General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Maureen A. Stapleton
General Manager

Budget Overview
Factors Impacting the FYs 16&17 Budget

• Challenging Water Conditions
  – Water supply allocations
  – State Water Resources Control Board Imposed Regulations
• Carlsbad desalination deliveries
  – Water Purchase Agreement administration
• Asset Management Program implementation
• Hydroelectric Opportunities Explored
• Continued focus on efficiencies and effectiveness
  – Cost containment
  – Leveraging partnerships
• Proposition 1 Grant Funding Opportunities
FYs 16&17 Recommended Budget

Water Purchases & Treatment: $957,526 (64%)
Debt Service: 282,804 (19%)
CIP Expenditures: 136,825 (9%)
Operating Departments: 94,143 (6%)
Hodges Pumped Storage: 4,204 (<1%)
Equipment Replacement: 4,219 (<1%)
Other and Grant: 19,108 (1%)

Total Budget: $1,498,829 (100%)

Water Purchases & Treatment = 92% of TOTAL BUDGET
Historical Spending

Expenses (in Millions $)

Cost of Water Sales  Capital Improvement Program  Debt Service  Operating Depts  Other

FY00  FY01  FY02  FY03  FY04  FY05  FY06  FY07  FY08  FY09  FY10  FY11  FY12  FY13  FY14  FY15  FY16  FY17

$-  $100  $200  $300  $400  $500  $600  $700  $800  $900

San Diego County Water Authority
Historical Staffing

<table>
<thead>
<tr>
<th>FY00</th>
<th>FY01</th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
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<td>475.00</td>
<td>495.00</td>
<td>515.00</td>
<td>535.00</td>
</tr>
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</table>

Reduction of 6.25 FTEs
Managing Staff Resources

- Current budget reduced 6.25 FTEs
  - 6.75 eliminated
  - 2.00 repurposed for new Energy Program
  - 0.50 new O&M position
- 8 positions downgraded

- Since FY08 (height of CIP) reduced 49.60 FTEs or 17% of workforce
Overview of Labor and Benefits

<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Net Impact</th>
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<tr>
<td>Position Reductions</td>
<td>&lt;$2.0 M&gt;</td>
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<tr>
<td>Retirement/Health Benefit Changes</td>
<td>$1.6 M</td>
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<tr>
<td>Downgrade in Position Classifications</td>
<td>&lt;$0.5 M&gt;</td>
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<tr>
<td>Position Addition (two-years of ½ time position)</td>
<td>$0.1 M</td>
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<tr>
<td>Overtime</td>
<td>&lt;$0.1 M&gt;</td>
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<tr>
<td>Other</td>
<td>$0.3 M</td>
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<tr>
<td><strong>Overall Change in L&amp;B</strong></td>
<td>&lt;$0.6 M&gt;</td>
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</table>
Workshop Schedule

Day One
• Cost of Water
• Capital Improvement Program
• Debt Service
• Hydro Power Revenues and Costs
• Equipment Replacement Fund
• Grants

Day Two - Operating Departments
• Water Supply
  – Colorado River Program, MWD Program, Water Resources
• Water Facilities
  – Engineering, Operations & Maintenance
• Core Business
  – Administrative Services, Finance, General Counsel, General Manager & Board of Directors, Public Outreach and Conservation
General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Ken Weinberg
Director of Water Resources
Background

- Water Authority conducts two water use forecasts
- Long Range Demand Forecast
  - Used in water resource planning, facility planning, Environmental Impact Reports and long range financial planning
  - Based on SANDAG Regional Demographic and Economic Forecast
  - Basis for compliance with Growth and Water legislation
  - Updated every five years with Urban Water Management Plan
  - Assumes compliance with 20% by 2020 conservation mandate
Background

• Short-term Budgetary Forecast
  – Projections used in multi-year budget document and annual rate setting process
  – Basis for near-term operational planning
  – Reflects a “snapshot in time”
    • Considers what's actually occurring and current conditions
  – May not align with long-term forecast
  – Influenced by multiple current factors
  – State Board Regulations
Factors Influencing Short-term Sales

