Fiscal Sustainability

A&F Committee Meeting
January 23, 2014

San Diego County Water Authority
Today’s Agenda

- Fiscal Sustainability Task Force Chair
  Introduction
- Rate and Planning History
- Fiscal Sustainability Task Force
  Recommendations
  - No Changes
  - Changes to Rates & Charges or Financial Policies
  - Addition to Rate & Charge Structure
- A&F Committee February Meeting
Task Force Process

- Task Force Members
  - Barbara Wight, Chair
  - Tom Wornham
  - Mark Weston
  - Gary Arant
  - DeAna Verbeke
  - Gary Croucher
  - Dave Barnum
Task Force Process (cont.)

- May 29, 2013 – 1st Meeting
- Met 11 Times
- Supported by:
  - Dr. Tom Chesnutt, A&N Technical Services
  - Robert Grantham, Carollo Engineers
  - Doug Montague, Montague & DeRose
  - Water Authority Staff
Task Force Process (cont.)

- Considered the Following:
  - Guiding Principles for fiscal sustainability
  - 20 year Water Authority rate and charge structure history
  - Water Authority financial policies
  - Market comparisons of other water wholesalers and retail agencies
  - Emerging issues and changing environment impacting fiscal sustainability
  - Rate structure has served Water Authority and its member agencies well over the last decade
  - All recommended changes will result in no additional revenues to the Water Authority (net zero impact)
Task Force Recommendations

- No Changes
  - Debt service coverage ratio of 1.50x
  - Capacity charges

- Changes to Rates and Charges or Financial Policies
  - Recommendation #1 – Clarify fixed cost definition
  - Recommendation #2 – Change Storage Charge allocation to 10-Year rolling average
  - Recommendation #3 – Consistently apply non-commodity revenue offsets to all rate categories, including the Treatment Rate

- Addition to Rate and Charge Structure
  - Recommendation #4 – Establish a Supply Reliability Charge using 10-year non-concurrent peak
History of Supply Planning Decisions and Capital Improvements

1989 Water Distribution Plan
- Increase system capacity and reliability
- 10 projects
- $530 million CIP budget

1993 Water Resource Plan

1995 Urban Water Management Plan

1997 Water Resource Plan
- Add IID water transfer

1999 Water Facilities Master Plan Update
- Preferred alternative “supply from the west”
- Add 89 kaf of regional desalination
- Add 100 kaf of carryover storage
- Add 50–100 MGD of treatment capacity
- $3.229 billion CIP budget

2000 Urban Water Management Plan

2003 Quantification Settlement Agreement
- IID water transfer, 35-yr take or pay, 4.88 maf
  - $1.45 billion
- Canal linings, 110 yrs, 4.32 maf
  - $175 million

2005 Urban Water Management Plan
- Add 56kaf desalination

2006 Comprehensive Reliability and Cost Assessment “CRACA”
- Analyze cost/reliability of CIP
- Validate storage decisions
- Carlsbad desal is local project

2009 CRACA “lite”
- Validate CIP scope/cost
- Drought mgmt impacts

Carlsbad Desal Project
- 30 year Water Purchase agreement
- 56 kaf local supply
- Add $80 million To CIP for existing system improvements

Emergency Storage Project
- Add 92 kaf of emergency storage
- Add $730 million to CIP
- $1.594 billion CIP budget
No Changes to Existing Specific Components of the Rate Structure and Financial Policies

A. Policy on Enhanced Debt Service Coverage Ratio 1.50x
   ◦ Remains at 1.50x
     • Water Authority’s ratio below rating agency medians; however,
       • Balanced by strong financial management policies
       • Board willingness to raise rates to pay for large investments in infrastructure
       • Rate structure that emphasizes fixed charges
       • Successful supply diversification strategy

B. Capacity Charges
   ◦ COSS Phase I Independently confirmed fair, proportional and consistent w/cost of service principles and legal requirements
Determine Definition of Fixed Costs

1. Fiscal Sustainability Task Force recommends the Board determine that the definition of Water Authority fixed costs include:

- All Water Authority payments towards the cost of Debt Service associated with the Carlsbad Desalination Project
- Fixed Operations and Maintenance costs of the Carlsbad Desalination Project;
- Fixed Operations and Maintenance costs associated with the All-American and Coachella Canal lining projects
- The take-or-pay purchase price of conserved Colorado River Water associated with the SDCWA–IID Water Transfer Agreement
Fixed versus Variable Costs

- Fixed costs do not directly vary with volume of water produced in the short term (example: plant, a pump)

- Variable (commodity) costs do (example: pumping costs, electricity, chemicals)

- Dividing line between fixed and variable critically depends on the time frame
Observations on Fixed Costs

- Observation 1: The Definition of Fixed Varies with the Period of Time under Consideration
  - A cost can be fixed (i.e. for the life of a contract) and then become completely variable
  - “Fixity” is an attribute that can vary along a scale—very fixed in the next budget cycle, more variable over time

- Observation 2: The Nature of Payment Does Not Change the Nature of the Costs
  - Volumetric cost recovery can occur with fixed costs
  - Misalignment of cost recovery and costs, causes financial problems
Water Authority’s Fixed Costs

Water Authority’s Fixed Costs Include:

- **Debt Service**
  - Cost does not vary with volume
  - Charge pays for capital
    - Includes Desal Plant & Pipeline Debt Service
    - Regardless of ownership
- **Water Authority O&M**
  - Costs do not vary with volume
  - Costs incurred even if no water is sold
- **Desal fixed O&M – Per Contract**
  - Costs do not vary with volume
  - Costs incurred if water is produced, even if we don’t take
- **Canal Lining O&M**
  - Costs do not vary with volume
  - Costs incurred even if water isn’t conserved
- **IID Water Supply Contract Costs (take or pay contract)**
  - Expressed volumetrically but are fixed over life of contract
  - Obligation to pay whether water is taken or not
Water Authority Fixed Costs

![Fixed Costs Chart]

- **Existing Fixed Costs**
- **IID Water Transfer Contract**
- **Desalination and Canal O&M**
- **Desalination Debt**
Costs Determined Not to Be Fixed

