Metropolitan Water District
Integrated Water Resources Plan Update

Imported Water Committee
January 28, 2016

Amy Chen, Director of MWD Program
2015 IRP Update Review

- March 2015 – MWD launches the 2015 IRP review
  - Bifurcated into 2 parts:
    - Phase 1: Technical update of MWD’s forecasts demands and supplies through staff workgroup with member agencies
    - Phase 2: Policy discussions by Board to tackle key policy issues
- August 2015 – IWC receives presentation on status of update
2015 IRP Update Review (cont.)

- September 2015 – MWD staff presents to Water Authority’s Imported Water Committee
  - Feedback:
    - Appropriateness of reliability goal
    - Cost and rate impact of achieving 100% reliability
    - Potential to strand assets
    - Role/responsibilities of MWD and member agencies in local supply development
2015 IRP Adoption

- January 2016 – MWD Board adopted 2015 IRP report, leaving “policy” discussion largely to implementation
  - Establishes resource development targets for imported and local supplies, and conservation
2015 IRP Report

Targets
1. New resources
   ▪ 20 TAF of LRP; 180 TAF of Conservation
2. Buffer
   ▪ 200 TAF additional local supplies
3. Additional “Future Supply Actions”

Based on Assumptions

- Imported
  ▪ Reduced CRA take
  ▪ SWP operated under regulations not in place

- Local supplies
  ▪ Included only existing and under construction projects; similar treatment for conservation
  ▪ Reduced groundwater production even with increased replenishment
Concerns – Technical Analysis

- Supply development targets based on questionable assumptions
- Lack of member agencies’ MWD demand profiles to assess which agencies are driving MWD supply development
- Incomplete probabilistic analysis
- “Adaptive management approach” lacks triggers
- No financial analysis
- No consideration of affordability or stranded costs
MWD Historic Demands

Demands (million acre-feet)

Year

MWD Projected Demands, Supplies, & IRP Targets

<table>
<thead>
<tr>
<th>Year</th>
<th>SWP (IRP Target)</th>
<th>SWP (Average, operating under non-existing regulations)</th>
<th>CRA</th>
<th>LRP &amp; Conservation (IRP Targets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1.00</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>1.50</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>2.00</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>2.00</td>
<td>2.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Potential Stranded Investment > 500,000 AF
Policy Concerns

- Sets resource development targets without financial and rate analyses
  - Affordability of resources not considered
  - How would stranded supplies be paid for?
- Assumes 100% reliability goal
  - One-size-fits all
  - Lacks financial commitments from member agencies
- Report will be used to justify investment decisions
  - “We definitely intend to use this document as a guide to go forward” – Jeffrey Kightlinger, GM
Next Steps in the 2015 IRP Update

- Phase 2: policy discussions are now limited to *implementation of IRP targets*

- Still key policy issues that require attention:
  - Cost to implement resource development targets
    - Levels of investment to achieve targets
    - Who benefits from the resource development
    - MWD water affordability and stranded investments
  - Reliability goal
    - Regional and retail level
    - Role/responsibilities of MWD and member agencies in local supply development
Water Transfer Implementation Update

Imported Water Committee
January 28, 2016

Dan Denham, Colorado River Program Director
Conserved Water Transfer Schedule

Gradual switch from land fallowing to efficiency-based conservation almost complete
2015 Water Transfer Revenue to IID

54% of IID’s revenue comes from the Water Transfer, or 4% of its total water sales

$624/AF * 100,000 AF = $62M
$20/AF * 2,400,000 AF = $48M
Water Transfer Price Schedule

2016 rate based on the annual increase in the Gross Domestic Product Implicit Price Deflator

30-Year Average Annual Increase: 2.28%

0.3% - 0.5%

Q1 Q2 Q3
Top Imperial Valley Crops

~ 440,000 Irrigated Acres
2015 IID Land Fallowing Program

$175/AF paid to growers who voluntarily enroll in 9, 12 or 24-month programs

Has ranged from 5,000 acres to 30,000 acres depending on conservation needs
2015 Efficiency-based Conservation

$285/AF paid to growers for on-farm improvements; additional investments in system efficiency projects funded through IID’s capital improvements program
Environmental Mitigation

$60 million spent through 2015 on 520,000 AF of Salton Sea mitigation water to maintain salinity and elevation

QSA JPA Mitigation Funding (through 2015)

- Future Funding $175M
- Spent $83M
- Unallocated $30M
Environmental Mitigation

2015 Advanced Funding Agreement will provide financial stability for the QSA JPA as air quality projects ramp-up
Water Authority submitted written comments in support of the Salton Sea Task Force’s efforts to date; Prop 1 funding for shovel-ready projects; and the State’s renewed commitment to addressing its responsibilities.