Anticipated Impact on Sales

- Weather
- Member Agency Local Supplies
- Economic Conditions
- State-wide Mandatory Use Restrictions
- Regulatory Agency Restrictions on Supply
- SWP Table A Allocations
- Supply Allocations
- Regional Use Restrictions
- Extraordinary Conservation Messaging
- Wholesale Water Rates
Trends in Total Water Demand

Total Demand
(Thousands of Acre-Feet)

- Recession
- Supply Shortage
- Mandatory Use Restrictions
- Supply Allocations

- Recession
- Supply Shortage
- Mandatory Use Restrictions
- Supply Allocations

- Record Heat

Member Agency
Local Surface Water Use

Historic
Projected

Normal Year

Water Use (TAF)

Total Water Sales

Monthly Sales (AF)

Jan-06  Jul-06  Jan-07  Jul-07  Jan-08  Jul-08  Jan-09  Jul-09  Jan-10  Jul-10  Jan-11  Jul-11  Jan-12  Jul-12  Jan-13  Jul-13  Jan-14  Jul-14  Jan-15

- 10,000  20,000  30,000  40,000  50,000  60,000  70,000  80,000
Program Agricultural Sales

-50% Drop in Program Ag sales July 07 to July 12

-Current Peak Season Ag demand equal to previous off-peak
Current Activities Influencing Potential Drought Response Actions in 2015/2016

- **Supply** availability from MWD
  - MWD allocation based on Level 3, 15% cutback
  - July 1, 2015 – June 30, 2016 allocation period
  - Surcharge for exceedance: $1,480/AF to $2,960/AF

- **Demand** reductions required statewide
  - Governor's April 1 Executive Order: 25% water savings mandate
  - SWRCB emergency conservation regulations
    - Establishes individual reduction targets for each member agency
Current Activities Influencing Potential Drought Response Actions in 2015/2016

• **Water Authority Drought Response Actions**
  – Declared Level 2 Drought Alert July 2014
  – April 2015 approved ordinance limiting outdoor irrigation of ornamental landscape to 2 days per/wk

• **Potable Supply Availability**
  • MWD allocation: 274 TAF
    • 15% cutback
  • Carlsbad Desal : 39 TAF
  • Colorado River Transfers: 180 TAF
  • Available supply meets 99% of demand
Main Assumptions for Sales Forecast
Fiscal Years 2016 and 2017

1. Start with SWRCB emergency regulations urban conservation standards
   - Estimated M&I total potable water use reduction of 20% from FY 2014
2. Subtract estimated FY 2016 potable local supplies provided by member agencies
3. TSAWR allocation (sales) based on MWD 15% supply cutback
4. Remain in shortage conditions in FY 2017

<table>
<thead>
<tr>
<th>Actual, Estimated and Forecasted Water Authority Sales (Acre-Feet)</th>
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<tbody>
<tr>
<td>FY 2014 (Actual)</td>
</tr>
<tr>
<td>FY 2015 (Estimated)</td>
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<tr>
<td>FY 2016 (Forecasted)</td>
</tr>
<tr>
<td>FY 2017 (Forecasted)</td>
</tr>
</tbody>
</table>
Water Supply Sources

Two-Year Water Purchases of 920,000 Acre-Feet

- Stored Water Purchases: 6%
- Desalination: 9%
- Canal Lining: 17%
- IID Transfer: 22%
- MWD: 46%

Two-Year Water Supply Purchases of $725 million

- Stored Water Purchases: 5%
- Desalination: 21%
- Canal Lining: <1%
- IID Transfer: 18%
- MWD Tier 1: 34%
- MWD Transportation: 22%

1) Excludes MWD fixed RTS and CRC charges
2) Canal & IID costs exclude debt service for capital projects and recovery of settlement expenditures
3) Desalination costs include Water Authority supply costs only
QSA Costs in Fiscal Years 2016 and 2017

