2012-2017 Business Plan

Administrative and Finance Committee
July 25, 2013

Maureen Stapleton
Business Plan History

The Business Plan is a comprehensive roadmap to our future based on strategic direction from the Board.

- First published in August 2004
- Looks out 5 years in the future
- Updated every 2 years
- Coordinates interdependencies
- Aligns our workforce
- Guides our resource allocation
- Communicates our goals
Business Plan History

- **2003**: MWD 85%
- **2012**: MWD 44%
Business Plan Successes

- 311 goals have been completed since 2004
- Awarded a 2012 ICMA Certificate of Achievement for Performance Measurement in Strategic Planning
- Increased transparency for our stakeholders
- Ensures alignment of our goals with Board strategies
2012-2017 Business Plan

The Business Plan is a comprehensive roadmap to our future based on strategic direction from the Board.

- 3 Focus Areas
- 21 Business Programs
- 77 Key Issues
- 174 Management Strategies
- 160 Goals
Current Operating Environment

- Reduced water sales volumes
- Increased water costs
- Transition from building to operating organization
- Impacts of the economic recession
- Ratepayer fatigue
- Regulatory impacts
- Legal challenges

The Water Authority must be adept and flexible to manage the challenges of our current and future environment.
Added Seawater Desalination Goals

10 goals added July 2013:

<table>
<thead>
<tr>
<th>Water Supply Portfolio</th>
<th>Water Facilities</th>
<th>Core Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seawater Desalination (5)</td>
<td>Capital Improvement Program (3)</td>
<td>Financial Planning (1)</td>
</tr>
<tr>
<td></td>
<td>Operations and Maintenance (1)</td>
<td></td>
</tr>
</tbody>
</table>
Fiscal Year 2013 Performance

- Long term target has been achieved: 36 goals (23%)
- On track or ahead of schedule: 102 goals (64%)
- Not on track: 15 goals (9%)
- Deleted or delayed due to a decision by the Water Authority Board: 7 goals (4%)
Goals Deleted or Delayed

- Approval of a MOU with Camp Pendleton on a potential desalination project.
- Completion of the 2013 Regional Water Facilities Optimization and Master Plan Update.
- Completion of the Water Authority Climate Action Plan to guide implementation of greenhouse gas reduction measures.
- Certification of Program EIR for the 2013 Regional Water Facilities Optimization and Master Plan Update and Climate Action Plan.
3 Goals Not on Track

- Completion of the final EIR/EIS for the Imperial Irrigation District/Water Authority joint petition to the State Water Resources Control Board.
- Execution of the contracts with the City of Carlsbad and Vallecitos Water District to purchase treated water from the Carlsbad Desalination Plant.
- Completion of the San Vicente Dam Raise and Carryover Storage.
- Execution of long-term wetland mitigation and banking agreements sites.
Goals Completed - Water Supply Portfolio

- Adoption of the Bay-Delta work plan.
- Attainment of a favorable ruling on the Quantification Settlement Agreement litigation.
- Completion of agreements between the local regulatory agencies and the member agencies regarding oversight of recycled water use sites.
- Approval by the Board of the Carlsbad Desalination Project Water Purchase Agreement and associated environmental documentation.
Goals Completed - Water Facilities

- Completion of the relining of Pipeline 4 from State Route 52 to Lake Murray.
- Installation of video surveillance equipment at Rancho Penasquitos Hydroelectric Facility, San Vicente Pump Station and Surge, and Lake Hodges Hydroelectric Facility.
Goals Completed – Core Business

- Completion of the Mitigated Negative Declaration for Pipeline 3 Relining Project (Sweetwater to Otay Segment).
- Increase of our investor base for long-term debt issues, including larger institutional investors.
- Approval by the Board of the updated 2013 Legislative Policy Guidelines.
- Achievement of the small business participation percentage goal, based on total procurement dollars.
Business Plan Next Steps

