</td>
<td>$43</td>
</tr>
<tr>
<td>$135</td>
<td>$102</td>
<td>$105</td>
<td>$108</td>
<td>$117</td>
</tr>
</tbody>
</table>
What If CY 2020 Rates Are Maintained

- 3.3% Increase to “All-In” Untreated
  - Despite all rates & charges remaining at existing levels

- Maintains CY 2020 Rates, outside CoS Recommendations - but still in compliance
- SRC & IAC held below Board defined amounts

- No mitigation fundamental financial challenges
- Puts credit rating and debt savings into question
- Causes future rate spikes
Maintaining CY 2020 Rates, Spikes CY 2022 Rates and Creates $23M hole in RSF

All-In Untreated Rate Guidance

- CYE2020: $1,355
- CYE2021: $1,387 (3.3% increase from CYE2020)
- CYE2022: $1,423 (10.4% increase from CYE2020)
- CYE2023: $1,443 (6.4% increase from CYE2022)

Not for approval, but forecasted CY 2022 and CY 2023 provide as fixed reference for rate and reserve impacts.

Our Region’s Trusted Water Leader
San Diego County Water Authority
CY 2020 rates require excess $22M RSF draw

Maintain CY 2020 RSF Balance Forecast

CY 2021 Rates impact FY ‘21 and FY ‘22 Draws

RSF Ending Balance  RSF Minimum Target  RSF Maximum Target
CY 2021 Rate Recommendation
CY 2021 “All-In” Untreated Rate within Guidance

High/Low to be updated as part of 2020/21 LRFP

- Updated Rate Guidance High - Untreated (2019) ($/AF)
- Updated Rate Guidance Low - Untreated (2019) ($/AF)
Recommendation balances Short and Long-Term Rates

Not for approval, but forecasted CY 2022 and CY 2023 Rates smoothed to balance RSF draws and maintain financial health.
CY 2021 “All-In” Treated Rate within Guidance

High/Low to be updated as part of 2020/21 LRFP

- Updated Rate Guidance High - Treated (2019) ($/AF)
- Updated Rate Guidance Low - Treated (2019) ($/AF)
Recommendation balances Short and Long-Term Rates

Not for approval, but forecasted CY 2022 and CY 2023 Rates smoothed to balance RSF draws and maintain financial health
RSF Draw mitigated by other financial actions

RSF Balance Forecast

- FYE 2019: $135M
- FYE 2020: $105M
- FYE 2021: $103M
- FYE 2022: $108M
- FYE 2023: $117M

- RSF Ending Balance
- RSF Minimum Target
- RSF Maximum Target
Reserves stabilized after PAYGO and RSF ‘20

End-of-Year Reserve Balances

<table>
<thead>
<tr>
<th>FYE</th>
<th>Operating Fund</th>
<th>Rate Stabilization Fund</th>
<th>PAYGO Fund</th>
<th>Equipment Replacement Fund</th>
<th>Canal Maintenance Reserve</th>
<th>Debt Service Reserve Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYE 19</td>
<td>$120</td>
<td>$100</td>
<td>$30</td>
<td>$40</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>FYE 20</td>
<td>$120</td>
<td>$100</td>
<td>$30</td>
<td>$40</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>FYE 21</td>
<td>$120</td>
<td>$100</td>
<td>$30</td>
<td>$40</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>FYE 22</td>
<td>$120</td>
<td>$100</td>
<td>$30</td>
<td>$40</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>FYE 23</td>
<td>$120</td>
<td>$100</td>
<td>$30</td>
<td>$40</td>
<td>$100</td>
<td>$100</td>
</tr>
</tbody>
</table>
# Recommended CY 2021 Rates & Fixed Charges