Workshop Panels

- CA Resources Agency, CA Air Board, CA Energy Commission and Colorado River Regional Water Quality Control Board
- Imperial Irrigation District and County of Imperial
- Pacific Institute, Defenders of Wildlife, Sierra Club, and Audubon Society
Colorado River RWQCB reports that ongoing regulatory efforts to control pollutants will reduce inflows to the Salton Sea.

40% reduction from Mexico since 2007.
CA Air Resources Board reports that no apparent transport of PM10 (dust) from currently exposed Salton Sea playa

Current PM10 exceedances due to fugitive windblown dust, off highway vehicle activity and Mexico

Estimated PM-10 Tons/Day of Emissions in 2047:

- Fugitive Windblown Dust: 66%
- Unpaved Roads & Farming: 18%
- Other: 11%
- Salton Sea Exposed Shoreline: 4%

1 – The 2047 estimate of playa emissions without implementation of any restoration measures. Assumes implementation of all required mitigation.
Governor’s Proposed Salton Sea Budget

- **$80 million** in Proposition 1 funding to support development, permitting, and construction of individual restoration projects to meet short-term goals of 9,000-12,000 acres of restoration

- **$200,000** for new Asst. Secretary for Salton Sea Policy position

- **$300,000** for three existing positions to implement water transfers, develop restoration projects, and manage wildlife resources

- **$138,000** for new SWRCB attorney to serve as staff lead to facilitate the Board’s role of providing for the sustainable management of the Salton Sea
As-needed Environmental Consulting
Professional Services Contract with
AECOM Technical Services, Inc.

Water Planning Committee
January 28, 2016
Environmental Management Program

Ensure compliance with environmental regulations
As-needed Environmental Consultant

- As-needed/on-call consultant offers the most flexible, expeditious arrangement

- Multidisciplinary resources
  - Available resources to adjust to a changing workload
  - Available specialized expertise

- Critical to executing Environmental Management Program strategies addressing key issues and accomplishing goals
Scope of Work

- As-Needed Services
  - Compliance documents
  - Technical studies
  - Field studies
  - Monitoring
  - Project support

- Project Management Services
  - Assist staff in RFP process
  - Contract management support
Selection Process

- RFP on The Network - 11/13/2015
- Pre-submittal meeting - 11/23/2015
- 4 proposals (AECOM, ECE, Helix, and RECON)
- Interview shortlist - 1/12/2016
Selection Process

- Understanding of the scope of work
- Technical and specialized qualifications
- Familiarity with similar projects
- Past performance
SCOOP

- AECOM's good faith efforts verified
- Four subconsultants are small businesses
- Included are Disabled Veteran, Disadvantaged, and Women-owned firms
Staff Recommendation

It is staff’s recommendation to the Board to:

Authorize execution of a professional services contract with AECOM Technical Services, Inc. to provide As-needed Environmental Consulting Services for four years in an amount not to exceed $4,000,000.
Update on Drought Response Activities and Water Supply Conditions

Sierra Nevada Mountains  Robbin Goddard/LA Times

Water Planning Committee Meeting
January 28, 2016

Presentation by:
Dana Friehauf, Water Resources Manager
SWRCB Proposed Emergency Regulation

Timeline

- SWRCB posted proposed Emergency Regulation on January 15, 2016
- Formal comments due by 12 p.m. on Thursday, January 28, 2016
- SWRCB will consider adoption of proposed regulation at its February 2, 2016 public meeting
January 15, 2016 Proposed Emergency Regulation
Main Modifications to May 2015 Regulation

- Compliance period June 2015 – October 2016
  - Continue to assess compliance on cumulative basis since June 2015

- Modified definition of commercial agriculture
  - Meets definition Government Code 51201 and produces at least $1,000 revenue the previous year or normally would have
  - Certify that deliveries to ornamental landscapes are not included