- www.sdcwa.org/mission-vision-values-strategies

- Next Business Plan update is scheduled for July 2014
Gregory Canyon Landfill

Engineering & Operations Committee

July 25, 2013

Larry Purcell and Frank Belock
Summary of Water Authority Concerns

- Plan has not been submitted to address potential impacts to aqueduct caused by:
  - Access roads
  - Streambed alteration
  - Possible blasting
  - Landfill leachate and gas
  - Slope instability
  - Impacts to landfill from pipeline rupture

- Will our pipelines need to be realigned or protected in place?
Summary of Water Authority Concerns (cont)

- Impacts to regional resources (San Luis Rey River and its watershed)
  - Leachate and landfill gas
  - Adequacy of landfill liner
  - Changes to groundwater flow
  - Impacts to wells and future water supply
Gregory Canyon Chronology

- October 1994: Board adopted neutral position on Prop C - General Plan change for Gregory Canyon Landfill

- 1999 to present: Staff has provided extensive comments to various project EIRs, landfill permit applications, etc.

- 2004 Solid Waste permit requires Gregory Canyon enter into a written agreement with the Water Authority regarding the protection or relocation of the First Aqueduct.
Gregory Canyon Chronology

- November 2004: Board did not take a position on Prop B - Repeal of Prop C

- March 2005: Board approval required for any Water Authority permit issued to Gregory Canyon

- April 23, 2009: Board directs staff to send RWQCB letter (sent April 28)

- April 29, 2009: RWQCB staff workshop on Gregory Canyon waste discharge permit
Gregory Canyon Chronology (cont)

- July 8, 2009: Water Authority staff submits letter to RWQCB outlining water quality and aqueduct concerns with Tentative Order for Gregory Canyon.
- June 2011: Scouring study submitted to Water Authority for review.
- May 2012: Water Authority staff and Gregory Canyon reach agreement on scouring issues.
GCL Permits

- **CalRecycle/LEA (Local Enforcement Agency)**
  - ✓ Solid Waste Facility Permit – issued Aug 2011
- **SWRCB/RWQCB**
  - ✓ Construction Storm water permit – enrolled Sep 2010
  - • Waste Discharge Requirements & Section 401 certification – pending
  - • National Pollutant Discharge Elimination System permit - pending
- **USACoE**
  - • Section 404 individual permit - pending
  - • Section 7 ESA & Section 106 SHPO consultation – pending
- **CDFW**
  - ✓ Streambed Alteration Agreement for SLR bridge – issued Dec 2009
  - • Streambed Alteration Agreement for landfill - pending
  - • 2081 ESA permit – pending
- **APCD**
  - • Authority to Construct – proposed for issuance
  - • Permit to Operate - pending
- **SDCWA**
  - • Encroachment permit & Construction permit - pending
U.S. Army Corps of Engineers
Draft EIS
Draft EIS

- 308 acre landfill on a 1,770 acre site
- Bridge across San Luis Rey River
- Widening portion of SR76 (landfill access)
- Double composite liner, leachate and gas collection
- Soil borrow/stockpile areas, internal haul roads
- Ancillary facilities (toll booth, recycle drop-off, etc.)
- Perimeter drainage channels, retention basins
- Water storage and treatment tanks
- Relocate SDG&E transmission towers
- 1,313 acres dedicated as open space
Draft EIS (cont)

• Project proposes to leave aqueduct in place

BUT

• Allows for limited relocation as an “option”
  - South side of river only
  - 3,200 feet of 72” diameter steel pipe
  - 150 foot wide ROW
  - 12 foot wide patrol road
  - No construction schedule identified
Draft EIS (cont)

Staff attended Public Hearing January 31, 2013

- Protection of Local Water Resources
  - Lack of analysis on impacts to local water supply
- Protection of Water Authority facilities (Pipelines 1 and 2, future Pipeline 6)
  - Blasting concerns
  - Lack of detail on relocation option