<table>
<thead>
<tr>
<th></th>
<th>CY 2020</th>
<th>CY 2021</th>
<th>Rate %Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable Rates ($/AF)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melded M&amp;I Supply Rate</td>
<td>$925</td>
<td>$940</td>
<td>1.6%</td>
</tr>
<tr>
<td>Melded M&amp;I Treatment Rate</td>
<td>$280</td>
<td>$295</td>
<td>5.4%</td>
</tr>
<tr>
<td>Transportation</td>
<td>$132</td>
<td>$164</td>
<td>24.2%</td>
</tr>
<tr>
<td>Untreated SAWR¹</td>
<td>$755</td>
<td>$777</td>
<td>2.9%</td>
</tr>
<tr>
<td>Treated SAWR¹</td>
<td>$1,035</td>
<td>$1,072</td>
<td>3.6%</td>
</tr>
<tr>
<td><strong>Fixed Charges ($M)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Service</td>
<td>$25.60</td>
<td>$25.60</td>
<td>0.0%</td>
</tr>
<tr>
<td>Storage</td>
<td>$65.00</td>
<td>$60.00</td>
<td>(7.7%)</td>
</tr>
<tr>
<td>Supply Reliability ⁴</td>
<td>$37.43</td>
<td>$41.29</td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>Other Charges</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure Access Charge ($/ME)²,⁵</td>
<td>$3.66</td>
<td>$4.24</td>
<td>15.8%</td>
</tr>
<tr>
<td>Standby Availability Charge ($)³</td>
<td>$10</td>
<td>$10</td>
<td>0.0%</td>
</tr>
<tr>
<td>System Capacity Charge ($/ME)²</td>
<td>$5,301</td>
<td>$5,312</td>
<td>0.2%</td>
</tr>
<tr>
<td>Treatment Capacity Charge ($/ME)²</td>
<td>$147</td>
<td>$148</td>
<td>0.2%</td>
</tr>
<tr>
<td>Annexation Application Fee ($)</td>
<td>$10,749</td>
<td>$10,771</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

1. Transitional (T) Special Agriculture Water Rate (SAWR) to sunset 12/31/2020 and to be replaced by Permanent SAWR (PSAWR) effective 1/1/2021
2. ME means meter equivalent as defined in the resolution establishing the Infrastructure Access Charge
3. Per parcel or acre, whichever is greater
4. Future SRC increases to moderate near CY 2021 levels following conclusion of IID Ramp-up
5. Year 2 Ramp up recommended by the FSTF and approved by the Board in November 2019 is less than the previously forecasted rate of $4.43/ME
Notable Rate Impacts

Melded Supply Rate:
- Further increase mitigated using RSF
- Additional mitigation utilizing storage

PSAWR:
- Creation & adoption of permanent program

Transportation:
- 14% $\downarrow$ sales with no drop in expenses
- $5M$ $\uparrow$ to revenue requirement (CIP)
- Additional increases mitigated using RSF

Storage Rate:
- $5M$ $\downarrow$ due to forecasted debt savings

Supply Reliability:
- CY 2021 concludes IID Ramp-Up
- Future rates forecasted to plateau

IAC:
- $4.24$ less than originally forecasted $4.43/ME$
- Revenue offset, shifts $7M$ from other rates
- No IAC increase would increase all other rates
- No future ramp-ups
Summary & Next Steps

- Rate and Charge Drivers
  - MWD increases | Persistent low sales | Cost of supply reliability

- Proactive & Strategic Financial Management
  - Cash Optimization | Refunding | New Issuance
  - Maximum rate relief and financial resilience

- Rate and charge increases inline with guidance
  - Treated increase 6.2% | Untreated increase 6.3%
  - Net 3% versus maintaining CY 2020 Rates

- Overall increase will vary by member agency based on fixed charge allocations

- Next Step: Public Hearing, adoption of CY 2021 Rates and Charges (*June 25th*)
Questions
DETACHMENT RESOLUTION

Board of Directors
May 28, 2020

Sandra L. Kerl
General Manager
Detachment applications filed

- Both Fallbrook and Rainbow filed for detachment with San Diego LAFCO

- The agencies want to detach from the Water Authority in order to buy imported water from MWD—stating that it would cost less and be equally reliable

- Today we go through some of the key issues for San Diego County, the Water Authority and its member agencies, and recommend a Board Resolution to protect all parties, including Fallbrook and Rainbow customers
Fallbrook and Rainbow have been Water Authority member agencies since 1944 and 1954, respectively.

They buy Water Authority water, which is delivered through both Water Authority and MWD facilities.

Under the applications, Fallbrook and Rainbow would become completely dependent on MWD water.

Their customers would no longer have access to Water Authority supplies and programs, and they would not gain access to Eastern’s supplies and programs.
A brief history how we got here

- During the drought of the 1990’s—when the Water Authority was 95% dependent on MWD—the MWD board voted to drastically cut water deliveries to San Diego County, including a 90% cut to water supply for agriculture

- San Diego County banded together, and the Water Authority board voted to voluntarily share water in order to avoid devastation of the County’s agricultural sector

- Here are some of the newspaper headlines at the time:
Our quality of life and economy threatened

San Diego Civic Leaders
“Never Again!”
“No More Water Shortages!”