- Adjustments for climate, growth and new local drought-resilient sources of potable supply
  - Total adjustment cannot exceed 8 percentage points
  - Conservation standard cannot drop below 8 percent
Proposed New Local Drought-Resilient Supply Credit Criteria

- Use of drought-resilient supply does not reduce water available to another legal user or environment
- Drought-resilient supply developed after 2013
- Supplier certifies that 4 percent or more of its total potable production is new, local drought-resilient supplies
## Proposed New Local Drought-Resilient Supply Credit Reduction Levels

<table>
<thead>
<tr>
<th>Drought-Resilient Supplies Percentage of Total Potable Production</th>
<th>Reduction from Conservation Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 – 4.9%</td>
<td>4%</td>
</tr>
<tr>
<td>5 – 5.9%</td>
<td>5%</td>
</tr>
<tr>
<td>6 – 6.9%</td>
<td>6%</td>
</tr>
<tr>
<td>7 – 7.9%</td>
<td>7%</td>
</tr>
<tr>
<td>8% +</td>
<td>8%</td>
</tr>
</tbody>
</table>
Proposed New Local Drought-Resilient Supply Credit

*San Diego County Urban Water Suppliers*

<table>
<thead>
<tr>
<th>Proposed Criteria for Drought-Resilient Supply Credit</th>
<th>Lewis CDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of supply does not reduce water available to another legal user or environment</td>
<td>✔</td>
</tr>
<tr>
<td>Supply developed after 2013</td>
<td>✔</td>
</tr>
<tr>
<td>4 percent or more of total potable production is new, local drought-resilient supply</td>
<td>✔</td>
</tr>
</tbody>
</table>

- For all urban water suppliers in San Diego County:
  - Local drought-resilient supply exceeds 8% of total potable production
  - Based on proposed Regulation, conservation mandate will be reduced by maximum 8 percent
January 15, 2016 Proposed Emergency Regulation

*Water Authority Response*

- Begins to recognize development of drought-resilient supplies through proposed supply credit

- Still fails to fully recognize the supply investments and should reflect the following:
  - Removal of the maximum 8% credit and provide full credit
  - Maintain the minimum conservation standard floor
  - Include supplies developed prior to 2013

- Should include requirement to re-evaluate based on measurable objectives and regional supply conditions

- Should not be used as a model for any potential future statewide conservation regulation
Contract Amendment with Braun Blaising McLaughlin & Smith PC for Legal and Consulting Services

Engineering & Operations Committee
January 28, 2016

James J. Taylor, Acting General Counsel
Kelly Rodgers, Energy Program Manager
Energy Program

- Existing Power Purchase Agreements
- New Energy Initiatives
- Energy Procurement and Transmission
- Energy Regulatory Engagement
Braun Blaising McLaughlin & Smith PC

- Established in 1996
- Sacramento-based
- Expertise in Water-Energy issues
- Advise on energy market rules, legislation, and regulatory issues
Original Contract
$50,000

Existing Power Purchase Agreements
- Interpret PPA terms

New Energy Initiatives
- Review/draft battery agreement terms and conditions

Energy Procurement and Transmission
- Identify avenues for energy cost savings

Energy Regulatory Engagement
- Support participation in rule-making and tariff-setting process
Proposed Amendment Through FY 2017
$290,000

Existing Power Purchase Agreements
- Continue to interpret PPA terms
- Draft new PPAs

New Energy Initiatives
- Develop inline hydro & floating solar agreement terms

Energy Procurement and Transmission
- Support federal process for transmission
- Finalize transmission agreement

Energy Regulatory Engagement
- Continue to support participation in rule-making and tariff-setting process
Authorize the General Counsel to execute a contract amendment with Braun Blaising McLaughlin & Smith PC (Braun) for legal and consulting services to increase the contract amount by $290,000 for a new contract amount of $340,000.
Contract with R&B Automation, Inc. for Purchase and Installation of Valve Actuators

Engineering & Operations Committee
January 28, 2016
# Bid Summary

<table>
<thead>
<tr>
<th>NO.</th>
<th>GENERAL CONTRACTOR</th>
<th>BID AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R&amp;B Automation, Inc</td>
<td>$1,907,590</td>
</tr>
<tr>
<td>2</td>
<td>Limitorque</td>
<td>No Bid</td>
</tr>
</tbody>
</table>
Recommendation

- Authorize the General Manager to award a three year contract to R&B Automation, Inc. in the amount of $1,907,590 to provide, retrofit, and install 100 electric continuous duty valve actuators at various Water Authority facilities.
Desalination Project