All comments consistent with prior comments.
Draft EIS (cont)

Written Comments: April 15, 2013

- Reiterated prior written/oral comments
  - Protection of water resources & facilities
- Design of vehicular crossings over pipes
- Design of perimeter drain over pipes
- Leak/migration concerns
  - Leachate & Methane
- Use of ROW for mitigation

Corps evaluating comments received
Recent Discussions with Gregory Canyon

Their comments:

- Addressing concerns of equipment crossing our pipelines by constructing two bridges at vehicular crossings
- Realignment of our pipelines will be more than shown in draft EIS
- Their blasting studies show there will be 66 blasts in the first year, then complete
  - Eight within 1000 feet of pipelines
Recent Discussions with Gregory Canyon

Their comments (cont.):

- Anticipate Final EIS: July/August 2013
- Plan to provide us with the missing data after 404 is approved (They believe March 2014)
- They will be clearing river area near the end of 2013 (Habitat restrictions)
- Anticipate Board action: summer 2014
Summary

Major Issues

- Scour analysis was received June 11, 2011 and modified as requested and has been accepted – completed
- Revised blasting analysis
- Encasement design for permanent vehicle crossings
- Temporary bridge design for temporary vehicle crossings
- Detailed construction and operating plans for the landfill
Summary

Major Issues

• Protective of Local Surface and Ground Water Resources
  ▪ Highly engineered liner design
  ▪ Quality liner installation will be crucial
  ▪ Failure increases strain on imported supplies
  ▪ Proposal does not identify funding for new supplies or facilities

• Existing and Future Aqueduct Protection
  ▪ Physical damage (blasting, excavation, corrosion)
  ▪ Right of Way (road/drainage crossings, mitigation, stockpiles)
  ▪ Limited relocation as “optional” project component
Advertisement for Bids for the San Vicente Marina Facilities Construction Contract

Engineering & Operations Committee Meeting
July 25, 2013
Agenda

- Project Description
- Project Risk Management
- Upcoming Activities
Project Description
Project Description

- Marina
  - Buildings
  - Grading/Site Utilities
  - Paving
  - Park Amenities
  - Boat Ramp/Dock System
- Bypass Pipeline Segment
Project Description

- San Vicente Site
  - Access Roads
  - Lab Improvements
  - Dam Grouting
  - Shotcrete Staining
  - Selective Demolition
- Moreno/Vigilante Intersection Improvements
Project Risk Management - Design Phase
San Vicente Marina Facilities

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Maintaining reservoir level at low elevation to avoid flooding of work areas</td>
<td>▪ Coordinate with City on reservoir operations</td>
</tr>
<tr>
<td></td>
<td>▪ Includes a constraint in specifications that water level will rise after a specified date</td>
</tr>
</tbody>
</table>
## Project Risk Management - Design Phase
### San Vicente Marina Facilities

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overlap of marina facilities design and dam raise construction</td>
<td>Flew aerial in early May</td>
</tr>
<tr>
<td></td>
<td>Walked jobsite to verify as-built conditions</td>
</tr>
<tr>
<td></td>
<td>Completed independent constructability review</td>
</tr>
<tr>
<td></td>
<td>Updated plans</td>
</tr>
</tbody>
</table>
# Project Risk Management - Design Phase
## San Vicente Marina Facilities

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overlap of dam raise and marina construction contracts (sharing site)</td>
<td>Includes provisions in specifications for contractor coordination</td>
</tr>
<tr>
<td></td>
<td>Requires contractor participation in weekly construction progress meetings</td>
</tr>
<tr>
<td>Risk</td>
<td>Risk Response</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
</tr>
<tr>
<td>Contractor delay in construction completion</td>
<td>Completed independent constructability review to ensure time to complete is realistic</td>
</tr>
<tr>
<td></td>
<td>Collect liquidated damages to reimburse extended durations for Water Authority administrative costs</td>
</tr>
</tbody>
</table>
Upcoming Activities