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

L.A. Ready to Battle San Diego Over Water

Water: Authority to Vote Today on Mandatory Restrictions

Companies cringe at 50 percent cut in water

Firms offer conservation plans to mayor; some say cutbacks could cripple growth
Regional collaboration and investment

- After suffering MWD shortages, and under the auspices of and in collaboration with SANDAG, the Water Authority planned and invested in major infrastructure projects to protect San Diego County’s economy and quality of life.

- These projects—which have had strong bipartisan and broad community support for more than 25 years—represent major financial commitments by our region to guarantee water for future generations.

- Here are some examples:
Investing for San Diego County

- Twin Oaks Valley Water Treatment Plant: $179 million
- Olivenhain Dam & Reservoir: $198 million
- San Vicente Dam Raise & Related Projects: $811 million
- Lake Hodges Projects: $208 million
- Pipeline Relining: $493 million
- Carlsbad Seawater Desalination Projects: $1 billion
- All-American & Coachella Canal Lining Project: $447 million ($190 million from Water Authority)
Financing our reliability and self-sufficiency

- To fund these projects, the Water Authority entered into bonds and other forms of debt, including long-term water supply contracts. These contracts were made in collaboration with and based on the projected needs of our member agencies, and have in fact produced a highly reliable water supply now used in San Diego County.

- By contrast, MWD has continued to have periodic water shortages. It depends on water from two sources: the Bay-Delta via the State Water Project, and the Colorado River, as shown here:
Imported water supply sources
State mandate to improve regional self-reliance

- The Bay-Delta is an environmentally sensitive region that has been mired in conflict for more than 50 years. The Legislature instructed water agencies to reduce reliance on water from this area in Water Code § 80521:

  “The policy of the State of California is to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water . . . .” (emphasis added)

- The Water Authority has been highly successful in reducing its reliance on Bay-Delta water from MWD:
Our Board’s extraordinary record of success

1991

- 28 TAF (5%)
- 550 TAF (95%)

Total = 578 TAF

2017

- 100 TAF (21%)
- 78 TAF (17%)
- 24 TAF (5%)
- 20 TAF (4%)
- 193 TAF (40%)

Total = 477 TAF

2020*

- 80 TAF (15%)
- 16 TAF (3%)
- 43 TAF (8%)
- 56 TAF (10%)
- 33 TAF (6%)
- 52 TAF (10%)
- 78 TAF (17%)
- 100 TAF (21%)
- 550 TAF (95%)

Total = 537 TAF

2035*

- 26 TAF (5%)
- 51 TAF (8%)
- 80 TAF (13%)
- 57 TAF (9%)
- 72 TAF (11%)
- 36 TAF (6%)
- 33 TAF (6%)
- 52 TAF (10%)
- 200 TAF (32%)
- 190 TAF (35%)
- 110 TAF (17%)
- 28 TAF (5%)
- 8 TAF (2%)
- 20 TAF (4%)
- 16 TAF (3%)
- 80 TAF (15%)
- 550 TAF (95%)

Total = 632 TAF

* Based on Interim Demand Forecast Reset and includes verifiable and additional planned local supply projects from 2015 UWMP

(TAF=Thousand Acre-Feet)

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

11
Where do we go from here?

- Detachment would appear to reverse this process by moving part of San Diego County back to nearly exclusive reliance on MWD, which remains highly dependent on the Bay-Delta

- Detachment raises numerous issues of importance to San Diego County, the Water Authority and its member agencies, San Diego water users and property owners

- The proposed Resolution for the Board asks that LAFCO, in an independent and transparent manner, review the applications to establish:
Water Authority Board needs to see

1. How Fallbrook and Rainbow customers are assured of having an equally reliable and affordable long-term water supply

2. How the other Water Authority member agencies and their customers, and San Diego County as a whole, will not be impacted financially or environmentally

3. How the Bay-Delta is protected and consistency with California state water law and policy

4. How San Diego County water users and property owners will not be harmed by any diminution of voting power
Recommendation

- The recommendation is intended to be neutral and protect all parties, including Fallbrook and Rainbow customers and property owners.

- If these assurances cannot be confirmed to all parties, the recommendation is to oppose detachment.

- The sooner the LAFCO evaluation process gets started, the sooner the parties may find a voluntary solution.

- LAFCO would benefit from this guidance by the Board.

- The General Manager and General Counsel recommend that the Board adopt the proposed Resolution.