- **IID Transfer**
  - 200 KAF or $129 M
- **All-American and Coachella Canals**
  - 160 KAF or $2 M
- **MWD wheeling costs**
  - 360 KAF or $158 M
Water Purchase Price Poseidon WPA

2012

- Fixed Charges: 1,312
- Pipeline Debt: 195
- Variable Charges: 557

Estimated 2016 (Dec 2012)

- Fixed Charges: 1,418
- Pipeline Debt: 210
- Variable Charges: 609

2016 - Current Estimate

- Fixed Charges: 1,443
- Pipeline Debt: 210
- Variable Charges: 714 *

*Based on highest electricity rate applicable.
Twin Oaks Valley Water Treatment Plant

• Planned decrease in plant production due to desal & lower demand
  – Estimated 50 MGD in FY16
  – Estimated 50 MGD in FY17
• Decrease in contract operations costs ($850K)
• Decrease in electricity costs ($500K)
General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Capital Improvement Program
Frank Belock

San Diego County Water Authority

Budget Document Pages 109-165
FYs 16&17 Budget

- Water Purchases & Treatment: 64%
- Debt Service: 19%
- Operating Departments: 6%
- CIP Expenditures: 9%
- All Others: 2%
Capital Improvement Program Components

• Planning
• Design
• Construction
• Project Management
• Construction Management
• Environmental Documents
• Mitigation
• Regulatory Agency Coordination
• Warranty
• Member Agency Coordination

• Right-of-Way Acquisition
• Public Outreach
• Record Drawings
• O & M Manual
Capital Improvement Program 2000-2020

CIP Expenditures (in millions)
Capital Improvement Program 2000-2020

Olivenhain Dam
$198 million
Capital Improvement Program 2000-2020

Coachella Canal Lining
$129 million
Capital Improvement Program 2000-2020

CIP Expenditures (in millions)

Twin Oaks Treatment Plant
$179 million
Capital Improvement Program 2000-2020

CIP Expenditures (in millions)

All-American Canal
$149 million
Capital Improvement Program 2000-2020

San Vicente Pipeline
$300 million
Capital Improvement Program 2000-2020

Lake Hodges Pumped Storage
$208 million

CIP Expenditures (in millions)

Capital Improvement Program 2000-2020

San Vicente Dam Raise
$825 million
Capital Improvement Program 2000-2020

CIP Expenditures (in millions)

Carlsbad Desal
$1 billion
Capital Improvement Program 2000-2020

Pipeline 3 Relining
Lake Murray to Sweetwater Reservoir
$54 million

CIP Expenditures (in millions)
Aqueduct System

Early 2000’s
- Miles of pipe: 279
- Pump Stations: 3
- Storage: 0 AF

Now
- Miles of pipe: 310
- Pump Stations: 7
- Storage: 200,000 AF
- 1 Water Treatment Plant
- 1 Dam and Reservoir
- 2 New Hydroelectric Facilities
- Desal Implementation
- 11 Additional Flow Control Facilities

New Technology
- Aqueduct Operating Plan (AOP)
- Weekly Operating Plan
- On-line Water Ordering System
- Real-time Water Quality Monitoring
- Acoustic Fiber Optic (AFO)
- Magnetic Flux Leakage (MFL)
- Remotely Operated Vehicle (ROV)
- Smartball Leak Detection
- Remote Corrosion System Monitoring
- Fleet Global Positioning System (GPS)
- Security Access Card System & Cameras
- Emergency Operations Center (EOC)
Asset Management History

- Aqueduct Protection Program (APP)
- Pipe Relining
- Valve and Venturi Replacement Program
- Failures

2006 Pipeline Failure
Board Policy

- **Asset Management Plan (2009)**
  - Deriving the most value from an asset through its entire life cycle
  - Aligns with Strategic and Business Plans
  - Supports Risk-based decision making

- **Asset Management Program Funding Policy (2010)**
  - Cost efficiency, predictable rates
  - Blend of Operating and Capital projects
  - Delivering system reliability at the lowest cost and least impact to MA’s
Condition Assessment