- Safety: (1,125,000 labor hours) Three lost time injuries
- Amount of concrete poured: 38,482 Cubic yards
- Amount of reinforcement steel: 3,882 tons
- Amount of conduit/pipe placed: 98,014 feet
- Number of membranes: 16,000
- Number of valves: 3,200
System Commissioning

- DDW Permits
  - Twin Oaks: October 12
  - Carlsbad: November 9
    - Product Water Tank pumps begin delivering water to Twin Oaks Valley Treatment Plant
System Commissioning

- **Performance Test: Mid-November**
  - 30 day test to confirm sustained combined system performance at required flow rates and product quality.

- **Surge Test: December 23**
  - Product Water Tank Pumps Shut off

- **Commercial Operations**
  - 120 days to complete non-water production items
  - Water Authority provides certification

- **Project Completion**
Surge Test Visual Representation

Pump Shut Down
Count Down

490 psi
290 psi
630 psi

240 psi
150 psi
280 psi

5 psi
30 psi

Hydraulic Grade Line

Carsibad Desal
Elev: 50 ft

10 miles

Pipeline Interconnect
Facility
Elev: 575 ft

5 miles

Twin Oaks Valley
Water Treatment Plant
Elev: 1100 ft

Boeing 777
560 MPH
Surge Test Visual Representation

Pump Shut Down
Count Down

490 psi
630 psi
290 psi

Hydraulic Grade Line

Pipeline Interconnect Facility
Elev: 575 ft

Twin Oaks Valley Water Treatment Plant
Elev: 1100 ft

240 psi
150 psi
280 psi
5 psi
30 psi

Carslbad Desal
Elev: 50 ft

Boeing 777
560 MPH

10 miles
5 miles
# Carlsbad Desalination Conveyance Pipeline

## Summary of Surge Test Pressures

<table>
<thead>
<tr>
<th>Condition</th>
<th>Desalination Plant</th>
<th>Pipeline Interconnect Facility (PIF)</th>
<th>Twin Oaks Treatment Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Pumped Flow</td>
<td>488</td>
<td>235</td>
<td>14</td>
</tr>
<tr>
<td>High Surge Pressure</td>
<td>624</td>
<td>277</td>
<td>29</td>
</tr>
<tr>
<td>Low Surge Pressure</td>
<td>296</td>
<td>159</td>
<td>6</td>
</tr>
<tr>
<td>Static Conditions (no flow)</td>
<td>459</td>
<td>228</td>
<td>14</td>
</tr>
</tbody>
</table>

Pressures indicated are in PSI
## Carlsbad Desalination Conveyance Facilities

### “Contract Administration Memoranda”

<table>
<thead>
<tr>
<th>Contract Administration Memoranda Number/Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Credit</strong>: San Marcos Street Improvements not required</td>
<td>($190,000)</td>
</tr>
<tr>
<td>2. <strong>Credit</strong>: Department of Public Health cutoff wall and monitoring wells not required</td>
<td>($125,000)</td>
</tr>
<tr>
<td>3. <strong>Delete</strong>: Property for air release and vacuum valve structures</td>
<td>$100,000</td>
</tr>
<tr>
<td>4. <strong>Add</strong>: Costs to permit and develop Macario tunnel design</td>
<td>$225,000</td>
</tr>
<tr>
<td>5. <strong>Administrative</strong>: Schedule of Values</td>
<td>No Cost</td>
</tr>
<tr>
<td>6. <strong>Add</strong>: Carlsbad Valve Vault (Reimbursable)</td>
<td>$29,300</td>
</tr>
<tr>
<td>7. <strong>Add</strong>: Vallecitos 9 Flow Control (Reimbursable)</td>
<td>$219,300</td>
</tr>
<tr>
<td>8. <strong>Credit</strong>: Reimbursement for Review of Over-pressurized Pipe</td>
<td>($17,390)</td>
</tr>
<tr>
<td>9–12 <strong>Add</strong>: Flow Meter Test, Pipeline 4 mods, Ammonia analyzer</td>
<td>$145,000</td>
</tr>
<tr>
<td>Contract Administration Memoranda Number/Description</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>13. Add: Additional Carlsbad paving (Reimbursable)</td>
<td>$1,228,049</td>
</tr>
<tr>
<td>14. Add: Changes to Pipeline Interconnect Facility.</td>
<td>TBD*</td>
</tr>
<tr>
<td>15. Credit: Baker Coupler Issue (Reimbursable)</td>
<td>($260,000)</td>
</tr>
<tr>
<td>16. Credit: In-Plant Pipe Inspection (Reimbursable)</td>
<td>($91,448)</td>
</tr>
<tr>
<td>17. Credit: PIF 8-inch BFV Failure (Reimbursable)</td>
<td>($24,991)</td>
</tr>
<tr>
<td>18. Credit: Disinfection Flushing (Reimbursable)</td>
<td>($101,355)</td>
</tr>
<tr>
<td>19. Administrative/Credit: Isolation Valve Replacement (Reimbursement of Costs in future)</td>
<td>TBD</td>
</tr>
<tr>
<td>20. Add: 2-inch Irrigation Water Meter at Faraday Shaft</td>
<td>$39,023</td>
</tr>
</tbody>
</table>
### Carlsbad Desalination Conveyance Facilities “Contract Administration Memoranda”