- **Desal Variable O&M**
  - Variable Energy, Chemicals
    - Costs vary with volume
    - Costs incurred for any water produced, even if not taken by Water Authority

- **MWD Wheeling (QSA)**
  - Costs vary with volume
  - Costs avoided if water is not conserved
  - Costs avoided if water is not transferred

- **FSTF Did Not Recommend These Items for Inclusion in Fixed Cost Definition**
Recovery of Fixed Costs Through the IAC Policy (Revenue)

- IAC Established in 1998 to Provide a Sustainable Fixed Revenue Source
- Independently Confirmed by Consultants
  - R.W. Beck
  - Carollo Engineers
- Fixed Costs per IAC Policy:
  - Principal and interest on debt
  - 80% of all O&M
  - Contractual incentive payments to member agencies for beneficial reuse of reclaimed water

  - Note: Does not include Storage or Customer Service charges
No Change to Existing IAC Policy

Under the Task Force determination of the fixed cost definition there is no change to IAC policy.

IAC is calculated as follows:

- IAC to include desal plant & pipeline debt service and 80% of desal fixed O&M and 80% canal lining O&M
  - Debt service
    - Total debt service * 25%
  - Fixed O&M
    - 80% Water Authority O&M
    - 80% Fixed desal O&M
    - 80% Canal lining O&M
      * 25%
IAC Calculation

Does Not Include:

- IID Water Supply Transfer Contract
- Fixed Cost but Not Tied to Physical Asset nor to Debt Service or O&M
  - Weak nexus to access which is basis for IAC
  - Liquid fixed asset
    - Supply Reliability Charge
- Desal Variable O&M
  - Variable Energy, Chemicals
    - Unavoidable costs incurred for any water produced, even if not taken by Water Authority
    - Costs vary with volume, separable cost
- FSTF Did Not Recommend These Items for Inclusion in Fixed Cost Definition
Estimated Total Revenue for 2016
(For Illustrative Purposes Only)

- Variable Revenue: 78.1%
- Storage: 8.7%
- Customer Service: 3.5%
- Desal Debt & Fixed O&M/Canal O&M in IAC: 2.4%
- IAC: 4.2%
- Property Tax: 1.6%
- Standby Availability: 1.5%

Note: Estimates for Desalination Debt and Fixed O&M based on full year production of 48,000 AF
2. Fiscal Sustainability Task Force recommends that the allocation of storage charge costs to member agencies be revised from a prior three-year rolling average of Municipal & Industrial water deliveries to a prior 10-year rolling average of Municipal & Industrial water deliveries.

- Storage Remains a Single Charge for ESP/CSP
- Change Storage Charge Allocation From 3-Year to 10-Year Timeframe
- 10-Year Rolling Average versus 10-Year Peak
Allocation of Storage Charge 10-Year vs. 3-Year Timeframe

- Storage Service Has Expanded with the Approval of ESP and CSP
  - Operational use, multiple uses = multiple beneficiaries
- Single Charge Appropriate as Currently Administered (fixed)
- 10-Year Allocation Better Aligns Long-term Nature of Benefits to Member Agencies by More Accurately Reflecting Trends in Water Use
  - 40 year bonds
  - 100 year useful life
- Alternative Opinion
  - 10-Year timeframe with adjustment for Local Supply Development
  - Or maintain 3-Year timeframe
Storage Charge Allocation

- 10-Year Rolling Average of Non-agricultural Water Deliveries
  - Longer timeframe provides better nexus to actual member agencies demands/benefits year after year
  - Ensures all beneficiaries of services pay their proportionate share of costs
  - More accurately reflects the need for member agency storage over longer period
  - Recognizes intergenerational benefits
  - Considers our dynamic environment (Long-term)
  - Consistent with Water Authority’s position here and at MWD
  - Significant capital commitment with long-term benefits
Consistent Application of Non-commodity Revenue Offsets to all Revenue Categories Including Treatment

3. Fiscal Sustainability Task Force recommends that the Water Authority consistently apply non-commodity revenue offsets to all revenue categories including Treatment.

- Carollo Recommendation From Phase I Cost of Service Report

- Policy Considerations
  - Treatment should pay for itself to the extent that it is fair and consistent
  - Perception issues among member agencies
  - IAC benefits all rates and charges excluding the Treatment Surcharge
## Recommendation for Allocation of Offsetting Revenues Applied

($ in Millions)

<table>
<thead>
<tr>
<th>Offsets (Capital Only)</th>
<th>Total Revenue Offsets (1)</th>
<th>Customer Service</th>
<th>Storage</th>
<th>Transportation</th>
<th>Supply</th>
<th>Treatment</th>
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<td>System Capacity Charge$^{(2)}$</td>
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<td>$1.61$</td>
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<td>$4.53$</td>
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<td>$0.68$</td>
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<table>
<thead>
<tr>
<th>Offsets (Capital and O&amp;M)</th>
<th>Total Revenue Offsets (1)</th>
<th>Customer Service</th>
<th>Storage</th>
<th>Transportation</th>
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<th>Treatment</th>
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<tr>
<td>Property Tax</td>
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<td>$1.81$</td>
<td>$4.33$</td>
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**Estimate of Total Offsets$^{(1)}$** | **Total Revenue Offsets for CY14 Rates & Charges** | **$76.84$** | **$11.78$** | **$31.59$** | **$22.35$** | **$7.61$** | **$3.52$** |

**Total Offsets for CY14 Rates & Charges** | **$76.84$** | **$12.27$** | **$32.91$** | **$23.36$** | **$7.95$** | **$0.36$** |

| Change in Offsets | **$0.00$** | **$0.49$** | **$1.31$** | **$1.01$** | **$0.34$** | **($3.16)$** |
| Estimated change in 2014 Rates and Charges | **$0.49$** | **$1.31$** | **$2/AF$\(^{(4)}\)** | **$1/AF$\(^{(4)}\)** | **($16/AF$\(^{(4)}\)** |

$^{(1)}$ Numbers may not foot due to rounding

$^{(2)}$ System Capacity Charge offsetting revenue not applied to Treatment

$^{(3)}$ Treatment Capacity Charge revenue only applied to Treatment

$^{(4)}$ Estimated increase/(decrease) in commodity rates in dollars
Establish a Fixed Supply Reliability Charge

4. Fiscal Sustainability Task Force recommends that the Water Authority establish a fixed Supply Reliability Charge allocated to member agencies on the basis of a prior 10 year non-concurrent peak amount of deliveries of Water Authority supplies.