- Visual
- Magnetic Flux Leakage (MFL)
- Acoustic Fiber Optics (AFO)
- Remote Field Eddy Current (RFEC)
- Corrosion Protection Survey

Field Condition Assessment
Prioritization

- Risk Matrix
  - Probability of Failure (Condition)
  - Consequence of Failure (Impacts)

- Project Recommendations
Visualization

Consequence of Failure:
Community Park, Housing

Probability of Failure:
Static PCCP wire break measurements (RFEC)

Consequence of Failure:
Power Line, High-Pressure Gas

Probability of Failure:
Real-time PCCP wire break measurements (AFO)

Google Earth Risk Visualization
Project Review Process

- Managers-Committee, Executive-Oversight, Board of Directors-Approval

Project Review Flowchart
## Recommended Projects (FY16/17)

<table>
<thead>
<tr>
<th>CIP Project</th>
<th>Category</th>
<th>Description</th>
<th>Phase</th>
<th>FY 16/17 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Rehab.</td>
<td>Facilities</td>
<td>Pipelines 1/2 structure rehabilitation</td>
<td>Design</td>
<td>$1.2 M</td>
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<tr>
<td></td>
<td>Pipelines</td>
<td>Pipeline protection at Moosa Creek</td>
<td>Design</td>
<td>$0.5 M</td>
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<tr>
<td></td>
<td>Facilities</td>
<td>Carlsbad 1 Flow Control Facility (FCF) replacement</td>
<td>Construction</td>
<td>$4.6 M</td>
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<td>Facilities</td>
<td>Vallecitos 2/Vista Irrigation District 1 FCF replacement</td>
<td>Construction</td>
<td>$1.7 M</td>
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<tr>
<td></td>
<td>Pipelines</td>
<td>Thirteen miles of Steel Pipe condition assessment</td>
<td>Assessment</td>
<td>$2.8 M</td>
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<tr>
<td></td>
<td>Pipelines/Facilities</td>
<td>Various rehabilitation projects such as actuator replacements, pumpwell installation, cathodic protection system fixes, and FCF rehabilitations</td>
<td>Design/Construction</td>
<td>$9.0 M</td>
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<tr>
<td>Relining and Pipe Replacement</td>
<td>Pipelines</td>
<td>Pipeline 4 relining, Lake Murray to Alvarado</td>
<td>Construction</td>
<td>$10.8 M</td>
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<td>Pipelines</td>
<td>Design of Pipeline 3 relining, Lake Murray to Sweetwater</td>
<td>Design</td>
<td>$2.2 M</td>
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<tr>
<td></td>
<td>Pipelines</td>
<td>Relining mitigation and design efforts</td>
<td>Design/Construction</td>
<td>$0.2 M</td>
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</table>

**Total** $33.0 M
2016-2017 CIP Stats

• Source of Projects
  – Focus now is on Asset Management
    • Most of new projects come from the Asset Management Process
    • Also have projects from Board approved Facilities Master Plan.

• Principle project phases
  – Planning (13)
  – Design (17)
  – Construction (19)
Engineering Projects - Planning
ESP North County Pump Station
FY16/17 Budget: $3.9M
Mission Trails Flow Regulatory Structure
FY16/17 Budget: $1.1M
San Vicente Pumped Storage Study
FY16/17 Budget: $2.9M
Engineering Projects – Design