<table>
<thead>
<tr>
<th>Contract Administration Memoranda Number/Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for measures to handle pipeline pressure</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>• Final Modification Cost (Pipe Thickness, Radiographic Testing, Pipe Coating, Surge Protection)</td>
<td>$6,781,046</td>
</tr>
<tr>
<td><strong>Credit to Project</strong></td>
<td><strong>$3,218,954</strong></td>
</tr>
</tbody>
</table>
## Carlsbad Desalination Project Budget Summary

<table>
<thead>
<tr>
<th>Task/Activity</th>
<th>Lifetime Budget ($ Millions)</th>
<th>Expended ($ Millions)</th>
<th>% Expended</th>
<th>% Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desalination Plant Water Purchase Agreement Oversight</td>
<td>$4.00</td>
<td>$3.36</td>
<td>84%</td>
<td>99%</td>
</tr>
<tr>
<td>Desalination Product Water Conveyance Pipeline</td>
<td>$11.97</td>
<td>$11.36</td>
<td>95%</td>
<td>99%</td>
</tr>
<tr>
<td>Pipeline 3 Desalination Relining</td>
<td>$30.13</td>
<td>$30.13</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>San Marcos Vent Desalination Modifications</td>
<td>$2.57</td>
<td>$2.57</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Twin Oaks Treatment Plant Modifications</td>
<td>$17.20</td>
<td>$16.65</td>
<td>97%</td>
<td>100%</td>
</tr>
<tr>
<td>Carlsbad and Vallecitos Reimbursables</td>
<td>$2.10</td>
<td>$0.30</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Desalination Intake Upgrade</td>
<td>$0.64</td>
<td>$0.03</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>$0.70</td>
<td>$ –</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Carlsbad Desalination Project Contingencies</td>
<td>$4.41</td>
<td>$ –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>De–appropriated</td>
<td>$6.30</td>
<td>$ –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$80.0</td>
<td>$69.88</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Proposition 50 Grant</td>
<td>$4.73</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What went well?

- Completed a very complicated project with many components on time
- Cooperation of the parties
- Public Outreach on the pipeline
- Plant construction and commissioning was smooth
- Macario Canyon change
What were the challenges?

- Small site
  - 3 Israeli Desal Plants
    - Sorek 165 MGD; 24.7 acres
    - Hadera 133 MGD; 17.3 acres
    - Ashkelon 97 MGD; 17.3 acres
  - Carlsbad – 50 MGD; 5.7 acres

- Pipeline valves needing to be replaced
What were the Challenges? (cont.)

- Contractual arrangement: Many & unique
  - Water Purchase Agreement: SDCWA↔Poseidon
  - Design-Build Agreement (Conveyance P/L): SDCWA↔Poseidon
  - EPC Agreement: Poseidon↔KSD (IDE as a sub)
  - O and M Agreement: Poseidon↔IDE
  - D-B-O Amendment (Twin Oaks): SDCWA↔CH2M
  - Design-Bid-Build (P/L3 Relining): SDCWA ↔ LH Woods
  - Design-Build (San Marcos Vent): SDCWA↔TC Construction/RBF
Owner Controlled Insurance Program