- Establish a Supply Reliability Charge
- Allocation of Supply Reliability Charge Based on 10-Year Peak
- Percentage of Supply Costs to be Apportioned to Reliability Charge Determined in Consultation with Member Agencies and Staff
Supply Reliability Charge

- Long-term Investments in Water Supply Reliability Benefit Member Agencies – Peak Needs
  - Not included in the existing IAC policy
- Highly Reliable Supplies Developed Specifically for Availability in Times of Shortages
- Ensures All Beneficiaries of Service Pay Their Proportionate Share of Cost
- Fixed Costs Have Appropriate Level of Fixed Revenue
Why a Fixed Supply Reliability Charge

- All Agencies Depend on Water Authority Supplies to Maintain Reliability
  - Member agencies with supplies subject to hydrologic variation
  - Member agencies with local supplies subject to mechanical or regulatory interruption
    - Recycled water
    - Brackish groundwater

- Water Authority Shortage Allocation Recognizes “Insurance Policy” of Water Authority Supplies
  - Loss of local supply adjustment during shortage allocation provides more water to agencies that have reduced local supplies

- Reliability Charge Must Be Based on Value of Insurance Policy
  - Most water supply benefit goes to the user of water
  - Values proportionate benefit of standby reliability to all agencies
### Identifying the Non-concurrent Maximum Year of Demand on the Water Authority

**Allocation Based on Maximum M&I Sales to Member Agencies**

*(FOR ILLUSTRATIVE PURPOSES ONLY)*

**in Acre-Feet**

*(FY 2004 - FY 2013)*

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<td>33,046</td>
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<td>726,587</td>
<td>752,287</td>
<td>777,987</td>
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</table>

**Footnote**

1) Shaded values denote maximum M&I sales volume for each agency.
Amount of Revenue Recovered by Supply Reliability Charge

- To Be Developed by Water Authority Staff and Rate Consultants Working With Member Agencies
  - Apportion a percentage of fixed supply costs
    - QSA
    - Desalination (amount not collected through IAC)
- Must Provide Nexus to the Reliability Benefit to Each Member Agency
- Return to Board with Recommendation
Summary of Task Force Recommendations

1. The Board determine that the definition of Water Authority fixed costs include all Water Authority payments towards the cost of Debt Service associated with the Carlsbad Desalination Project; Fixed Operations and Maintenance costs of the Carlsbad Desalination Project; Fixed Operations and Maintenance costs associated with the All-American and Coachella Canal lining projects; and the take-or-pay purchase price of conserved Colorado River Water associated with the SDCWA–IID Water Transfer Agreement.

2. The allocation of storage charge costs to member agencies be revised from a prior three-year rolling average of Municipal & Industrial water deliveries to a prior 10-year rolling average of Municipal & Industrial water deliveries.

3. The Water Authority consistently apply non-commodity revenue offsets to all revenue categories including Treatment.

4. The Water Authority establish a fixed Supply Reliability Charge allocated to member agencies on the basis of a prior 10 year non-concurrent peak amount of deliveries of Water Authority supplies.
Carlsbad Desal Project Update

Engineering & Operations Committee
January 23, 2014
Carlsbad Desalination Projects

TWIN OAKS VALLEY WATER TREATMENT PLANT DESALINATION MODIFICATIONS (K0306)

PIPELINE 3 DESALINATION RELINING SAN MARCOS TO TWIN OAKS (K0304) (27,100 FEET)

DE Salination Product Water Conveyance Pipeline (K0303) (10 MILES, 54-INCH PIPE)

SAN MARCOS VENT DESALINATION MODIFICATIONS (K0305)

AQUEDUCT CONNECTION POINT

Carlsbad Desalination Plant

Legend:
- Desalination Plant
- Desalination Pipeline
- Water Authority Pipeline
- Pipeline 3 Reline
- Portal Location
- Portal Staging Area

SCALE (ft):
- 0
- 250
- 500
- 1,000
- 2,500
- 8,000

Pacific Ocean

San Diego County Water Authority
## Project Elements

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<tr>
<th>Project Element</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<tr>
<td>Pipeline 3 Relining</td>
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<tr>
<td>Twin Oaks Plant Modifications</td>
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<td>Conveyance Pipeline</td>
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<td>Carlsbad Desalination Plant</td>
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<tr>
<td>System Commissioning</td>
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</table>
San Marcos Vent Structures
San Marcos Vent

- Design is 100% complete.
- Contractor mobilized onsite.
- Excavation has started.
- Pipe Fabrication by Northwest Pipe to begin at the end of the month.
Pipeline 3 Relining
Pipeline 3 Relining

- Staging near Portal 5/6
- Environmental pre-work is underway
- Contractor has submitted shop drawings
- Coordination with San Marcos and outreach to community
- Work to start in February
TOWWTP Modifications

Clearwell Upgrades

New 54-inch Dia. Piping

Existing Pipeline 3

New 54-inch Dia. Connection and Valve Vault

Chemical Feed Facilities Upgrades

TWFCF Upgrades
Clearwell No. 1
Clearwell No. 1
Twin Oaks Improvements

- ✔ 54-inch steel pipeline connecting Pipeline 3 to clearwells
- ✔ Modify Clearwell 1
- □ Modify Clearwell 2
- □ Complete meter vault (75%)
- □ Complete chemical feed facilities (80%)
- □ Complete isolation valve vault (40%)
- □ Complete Testing
Conveyance Pipeline Progress to Date