- San Vicente Post Construction Revegetation
- Carlsbad 5 MWD New Facilities for Desal
- Fallbrook 4, Rainbow 5, Rainbow 7 FCF Rehabilitation
- Microwave Communications Project
- Vallecitos 2 / Vista 1 FCF Replacement
- P3 Spring Street to Sweetwater Reservoir
- Mission Trails FRS II
- Carlsbad 6 FCF - Carlsbad 1 FCF Rehabilitation
- P4 Moosa Canyon Thrust Restraint/Erosion Control
- Source Technology for Condition Assessment
- First Aqueduct Structures & Lining Rehabilitation Hubbard Hill North
- First Aqueduct Structures & Lining Rehabilitation Hubbard Hill South
- Carlsbad 6 FCF - Carlsbad 1 FCF Rehabilitation
- P3 Lake Murray to Spring Street
- Pipeline 4 Relining Lake Murray Interconnect to Alvarado
- OLIV1 FCF Rehabilitation
- HLX1 FCF Rehabilitation
- Padre Dam 6 FCF Rehabilitation
Moosa Creek Pipeline Protection
FY16/17 Budget: $0.5M
Communication Facility
FY16/17 Budget: $1.0M
Lake Murray to SR125 (City of La Mesa Alignment)
FY16/17 Budget: $2.2M
South SR125 to Sweetwater Reservoir (Spring Valley Alignment)
Engineering Projects – Design

- San Vicente Post Construction Revegetation
- Carlsbad Post Construction Revegetation
- Carlsbad 5 MWD New Facilities for Desalination
- Fallbrook 4, Rainbow 5, Rainbow 7 FCF Rehabilitation
- Microwave Communications Project
- Vallecitos 2 / Vista 1 FCF Replacement
- P3 Spring Street to Sweetwater Reservoir
- P4 Moosa Canyon Thrust Restraint/Erosion Control
- Source Technology for Condition Assessment
- First Aqueduct Structures & Lining Rehabilitation Hub North
- Carlsbad 6 FCF - Carlsbad 1 FCF Rehabilitation
- P3 Lake Murray to Spring Street
- Pipeline 4 Relining Lake Murray Interconnect to Alvarado
- OLIV1 FCF Rehabilitation
- Padre Dam 6 FCF Rehabilitation
Engineering Projects – Construction

- Nob Hill Improvements
- Desal Product Water Conveyance Pipeline
- Vallecitos Connections to Desal Conveyance Pipeline
- San Vicente Bypass Pipeline
- San Vicente Marina Facility
- Padre Dam 7 FCF
- PCCP Relining P4 San Luis Rey
- Miramar Pump Station Rehabilitation
- Twin Oaks Valley WTP Expanded Service Area
- Carlsbad 6 FCF - Carlsbad 1 FCF Rehabilitation
- Microwave Communications Project
- San Vicente Post Construction Revegetation
- FCF Actuator Replacements
- Ramona Pipeline Cathodic Protection Bonding & Pump Well Installation
- Carlsbad 5 MWD New Facilities for Desal
- Fallbrook 4, Rainbow 5, Rainbow 7 FCF Rehabilitation
- Vallecitos 2 / Vista 1 FCF Replacement
- Pipeline 4 Relining Lake Murray Interconnect to Alvarado
- San Luis Rey
- Rancho Hydroelectric Facility Generator & Turbine Replacement/Rehabilitation
- San Vicente Post Construction Revegetation
Nob Hill Pipeline Realignment
FY16/17 Budget: $14.7M
San Vicente Marina
Total Budget: $32M
Miramar Pump Station Rehabilitation
FY16/17 Budget: $5.3M
Managing a project—big or small

- **Planning**
  - Gate 1: Project Initiation

- **Design**
  - Gate 2: Design Initiation
  - Gate 3: Preliminary Design
  - Gate 4: Mid-Point Design
  - Gate 5: Final Design

- **Construction**
  - Gate 6: Beneficial Occupancy
  - Gate 7: Approval to Go to Board to File NOC

- **Post-Construction**
  - Gate 8: Project Closeout
Managing a project–big or small

**Gate 1**
- Planning Study Final Report
- Identify Project Team
- Project Delivery Plan
- Preliminary Project Schedule
- Project Budget
- Risk Management Plan
- Preliminary Public Outreach Plan
- Environmental Studies Support
- Project Procurement Method and Plan
- Preliminary Right-of-Way Assessment
- Environmental Alternative Analyses
- Detailed Project Description and Scope
- Review the Lessons Learned Database
- Establish File Plan
Managing a project—big or small