Matthew Brown
Director of Administrative Services

January 28, 2016
Administrative & Finance Committee
ESP Historical Timeline

- **1998**: ESP Included in CIP
- **1999**: Begin Construction
- **2003**: Olivenhain Dam/CSP in CIP
- **2005**: Olivenhain Pump Station
- **2010**: San Vicente Pumping Facilities
- **2011**: San Vicente Pipeline
- **2013**: Lake Hodges
- **2014**: San Vicente Dam Raise
Traditional vs. OCIP
Traditional vs. OCIP

- Multiple insurers vs. Single insurer
- Multiple policies vs. Economy of scale
- Gaps in coverage vs. Broader coverage
- Standard limits vs. Higher limits
- Cross litigation vs. No cross litigation
- Lines of communication vs. Centralized administration
- Multiple safety programs vs. Uniform safety program
OCIP Covered Projects

Olivenhain

San Vicente

Lake Hodges
GOAL 1
Increase project safety

GOAL 2
Reduce claims

GOAL 3
Realize insurance savings
Goal 1 – Increase project safety

<table>
<thead>
<tr>
<th>INCIDENT RATE</th>
<th>LOST TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FED OSHA</strong></td>
<td><strong>SDCWA OCIP</strong></td>
</tr>
<tr>
<td>8.4</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>FED OSHA</strong></td>
<td><strong>SDCWA OCIP</strong></td>
</tr>
<tr>
<td>3.7</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Goal 2 – Reduce claims

<table>
<thead>
<tr>
<th>Industry Standard</th>
<th>Other OCIPs</th>
<th>SDCWA OCIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.8</td>
<td>2.1</td>
<td>0.85</td>
</tr>
</tbody>
</table>
Goal 3 – Realize insurance savings

WORKERS COMPENSATION – Average Claim Cost

- SDCWA OCIP: $35,210
- CALIFORNIA: $70,566
Goal 3 – Realize insurance savings

TOTAL SAVINGS

Traditional

$65M

OCIP

$43M

$22M
OCIP Primary Goals

GOAL 1
Increase project safety

GOAL 2
Reduce claims

GOAL 3
Realize insurance savings
Long Range Financing Plan Table of Contents

1. Executive Summary
2. Financial Management Objectives & Policies
3. Regional Water Sales Projections
4. Capital Improvement Plan
5. Capital Financing Plan
6. Financial Forecast
7. Funds & Reserves
8. Risk Mitigation Strategies
Stakeholder Involvement

- October 13, 2015—General Managers’ Meeting
  - draft outline presented for review, discussion and input
- October 14, 2015—Finance Officers’ Meeting
  - draft outline presented for review, discussion and input
- November 12, 2015—Special A&F Committee Workshop
  - review & discussion of draft assumptions and select financial policies
- November 17, 2015—General Managers’ Meeting
  - review & discussion of draft assumptions and select financial policies
- November 18, 2015—Finance Officers’ Meeting
  - review & discussion of draft assumptions and select financial policies
- December 8, 2015—Joint General Managers’ and Finance Officers’ Meeting
  - review draft financial projections and High/Low rate and charge projections
- December 10, 2015—A&F Committee Meeting
  - overview and discussion of 2015 LRFP
Response to Board Inquiries

- Level of cash funding and Intergenerational equity
  - Increased cash funding from 23% to 30%
- PAYGO Fund balance levels
  - PAYGO fund balances projected to be positive
- Clarify Stored Water Fund Policy
  - Approach to inventory management
    - Cost and Operations (Operations to be addressed in February)
Intergenerational equity means striking a balance between cash and debt funding to ensure current customers are contributing funds towards the capital investments they are benefiting from and not deferring the costs to future generations.
PayGo Utilization