- Safety: No injuries (100,000 work-hours)
- Design: Over 90% complete
- Total working on project: 150
- Amount of pipe installed 12,300 15,000 feet (out of 53,000)
- Current work areas
  - Trench work at Cannon Road at Car Country Drive (Carlsbad)
  - Cannon Road at Grand Pacific Drive (Carlsbad)
  - Poinsettia Ave/Lionshead Ave (Vista)
  - Tunnel work on Cannon Road west to beneath Interstate 5 and north on Avenida Encinas (Carlsbad)
  - Prep work at Flow Control Facility (San Marcos)
  - Macario Tunnel (begin in February/March)
Community Outreach Update

- Friday eBlasts with construction updates to residents, property owners, and tenants began.
- Working with West Development on Avenida Encinas (work started in January).
- Continued Carlsbad Research Center Outreach
  - Open House Scheduled for January 29.
  - Obtained contact information for 90% of businesses.
- Plant Outreach – YouTube time lapse videos to be updated monthly on website.
Delivery System
Pipeline Construction March 2013 – December 2014
Macario Canyon Tunnel Approval Process

- Conceptual design approved including portals/shafts locations
- Environmental resource survey
- Board approved EIR addendum in Water Planning (September)
- Geotechnical work
- Easement language approved by agencies
- City of Carlsbad approved LCP consistency (November)
- Coastal Commission approval (December)
- Carlsbad easement acquired (January 28)
- SDG&E easement acquired
Desalination Plant

Current Trench Work

Desalination Conveyance Pipeline 10 miles of new 54-inch Pipe

TOVWTP Improvements

Pipeline 3 Relining (27,100 feet)

Pipeline 3 Work

Current Work

Aqueduct Connection Facilities

Current Trench Work

Current Tunnel Work

Scale (Feet)

0 2,000 4,000 8,000

Pacific Ocean
Desalination Plant Progress

- Safety: No injuries
- Total working on project: 200
- Amount of concrete poured: \(10,168 \text{ to } 20,100\) Cubic yards (28%) (55%)
- Amount of reinforcement steel: \(1.4 \text{ to } 2,784\) tons (43%) (85%)
- Amount of conduit/pipe placed: \(5,147 \text{ to } 7,543\) feet (6.5%) (9.5%)
- Design is 84% 96% complete
- Overall: 16% 26% complete
### 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>($130,000)</td>
</tr>
<tr>
<td>3. <strong>Add:</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>$185,000</td>
</tr>
<tr>
<td>5. <strong>Administrative:</strong> Tunnel Design Start Dates</td>
<td>No Cost</td>
</tr>
<tr>
<td>6. <strong>Add:</strong> Carlsbad Valve Vault (Reimbursable)</td>
<td>$29,300</td>
</tr>
</tbody>
</table>
### Carlsbad Desalination Conveyance Facilities

“Contract Administration Memoranda” (cont.)

<table>
<thead>
<tr>
<th>Contract Administration Memoranda Number/Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for pipe thickness, steel etc. to handle pipeline pressure</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>• Steel for mainline</td>
<td>$5,170,000</td>
</tr>
<tr>
<td>• Bends &amp; Elbows &amp; Tunnel (estimated)</td>
<td>1,000,000</td>
</tr>
<tr>
<td><strong>Current Balance</strong></td>
<td><strong>$3,830,000</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>
</tr>
</thead>
<tbody>
<tr>
<td>Desalination Plant Water Purchase Agreement</td>
<td>$3.97</td>
<td>$0.81</td>
<td>20%</td>
</tr>
<tr>
<td>Desalination Product Water Conveyance Pipeline</td>
<td>$10.40</td>
<td>$2.96</td>
<td>28.5%</td>
</tr>
<tr>
<td>Pipeline 3 Desalination Relining</td>
<td>$36.46</td>
<td>$1.27</td>
<td>3.5%</td>
</tr>
<tr>
<td>San Marcos Vent Desalination Modifications</td>
<td>$3.20</td>
<td>$0.42</td>
<td>13.1%</td>
</tr>
<tr>
<td>Twin Oaks Treatment Plant Modifications</td>
<td>$17.35</td>
<td>$9.82</td>
<td>56.6%</td>
</tr>
<tr>
<td>Carlsbad MWD New Facilities for Desal</td>
<td>$0.12</td>
<td>$ –</td>
<td></td>
</tr>
<tr>
<td>Carlsbad Desalination Project Contingencies</td>
<td>$8.50</td>
<td>$ –</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$80.0</td>
<td>$15.28</td>
<td>19%</td>
</tr>
</tbody>
</table>
San Vicente Dam Raise
Construction Update and Contract Action

Engineering & Operations Committee Meeting
January 23, 2014
Agenda

- Construction Update
- Contract Action for Construction Management Services
- Closed Session
  - Potential Litigation
Existing Dam - Circa 2010

Benefit:
increase reservoir capacity by 152,000 acre-feet
Cross-Section of San Vicente Dam Raise

- Raised Dam: +117 feet
- Existing Dam: 220 feet
- Reservoir Surface Area: +500 Acres
- Reservoir Surface Area: 1,100 Acres
- +152,000 acre-feet
- 90,000 acre-feet in current reservoir

Acre-foot: amount of water used by two typical households in one year
Not to scale
Rock for Roller Compacted Concrete
Batch Plant
Roller Compacted Concrete Placement
December 2011

ULTIMATE DAM HEIGHT

ELEV. (FEET)
800
750
700
650
600
550
500
450
400

776
530
Roller Compacted Concrete Placement
April 2012

ULTIMATE DAM HEIGHT

ELEV. (FEET)
800
750
700
650
600
550
500
450
400

776
642
RCC Placement
September 2012

ULTIMATE DAM HEIGHT – FALL 2012

ELEV. (FEET)
800
776
750
700
650
600
550
500
450
400
Current View of Dam
Outlet Tower
July 2013
Emergency Release System

- Reservoir
- Spillway Elevation 766 feet
- Completed Dam Raise
- Low Level Outlet Gate Structure
- Low Level Outlet Pipe
- Plunger Valve Elevation 486.5 feet
- Knife Gates
- Downstream Control Facility
- Emergency Release
- 108” Butterfly Valve
January 2014