Gate 2

- Life Cycle Cost Analysis
- Preliminary Design Report – updated cost and schedule
- Draft Environmental Impact Report
- Permitting Strategy
- Public Outreach Plan
- Right-of-Way Acquisition Plan
- Value Engineering Study
Managing a project—big or small

**Gate 3**
- Preliminary Design Documents
- Updated Construction Cost Estimate
- Board Adopted Final Environmental Impact Report and MMRP
- Baseline or Control Survey
- Updated Project Delivery Plan
- Input to Lessons Learned Database for Gate 2

**Gate 4**
- Mid-Point Design Documents
- Updated Construction Cost Estimate
- Construction Schedule
- Right-of-Way Verification
- Constructability Review
- Input to Lessons Learned Database for Gate 3
Managing a project—big or small

**Gate 5**
- Quality Assurance/Quality Control - Check Bid Package
- Final Contract Documents
- Updated Construction Schedule
- Right-of-Way Possession Certification
- Environmental Permits and Regulatory Approvals
- Updated Construction Cost Estimate
- Startup and Testing Plan
- Public Bid Preparation Plan
- Input to Lessons Learned Database for Gate 4
- Constructability Review

**Gate 6**
- Compile Punch List
- Compile Project Expectation List
- Change Order Summary
- Beneficial Occupancy Internal Meeting and Walkthrough
- Input to Lessons Learned Database for Gate 5
Managing a project—big or small

Gate 7

• Punch List Items Completed
• Change Order Summary
• “Red Lines” for Record Drawings
• “Red Lines” for Record Specifications
• Operations and Maintenance Manuals and Maximo Data
• Post-Construction Environmental Impact Surveys Completed
• Pre-Closeout Internal Meeting and Walkthrough
• Warranty Items Exceptions List
• Status Update of Project Expectation List
Managing a project—big or small

Gate 8
- Funds for Post-Mitigation
- Electronic Record Drawings Completed
- Equipment and Project Warranties provided to O&M
- Copies of Environmental Warranties provided to Water Resources
- All Invoices Received and Paid
- All Requirements of Construction Management Manual Sections 8.2 and 8.3 Satisfied
- Documented Resolution of Commitments and Agreements
- Input to Lessons Learned Database for Gates 7 and 8
- Record of Survey
- Warranty Management Plan
- Information to Finance to Capitalize Project
- Project Closed to Financial Charges
Number of positions managing the CIP

Increase of 36 positions
Number of positions managing the CIP

Decrease of 50 positions


# of Positions

0 10 20 30 40 50 60 70 80 90 100 110 120

Regular  LDEs  Contractors
Number of positions managing the CIP
Number of positions managing the CIP
Capitalized Overhead

• Water Authority costs that related to the CIP but not attributable to individual projects.
  – Examples:
    • Percentage of organization’s fixed costs (utilities and building maintenance)
    • Support departments
      – Administration: i.e. IT supporting computer systems used for projects
      – Public Affairs: i.e. Project related events and outreach
      – Finance: i.e. Payroll, Debt Management, Budget(CIP) Administration
Historical Capitalized Overhead

![Bar chart showing historical capitalized overhead from FY01 to FY17]
Summary

• Water Authority has executed a CIP of $3.37B which includes numerous projects that have advanced our goal of water reliability.

• Effectively managed the peaking of CIP through use of LDEs and consultant employees
  – Ramp up: 36 positions (9 regular FTEs)
  – Decrease: 50 positions (17 regular FTEs)

• CIP has now transitioned from constructing new facilities (assets) to managing them.
Debt Service

General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Lisa Marie Harris, Director of Finance/Treasurer
Capital Financing Plan

- Long-term Target CIP Financing Mix
  - Pay-As-You-Go/Cash funded (23%)
  - Fixed-rate debt funded (54%)
  - Short-term debt funded (23%)
Senior Lien Coverage Meets Board Policy Target