Long-Term Debt and Cash CIP Funding Mix

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Cash Funded</th>
<th>Debt Funded</th>
<th>% Cash Funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>13.0</td>
<td>258.0</td>
<td>5%</td>
</tr>
<tr>
<td>2009</td>
<td>39.6</td>
<td>239.7</td>
<td>14%</td>
</tr>
<tr>
<td>2010</td>
<td>11.2</td>
<td>195.8</td>
<td>5%</td>
</tr>
<tr>
<td>2011</td>
<td>9.1</td>
<td>128.5</td>
<td>7%</td>
</tr>
<tr>
<td>2012</td>
<td>11.0</td>
<td>118.3</td>
<td>8%</td>
</tr>
<tr>
<td>2013</td>
<td>12.1</td>
<td>100.5</td>
<td>11%</td>
</tr>
<tr>
<td>2014</td>
<td>44.2</td>
<td>59.2</td>
<td>43%</td>
</tr>
<tr>
<td>2015</td>
<td>30.9</td>
<td>49.2</td>
<td>39%</td>
</tr>
<tr>
<td>2016</td>
<td>12.7</td>
<td>60.1</td>
<td>17%</td>
</tr>
<tr>
<td>2017</td>
<td>17.9</td>
<td>32.9</td>
<td>35%</td>
</tr>
<tr>
<td>2018</td>
<td>75.1</td>
<td>35.0</td>
<td>68%</td>
</tr>
<tr>
<td>2019</td>
<td>77.3</td>
<td>19.3</td>
<td>80%</td>
</tr>
<tr>
<td>2020</td>
<td>45.8</td>
<td>30.5</td>
<td>60%</td>
</tr>
<tr>
<td>2021</td>
<td>101.7</td>
<td>25.4</td>
<td>80%</td>
</tr>
<tr>
<td>2022</td>
<td>16.6</td>
<td>1.8</td>
<td>90%</td>
</tr>
<tr>
<td>2023</td>
<td>18.6</td>
<td>31.6</td>
<td>37%</td>
</tr>
<tr>
<td>2024</td>
<td>20.1</td>
<td>0.0</td>
<td>100%</td>
</tr>
<tr>
<td>2025</td>
<td>22.1</td>
<td>0.0</td>
<td>100%</td>
</tr>
<tr>
<td>2026</td>
<td>15.5</td>
<td>0.0</td>
<td>100%</td>
</tr>
</tbody>
</table>
Stored Water Fund

- Stored water purchases
  - Cash used to buy Inventory
    - Asset booked at cost
- Inventory tracked
  - Unit cost = weighted average
- Stored water sale
  - Water sales revenues
  - Water purchase cost = weighted average cost of inventory (returned to the Stored Water Fund)
Additional LRFP Revisions

- Correction to MWD’s high rate projections
  - MWD’s CY 2018 rate and charge estimate increased by $25/AF (impacts subsequent years)
    - Increases the Water Authority’s high rate guidance in CY 2018 by $10/AF (CY 2026 impact is $22/AF)
- Adjustment to total debt issued to include cost of issuance for commercial paper
  - Increased debt issuances by $100,000
- Other changes are editorial
2015 LRFP Key Conclusions

- Limited New Debt Issuances
  - Baseline CIP $582 million over the planning period
  - Debt funding projected at $168.5 million of new debt issuance

- Policy recommendations
  - Increasing cash funding mix to 30% from 23%
  - Stored Water Fund becomes permanent

- Demonstrates the long-term feasibility and affordability of CIP and financing plan

- Emphasizes Water Authority’s commitment to long-range planning
Today’s Board Action

Adopt, as final, the Water Authority’s 2015 Long-Range Financing Plan.
Prior Board Action

- On December 10, 2015, the Board approved Water Authority co-sponsorship of AB 33 (Quirk)
  - Legislation intended to create an improved path forward for large-scale energy storage projects
- Board deferred action on drought-related legislative proposals to allow full evaluation of SWRCB new proposed emergency drought regulations
Recommended Sponsorship – Drought Proposal #1

Issues

- SWRCB emergency drought regulations don’t recognize investments regions and communities have made to:
  - Reduce reliance on the Delta
  - Improve regional self-sufficiency
  - Insulate a region’s economy and residents from impacts of long-term drought

Proposed legislative approach

- Sponsor legislation to require any future emergency drought regulation provides crediting/adjustments for new drought-sustainable local water supplies
Recommended Sponsorship – Drought Proposal #2

- Issues
  - SWRCB emergency drought regulations are implemented within a one-size-fits-all framework
  - Different regions of the state face different hydrological and climatological conditions
  - Regions of the state have addressed local water supply reliability conditions differently

- Proposed legislative approach
  - Sponsor legislation to require SWRCB implementation of a declared drought emergency to be conducted on a county–by–county or regional basis
Approve sponsorship of legislation:

- Sponsor legislation to require any future emergency drought regulation provides crediting/adjustments for new drought-sustainable local water supplies

- Sponsor legislation to require SWRCB implementation of a declared drought emergency to be conducted on a county-by-county or regional basis