Downstream Control Facility

Gallery Access Building
Emergency Release System

Water Flow
Plunger Valve Anchorage Fix

- Existing 108-inch Emergency Release System Pipe
- Existing Plunger Valve
- Downstream Control Facility
- Thickened Concrete
- Relocate Emergency Release Protective Cover to New Wall Face
Plunger Valve Anchorage Fix

- **Existing Plunger Valve**
- **Restained Coupling Engages In-Line Piping To Anchor Valve**
- **Existing 108-Inch Emergency Release System Pipe**
- **Mechanical Revisions Disconnect Plunger Valve From The Wall**
- **Downstream Control Facility**
Decommissioning Existing Outlet Works

- Decommission original outlet tower, valve vault and city pipelines
- Cut & cap existing pipelines
- Connect new outlet works to city pipelines and cut/cap existing city pipelines
- Connect new outlet works to water authority’s system
Contractor’s Baseline Schedule

(Construction Contract Duration)  11 Months

Complete Outlet Works (Tower, emergency release system and water delivery system)

Decommission Exist OW

May 2014 FINISH

May Begin Reservoir Fill*

* Subject to water availability
Construction Update

Contract Action for Construction Management Services

Closed Session
  - Potential Litigation
Parsons-Black & Veatch Joint Venture

Awarded in 2008

Contract Amount: $28,561,000

Scope

- Package 2 (Foundation Excavation) - Complete
- Package 3 (Dam Raise) - Ongoing
Summary of Services During Peak Work

- Construction Management – 10 People
  - Coordination with contractors, Designer DSOD, City of San Diego, other Project Stakeholders.
  - Construction Contract Administration
  - Claims Support

- Quality Assurance – 20 People
  - Field Inspection and Materials Testing
  - Documentation
# Summary of Contract Amendments

<table>
<thead>
<tr>
<th>Original Contract Value</th>
<th>$ 28,561,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amendment 1</td>
<td>$ 0</td>
</tr>
<tr>
<td>Amendment 2</td>
<td>$ 0</td>
</tr>
<tr>
<td>Amendment 3</td>
<td>$ 3,106,595</td>
</tr>
<tr>
<td>Amendment 4</td>
<td>$ 0</td>
</tr>
<tr>
<td>Amendment 5</td>
<td>$ 200,198</td>
</tr>
<tr>
<td>Amendment 6</td>
<td>$ 3,156,491</td>
</tr>
<tr>
<td>Amendment 7</td>
<td>$ 1,044,465</td>
</tr>
<tr>
<td><strong>Recommended Contract Value</strong></td>
<td><strong>$ 36,068,749</strong></td>
</tr>
</tbody>
</table>
Summary of Work till May 2014 - Amendment 7

- Construction Management – 4 people
  - Coordination with Contractors, Designer, DSOD, City of San Diego, other Stakeholders
  - Construction Contract Administration
  - Project Closeout and Claims Support

- Quality Assurance/Inspection and Documentation – 2 people
  - Plunger Valve Anchorage Issue
  - Connection to New Water Delivery System
  - Disconnect City’s Old System
Cost Recovery to Date

- Liquidated Damages at $50,000/day of Delay: $9.95 million
- Inspection Reimbursement: ~ $1 Million
- Retention: ~ $14 million
Staff Recommendation

Approve Amendment 7 in the amount of $1,044,465 to provide extended construction management, inspection, and materials testing services for the ESP - San Vicente Dam Raise and Carryover Storage project due to delayed construction contract completion, increasing the contract amount from $35,024,284 to $36,068,749.
Bay–Delta Conservation Plan: Preliminary Assessment of Financing Risk Parameters

Imported Water Committee
January 23, 2014

Amy Chen, Director of MWD Program
BDCP Update

- Public draft of BDCP and EIR/EIS released December 13, 2013
  - 120 day formal review period
  - Public meeting scheduled for February 6, 2014 in San Diego at the Convention Center from 3:00pm – 7:00pm

- Staff continues its evaluation of the public draft
## BDCP Project Cost Estimates

<table>
<thead>
<tr>
<th>BDCP Component</th>
<th>Type of Cost¹</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capital</td>
<td>O&amp;M</td>
<td>Total</td>
</tr>
<tr>
<td>Water Facilities &amp; Operation (CM1)</td>
<td>$14,571</td>
<td>$1,456</td>
<td>$16,027</td>
</tr>
<tr>
<td>Natural Community Restoration (CM2–CM11)</td>
<td>$4,170</td>
<td>$237</td>
<td>$4,406</td>
</tr>
<tr>
<td>Other stressors (CM12–CM22)</td>
<td>$927</td>
<td>$1,735</td>
<td>$2,661</td>
</tr>
<tr>
<td>Changed circumstances</td>
<td>$184</td>
<td>–</td>
<td>$184</td>
</tr>
<tr>
<td>Local government revenue replacement</td>
<td>–</td>
<td>$226</td>
<td>$226</td>
</tr>
<tr>
<td>Monitoring &amp; research measures</td>
<td>–</td>
<td>$913</td>
<td>$913</td>
</tr>
<tr>
<td>Plan admin.</td>
<td>–</td>
<td>$336</td>
<td>$336</td>
</tr>
<tr>
<td><strong>Total²</strong></td>
<td><strong>$19,851</strong></td>
<td><strong>$4,902</strong></td>
<td><strong>$24,754</strong></td>
</tr>
</tbody>
</table>