**Coverage Targets & Requirements**

<p>| | |</p>
<table>
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<td>Senior Lien Board</td>
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<tr>
<td>Policy Target</td>
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<tr>
<td>Senior Lien Bond</td>
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<tr>
<td>Covenant</td>
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<tr>
<td>Total Debt Service</td>
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<tr>
<td>Bond Covenant</td>
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</table>

**Meeting coverage target is important to maintain AA+/Aa2/AA+ ratings**

*Includes subordinate debt (i.e., commercial paper) and excludes super-subordinate Desal Pipeline debt*
CIP Spending

Capital Improvement Program Financing Mix*

*Excludes reimbursable capital expenditures
Fiscal Year 2016 Debt Portfolio

SDCWA Debt Mix*
$2.162 Billion

- Fixed Revenue Bonds, 28% ($607M)
- Variable Commercial Paper, 17% ($360M)
- Intermediate Fixed 5-Year Fixed Rate Notes, 4% ($87M)
- Fixed Taxable Build America Bonds, 24% ($526M)
- Fixed Certificates of Participation, 27% ($582M)

*Excludes Pipeline debt, CP program fees and trustee services
Existing Debt Service*

*Excludes Desal Pipeline debt, CP program costs and trustee services
Prudent Debt Management

*Excludes Desal Pipeline debt, CP program costs and trustee services*
Debt Service Expenditures

Past and Future Gross Debt Service Expenditures

FYs 2016 & 2017
Total Debt Service is $275.7M

FYs 2016 & 2017
Total Debt Service is $262.5M

*Excludes Desal Pipeline debt, CP program fees and trustee services
General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Gary Eaton, Director

Hydro Power Revenues and Costs
Lake Hodges Hydroelectric

<table>
<thead>
<tr>
<th></th>
<th>FYs 14&amp;15 Amended</th>
<th>FYs 14&amp;15 Estimate</th>
<th>FYs 16&amp;17 Recommended</th>
<th>Variance Budget to Budget</th>
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<td>Revenue</td>
<td>3,644</td>
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<td>5,600</td>
<td>1,956</td>
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<td>Expenses</td>
<td>4,133</td>
<td>3,775</td>
<td>3,615*</td>
<td>(518)</td>
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*Additional $589k budgeted exclusively for operational activities

- 24-Hour contract O&M
- Dual-purpose facility
- Overall budget increase 2% ($71K)
- Utilities cost increase ($90K)
- Full 2-year power production revenue increase ($1,956K)
## Rancho Peñasquitos Hydroelectric

<table>
<thead>
<tr>
<th></th>
<th>FYs 14&amp;15 Amended</th>
<th>FYs 14&amp;15 Estimate</th>
<th>FYs 16&amp;17 Recommended</th>
<th>Variance Budget to Budget</th>
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<tbody>
<tr>
<td>Revenue</td>
<td>1,800</td>
<td>1,595</td>
<td>1,400</td>
<td>(400) -22%</td>
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<tr>
<td>Expenses</td>
<td>430</td>
<td>429</td>
<td>848</td>
<td>418 97%</td>
</tr>
</tbody>
</table>

- Dual-purpose facility
- Expenses: Major maintenance due (10 year)
- Revenue: Production decrease due to reduced flows ($400K)
General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Gary Eaton, Director
Matt Brown, Director

Equipment Replacement Fund
Equipment Replacement Fund

• Business Systems
  – Servers & Computers
  – Major Enterprise Software

• Vehicles
  – Fleet Vehicles
  – Heavy Equipment

• Supervisory Control and Data Acquisition (SCADA)
  – Servers & Field Computers
  – Communications & Control Equipment
## Vehicle Evaluation Criteria

- Criticality to Operations
- Suitability for Function
- Maintenance Costs
  - Past & Future
- Downtime
- Options
  - Rent, Lease, etc.