¹ in Millions of 2012 dollars
² Total may not add due to rounding

Source: Bay Delta Conservation Plan, Tables 8–33 and 8–34
Funding Sources

- BDCP envisions costs will be shared between water export contractors and the state and federal governments
  - Exporters: Conveyance facilities and related mitigation costs
  - State/Federal: Ecosystem restoration costs
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractors</td>
<td>$16,027</td>
<td>$266</td>
<td>$269</td>
<td>$224</td>
<td>$113</td>
<td>$31</td>
<td>$16,930</td>
</tr>
<tr>
<td>USBR</td>
<td>$0</td>
<td>$50</td>
<td>$602</td>
<td>$1,077</td>
<td>$640</td>
<td>$100</td>
<td>$2,469</td>
</tr>
<tr>
<td>Other Fed Funds</td>
<td>$0</td>
<td>$346</td>
<td>$460</td>
<td>$10</td>
<td>$200</td>
<td>$60</td>
<td>$1,076</td>
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<tr>
<td>Props 1E &amp; 84</td>
<td>$0</td>
<td>$0</td>
<td>$142</td>
<td>$21</td>
<td>$0</td>
<td>$0</td>
<td>$163</td>
</tr>
<tr>
<td>2014 Water Bond</td>
<td>$0</td>
<td>$184</td>
<td>$900</td>
<td>$430</td>
<td>$0</td>
<td>$0</td>
<td>$1,514</td>
</tr>
<tr>
<td>Future Water Bond</td>
<td>$0</td>
<td>$205</td>
<td>$1,200</td>
<td>$840</td>
<td>$0</td>
<td>$0</td>
<td>$2,245</td>
</tr>
<tr>
<td>Other State Funds</td>
<td>$0</td>
<td>$10</td>
<td>$40</td>
<td>$0</td>
<td>$145</td>
<td>$0</td>
<td>$195</td>
</tr>
<tr>
<td>Interest Income</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$20</td>
<td>$0</td>
<td>$145</td>
<td>$165</td>
</tr>
<tr>
<td>Total Funding</td>
<td>$16,027</td>
<td>$1,061</td>
<td>$3,613</td>
<td>$2,623</td>
<td>$1,098</td>
<td>$336</td>
<td>$24,758</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$16,027</td>
<td>$1,061</td>
<td>$3,610</td>
<td>$2,623</td>
<td>$1,097</td>
<td>$336</td>
<td>$24,754</td>
</tr>
<tr>
<td>Difference</td>
<td>$0</td>
<td>$0</td>
<td>$3</td>
<td>$0</td>
<td>$1</td>
<td>$0</td>
<td>$4</td>
</tr>
</tbody>
</table>

1 In millions of 2012 dollars

Source: Bay Delta Conservation Plan, Public Draft, Chapter 8, December 2013, Table 8–37.
State and federal regulations require assurance of funding to issue permits under the habitat conservation plan.

Federal ESA requires that HCPs specify “the applicant will ensure that adequate funding for the plan will be provided” for conservation actions – courts have interpreted broadly.

ESA case law strongly supports the notion that funding must be assured and an HCP “cannot rely on speculative future actions of others.”
Cost allocation negotiations between and among state and federal water export contractors are ongoing

- Water Authority requested, but is not involved in cost allocation negotiations

- BDCP indicates that the actual funding share between state and federal contractors will not be determined until “near the time that permits are issued for BDCP”

- Lack of cost allocation certainty hinders the ability to assess cost impacts and risks
Possible Cost Allocation Scenarios for Water Authority Risk Assessment

Because cost allocation has not been finalized, staff analysis uses a bookend approach to potential cost allocation scenarios.

**Scenarios**

1. Contractors pay for only conveyance/mitigation costs of $16.9 billion, with costs shared 55/45 between SWP and CVP.

2. All $24.8 billion of BDCP costs paid by contractors, with costs shared 55/45 between SWP and CVP.

3. Contractors pay for only conveyance mitigation costs of $16.9 billion, with urban agencies from SWP and CVP paying 90 percent of costs and agricultural agencies paying 10 percent. – MWD share assumed to be 58 percent of urban share.
## Range of Potential BDCP Costs to the Water Authority

<table>
<thead>
<tr>
<th>Description</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractors pay for conveyance</td>
<td>Contractors pay for all costs</td>
<td>Contractors pay for conveyance; Urban and agricultural split: 90/10</td>
<td></td>
</tr>
<tr>
<td>Cost share between SWP &amp; CVP: 55/45</td>
<td>Cost share between SWP &amp; CVP: 55/45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost (Capital and O&amp;M)</td>
<td>$16,930M</td>
<td>$24,754M</td>
<td>$16,930M</td>
</tr>
<tr>
<td>SWP (or urban in scenario 3)</td>
<td>$9,312M</td>
<td>$13,617M</td>
<td>$15,237M</td>
</tr>
<tr>
<td>MWD</td>
<td>$4,218M</td>
<td>$6,168M</td>
<td>$8,832M</td>
</tr>
<tr>
<td>Water Authority</td>
<td>$1,055M</td>
<td>$1,542M</td>
<td>$2,208M</td>
</tr>
</tbody>
</table>
## Range of Incremental Capital Unit Costs for MWD*

<table>
<thead>
<tr>
<th>Description</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractors pay for conveyance, Cost share between SWP &amp; CVP 55/45</td>
<td>Contractors pay for all costs, Cost share between SWP &amp; CVP 55/45</td>
<td>Contractors pay for conveyance; Urban and agricultural split: 90/10</td>
<td></td>
</tr>
<tr>
<td><strong>Annualized Debt Service</strong></td>
<td>$1,111M</td>
<td>$1,563M</td>
<td>$1,111M</td>
</tr>
<tr>
<td><strong>SWP share (or urban)</strong></td>
<td>$611M</td>
<td>$859M</td>
<td>$1,000M</td>
</tr>
<tr>
<td><strong>Annualized Debt Service to MWD</strong></td>
<td>$277M</td>
<td>$389M</td>
<td>$579M</td>
</tr>
<tr>
<td><strong>BDCP Op Scn.</strong></td>
<td><strong>High Outflow</strong></td>
<td><strong>Low Outflow</strong></td>
<td><strong>High Outflow</strong></td>
</tr>
<tr>
<td><strong>Potential Benefit (TAF)</strong></td>
<td>299</td>
<td>424</td>
<td>299</td>
</tr>
<tr>
<td><strong>Incremental Unit cost ($/AF)</strong></td>
<td>$926</td>
<td>$653</td>
<td>$1,302</td>
</tr>
</tbody>
</table>

*Analysis varied the cost obligations only, assumes MWD’s share of the BDCP benefits remains constant – i.e., 45.3 percent (Table A) of 55 percent (SWP share).
Summary and Observations

- **Funding**
  - Federal and state share – dependent on future bond passage and/or appropriation
  - Exporters share
    - Allocation not yet finalized