### Table: 2016/2017 Requested Vehicle Replacement List (ESP)

<table>
<thead>
<tr>
<th>Description</th>
<th>General Replacement Information</th>
<th>Maintenance</th>
<th>Operating Cost Factor</th>
<th>Future Cost</th>
<th>Suitability</th>
<th>Suitability</th>
<th>Suitability</th>
<th>Weighting Factors</th>
<th>Cost to Replace</th>
<th>Depreciation</th>
<th>Percentage of Replacement Cost</th>
<th>Rent, Lease, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>90</td>
<td>1 ton Utility</td>
<td>17,665</td>
<td>5,000</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>50</td>
<td>1 ton Utility</td>
<td>9,800</td>
<td>5,000</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>30</td>
<td>1 ton Utility</td>
<td>4,900</td>
<td>2,500</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>15</td>
<td>1 ton Utility</td>
<td>2,450</td>
<td>2,500</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>10</td>
<td>1 ton Utility</td>
<td>1,225</td>
<td>2,500</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>5</td>
<td>1 ton Utility</td>
<td>615</td>
<td>2,500</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>2</td>
<td>1 ton Utility</td>
<td>308</td>
<td>2,500</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 Diesel Eng. - Crawler</td>
<td>1</td>
<td>1 ton Utility</td>
<td>151</td>
<td>2,500</td>
<td>0.25</td>
<td>1.40</td>
<td>1,040</td>
<td>8,200</td>
<td>$2,968</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evaluation Criteria

• Servers & Computers
  – Age, software, operating system, manufacturer support, historical maintenance, performance

• Enterprise Software
  – Manufacturer support
  – Compatibility
  – Compliance
# Equipment Replacement Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>FYs 16&amp;17 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles</td>
<td></td>
</tr>
<tr>
<td>14-Fleet Vehicles</td>
<td>$ 1,809,500</td>
</tr>
<tr>
<td>2-Heavy Duty Trucks</td>
<td></td>
</tr>
<tr>
<td>7-Heavy Equipment</td>
<td></td>
</tr>
<tr>
<td>Computers, Servers</td>
<td></td>
</tr>
<tr>
<td>48-Desktops</td>
<td>872,982</td>
</tr>
<tr>
<td>25-Laptops</td>
<td></td>
</tr>
<tr>
<td>22-Servers</td>
<td></td>
</tr>
<tr>
<td>43-Board Room A/V</td>
<td></td>
</tr>
<tr>
<td>16-Other equipment</td>
<td></td>
</tr>
<tr>
<td>SCADA</td>
<td>284,000</td>
</tr>
<tr>
<td>Enterprise Software Upgrade (PeopleSoft and email)</td>
<td>1,252,100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 4,218,582</strong></td>
</tr>
</tbody>
</table>
General Manager’s Recommended Budget for Fiscal Years 2016 & 2017

Ken Weinberg, Director
Jason Foster, Director

Grants
Grant Support for Essential Water Management Projects – FYs 2014 & 2015

- IRWM, Conservation, and Other
  - 6 Water Authority Projects - $4.4 Million
  - 8 Member Agency and County Projects - $19 Million
  - 4 Non-Profit Organizations Projects - $5 Million
- Funding supports achievement of water supply goals in 2010 Urban Water Management Plan
- Projects provide multiple water management benefits throughout region and help prepare region for future drought impacts
- Funds distributed across multiple years
Grant Support for Essential Water Management Projects – FYs 2016&2017

- IRWM Implementation – Grant Application anticipated award December 2015 ($31 Million)
  - 9 Water Authority and Public Agency Projects
  - 4 Non-Profit Organizations Projects

- San Diego Region Proposition 1 – FY2016 Availability
  - Water Recycling $625 Million
  - Seawater & Groundwater Desalination $100 Million
  - Stormwater Management $200 Million
  - San Diego River Conservancy $17 Million
  - Urban & Agricultural Water Conservation $100 Million
Other Support for Programs – FYs 2016&2017

• San Diego Gas & Electric
  – Clothes Water Rebates ($128,000)
  – Leak Loss Programs ($340,000)
  – Detention Facility Retrofit (TBD)

• Hans Doe Charitable Trust
  – Educational and Conservation Materials