- **BDCP “Big Gulp”**
  - Contractors’ ability and willingness to capture and store wet year supply for dry year use critical
  - Storage fill plan and financing strategy needed at MWD
# BDCP Alternatives Review & Analysis: 2013 Activities

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Imported Water Committee/Board Activity</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/25/2013</td>
<td>Provide input on scope of proposed Water Authority analysis of BDCP alternatives; provide input on policy questions to be addressed</td>
<td>✓</td>
</tr>
<tr>
<td>8/8/2013 Special Meeting</td>
<td>Overview of Bay–Delta and proposals for Delta fix, including description of alternatives</td>
<td>✓</td>
</tr>
<tr>
<td>8/22/2013</td>
<td>Review of technical analysis – demand assumptions; alternative project yield assumptions; projected costs</td>
<td>✓</td>
</tr>
<tr>
<td>9/12/2013 Special Meeting</td>
<td>BDCP economic study on cost–benefit of BDCP preferred alternative</td>
<td>✓</td>
</tr>
<tr>
<td>9/26/2013</td>
<td>Review of technical analysis (cont.), including yield review</td>
<td>✓</td>
</tr>
<tr>
<td>10/24/2013</td>
<td>Information: Review of technical analysis (cont.), including baselines; BDCP timeline and processes impacting implementation</td>
<td>✓</td>
</tr>
<tr>
<td>11/14/2013 Special Meeting</td>
<td>Supply and demand evaluation and analysis</td>
<td>✓</td>
</tr>
</tbody>
</table>
# BDCP Alternatives Review & Analysis: 2014 Activities

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Imported Water Committee/Board Activity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/9/2014</td>
<td>Identification of BDCP Physical features and facilities; supply/demand risk assessment</td>
<td>√</td>
</tr>
<tr>
<td>1/23/2014</td>
<td>Preliminary cost estimates and risk assessment to Water Authority</td>
<td>√</td>
</tr>
<tr>
<td>2/13/2014</td>
<td>Engineering assessment of BDCP cost estimates; BDCP Governance</td>
<td></td>
</tr>
<tr>
<td>2/27/2014</td>
<td>Economic and risk assessment (cont.)</td>
<td></td>
</tr>
<tr>
<td>3/13/2014</td>
<td>Summary presentation of BDCP issues; Identification of issues to be addressed in the EIR/EIS comment letter</td>
<td></td>
</tr>
<tr>
<td>3/27/2014</td>
<td>Action: Consider action on final EIR/EIS comment letter</td>
<td></td>
</tr>
<tr>
<td>4/24/2014</td>
<td>Revise BDCP schedule; discuss outstanding policy issues; timeline for future board meetings</td>
<td></td>
</tr>
</tbody>
</table>
Federal Legislative Priorities

Legislation, Conservation, and Outreach Committee
January 23, 2014
Developing a Federal Legislative Action Plan

- Carpi & Clay continues to actively represent the Water Authority and its interests in Washington, D.C.
  - Ken Carpi
  - Eric Swedlund

- Staff and federal legislative advocates will continue to rely on the Board’s policy direction within the Legislative Policy Guidelines

- The purpose of this product is to outline the implementation program to advance the Board’s policy objectives
# Federal Legislative Priorities

<table>
<thead>
<tr>
<th>Federal Legislative Priorities (At-a-Glance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pursue opportunities for funding authorization for desalination projects.</td>
</tr>
<tr>
<td>2. Advocate for federal funding authorization opportunities for desalination and water recycling projects through new Water Resources Development Act legislation.</td>
</tr>
<tr>
<td>3. Participate and engage closely to influence the direction of emerging regulatory issues.</td>
</tr>
<tr>
<td>4. Communicate the Water Authority’s interests in the Bay–Delta Conservation Plan with the San Diego congressional delegation and other key federal officials.</td>
</tr>
<tr>
<td>5. Pursue continued federal appropriations for important regional water reuse projects through Title XVI Water Reclamation funding opportunities.</td>
</tr>
<tr>
<td>6. Continue to regularly apprise members of the San Diego congressional delegation of developments regarding the Water Authority’s interests in the Colorado River.</td>
</tr>
<tr>
<td>7. Continue to inform and apprise the San Diego congressional delegation of developments related to Salton Sea restoration.</td>
</tr>
<tr>
<td>8. Continue to inform the regional congressional delegation regarding the Water Authority’s energy needs and contributions and explore options for further regulatory relief to reduce costs for ongoing and planned projects and operations.</td>
</tr>
<tr>
<td>9. Regularly apprise the San Diego congressional delegation and other key federal officials regarding the Water Authority’s interests in pursuing opportunities for infrastructure funding and public finance developments.</td>
</tr>
</tbody>
</table>
Value of Water Outreach Update

Legislation, Conservation and Outreach Committee
January 23, 2014
Background

- Focused communications on issue recommended as priority
  - LCO Committee goal for 2013-2014
- Growing need to improve ratepayer understanding of:
  - Bills they pay = water reliability received
  - Elements of water system they may not know
  - Investments necessary for repairs and maintenance
  - Value of services provided for unit cost paid
2013 Activities

- Integrated into existing communications
  - Media relations
  - Annual report
  - Promotions and social media
- New efforts
  - Articles, bill stuffer
  - Video
  - Summer movie campaign
2014 Strategies

- Build on successful activities from 2013
- Strengthen visual identity – better branding
- Improve metrics
- Expand message to tie in water conservation services
- Spotlight ROI of investments this year
  - Increased protection from drought conditions
- Explore partnerships
Planned Activities

- Create logo
- Establish online information hub
- Pursue partnerships
  - Joint Public Information Council recommendation: craft breweries and restaurants
- Develop yearlong calendar
  - Love Your Water contest
  - Spring conservation push
  - Water Awareness month
  - More activities through the fall
Governor Declares Drought Emergency

• Governor Brown proclaims a State of Emergency in California due to drought on January 17, 2014
• Directs state agencies to expedite the processing of voluntary water transfers
• Enacts a statewide water conservation campaign
• Implements water-use reduction plans at state facilities
• Takes action to provide assistance to farmers and communities damaged economically by dry conditions
State Water Project Hydrologic Conditions

- Record dry conditions in California in CY 2013
- First snow season survey on January 3, 2014
  - State’s snow water content at record low of 20% of average
  - Snow water content on January 22, 2014 decreased to 13% of normal statewide and 7% in the northern Sierra
- Initial CY 2014 SWP Table A allocation of 5%
  - Initial allocation for CY 2010 was 5%, eventually increasing to 50%
Lake Oroville Conditions
(as of Midnight - January 21, 2014)

Current Level: 1,266,193 AF

- 36% (Total Capacity)
- 54% (Historical Avg.)

Data Updated 01/22/2014 08:45 AM
Reservoir Conditions - San Luis

San Luis Levels: Various Past Water Years and Current Water Year, Ending At Midnight January 21, 2014

Total Reservoir Capacity: 2,038,000 AF

San Luis Conditions
(as of Midnight - January 21, 2014)

Current Level: 625,160 AF
31% (Total Capacity) 40% (Historical Avg.)

Data Updated 01/22/2014 08:45 AM
Colorado River Hydrologic Conditions
January 21, 2014

- Water year 2014 precipitation
  - 92% of average

- Basin snowpack water content
  - 96% of average

- Combined storage in Lake Mead and Lake Powell
  - 2014: 22.5 MAF, 45% Capacity
  - 2013: 26.2 MAF, 52% Capacity
Local Service Area Conditions
December 31, 2013

- Local reservoir storage approximately 219,630 AF including carryover, or 76% of average

- Water Authority Storage
  - Local carryover storage: 3,700 AF
  - Semitropic groundwater storage bank 16,100 AF

### Water Year 2014 Precipitation
Through December 31, 2013

<table>
<thead>
<tr>
<th>Station</th>
<th>Actual in.</th>
<th>% Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lindbergh Field</td>
<td>2.19</td>
<td>70%</td>
</tr>
<tr>
<td>Ramona Airport</td>
<td>4.38</td>
<td>81%</td>
</tr>
</tbody>
</table>
Member Agency Fiscal Year Potable Water Use

- July – December of FY 2014 is 1% less than in FY 2013
National Weather Service Precipitation Outlook
February – April 2014

THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID FMA 2014
MADE 16 JAN 2014

EC MEANS EQUAL CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW
Impacts due to Dry Conditions Vary Statewide

- Impacts depend on supply portfolio of the region
- For example, San Juan Water District asking customers to reduce indoor use by 20 percent and eliminate outdoor water use
  - Serves eastern Sacramento and southern Placer Counties
  - Rely on Lake Folsom, which is at 17 percent of capacity
- Central Valley farmers and communities forecast major economic losses due to farmland not being planted this year
Impacts due to Dry Conditions Vary Statewide (cont.)

- San Diego region better able to manage dry-year conditions, due to:
  - Ratepayer investments over last 20 years to diversify resources and implement strong conservation efforts
  - Regional water use remains low
  - MWD storage reserves at 2.4 MAF
- MWD staff has stated that supply allocations are not anticipated in 2014
- No shortages expected for San Diego region in 2014
## Comparison of Water Use and Supply Conditions
### CY 2007 and CY 2013

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2007</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Water Use</td>
<td>725,900 AF</td>
<td>572,200 AF</td>
</tr>
<tr>
<td>Member Agency Local Supplies</td>
<td>77,000 AF</td>
<td>87,900 AF</td>
</tr>
<tr>
<td>Water Authority Colorado River Transfer Supplies</td>
<td>73,125 AF</td>
<td>180,000 AF</td>
</tr>
<tr>
<td>Regional Reliance on MWD Supplies</td>
<td>79%</td>
<td>53%</td>
</tr>
<tr>
<td>MWD End of Year Storage</td>
<td>1.8 MAF</td>
<td>2.4 MAF</td>
</tr>
</tbody>
</table>
Water Authority Dry-Year Regional Management Tools

- Water Shortage and Drought Response Plan
  - Provides guidance on regional actions to manage dry-year conditions
  - Provides orderly, incremental approach to drought response
    - Implementation of stages and actions may vary based on specific dry-year conditions

- Model Drought Response Ordinance
  - Contains shortage levels and core water-use restrictions
    - Progressive severity of restrictions to avoid economic hardship
  - All member agencies updated ordinances based on model
  - Triggered when reasonable probability of supply shortages
## Water Shortage and Drought Response Plan

### Drought Response Matrix – Firm Demands

<table>
<thead>
<tr>
<th>POTENTIAL SDCWA DROUGHT ACTIONS</th>
<th>STAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voluntary Supply Management</td>
</tr>
<tr>
<td>Ongoing BMP Implementation</td>
<td>X</td>
</tr>
<tr>
<td>Communication Strategy</td>
<td>X</td>
</tr>
<tr>
<td>Monitoring supply conditions and storage levels</td>
<td>X</td>
</tr>
<tr>
<td>Call for voluntary conservation</td>
<td>X</td>
</tr>
<tr>
<td>Put in and take from SDCWA Carryover Storage</td>
<td>X</td>
</tr>
<tr>
<td>Secure transfer option contracts</td>
<td>X</td>
</tr>
<tr>
<td>Buy phase 1 spot transfers (cost at or below Tier 2 rate)</td>
<td>X</td>
</tr>
<tr>
<td>Call transfer options</td>
<td>X</td>
</tr>
<tr>
<td>Buy phase 2 spot transfers (cost at or below Tier 2 rate)</td>
<td>X</td>
</tr>
<tr>
<td>Implement allocation methodology</td>
<td></td>
</tr>
<tr>
<td>Utilize ESP Supplies</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion: Near-Term Steps

- Continue to closely monitor supply and demand conditions
- Maintain strong water-use efficiency message
- Get input from member agency managers on regional messaging and potential actions (Feb. managers’ meeting)
- Provide detailed report to Board in February
  - Update on supply and demand conditions
  - Further information on Water Authority management tools
  - Summary of input received from member agencies
  - Overall assessment and recommendation on potential actions