- Construction estimate: $16.3M to $18.1M
- Advertise for construction bids: Early August 2013
- Recommend construction contract award: Fall 2013
- Marina completion: Fall 2014
- Revegetation completion: Spring 2015
Upcoming Activities

- Award Package 4 Bypass Pipeline Construction - Summer of 2014
- Fill to Height of Existing Dam (2014-2017)
- Obtain Division of Safety of Dams Certification
- Complete Package 4 Bypass Pipeline Construction - Winter of 2015
- Can Begin Filling to Full Height of Raised Dam
San Vicente Dam Raise
Construction Update and Contract Action

Engineering & Operations Committee Meeting
July 25, 2013
Agenda

- San Vicente Dam Raise - Project Background
- San Vicente Dam Raise - Construction Update
- Professional Services Contract with Parsons/Black and Veatch Joint Venture – Action
- Advertisement for Bids for the San Vicente Marina Facilities Construction Contract - Information
Emergency Storage Project

- Four Phases - $1.5 billion
- System of pipelines, pump stations and reservoirs
- Store water locally
- Provide more flexible water deliveries
- Over 90,000 AF
- Meet needs through 2030
San Vicente Dam Raise

Raised Dam: +117 feet

Existing Dam: 220 feet

+152,000 acre-feet

90,000 acre-feet in current reservoir

Reservoir Surface Area +500 Acres

Reservoir Surface Area 1,100 Acres

Acre-foot: amount of water used by two typical households in one year

Not to scale
Construction Packaging

- Package 1 - Test Quarry (completed)
- Package 2 - Foundation Preparatory Work (completed)
- Package 2B - Vegetation Cutting and Erosion Control (completed)
- Package 3 - Roller Compacted Concrete Dams and Appurtenant Facilities (in construction)
- Package 4 - Bypass Pipeline (in design)
- Package 5 - Marina Improvements (design complete)
- Package 6 - Post Construction Habitat Restoration (in planning)
Construction Update
Downstream Step Survey
Upstream Liner Installation
Low Level Outlet Gate Structure
Low Level Outlet Gate Structure
Outlet Tower
Downstream Control Facility
Schedule Update

Contractor’s Baseline Schedule

(Construction Contract Duration) 6 Months

- Complete Outlet Works
- Start-up Testing
- Decommission Exist OW
- May Begin Reservoir Fill

DECEMBER 2013 FINISH

RESERVOIR FILL TO EL.640
FALL 2014 - 2017

CONTRACTORS BASELINE SCHEDULE
Outlet Works Delay
Construction Management Contract

- 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 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>Recommended Contract Value</td>
<td>$ 35,024,284</td>
</tr>
</tbody>
</table>
### Summary of Additional Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension of CM Oversight</td>
<td>$ 2,109,331</td>
</tr>
<tr>
<td>Coring Program Support</td>
<td>$ 967,255</td>
</tr>
<tr>
<td>P5 Foundation Grouting Support</td>
<td>$ 79,905</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 3,156,491</strong></td>
</tr>
</tbody>
</table>
Cost Recovery

- Pending Reimbursement for Overtime Inspection to Date ($900K)
- Liquidated Damages: $50,000/day of Delay
Accept Amendments 4 and 5 for $200,198 and approve Amendment 6 in the amount of $3,156,491 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, extended main dam coring program, and marina facilities construction support, increasing the contract amount from $31,667,595 to $35,024,284.
Welded Steel Pipeline
Nondestructive Testing Services (Action)

Engineering & Operations Committee
July 25, 2013

Nathan Faber
# Water Authority Pipe Materials

<table>
<thead>
<tr>
<th>Pipe Material</th>
<th>Length (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prestressed Concrete (PCCP)</td>
<td>82</td>
</tr>
<tr>
<td>Welded Steel (WSP)</td>
<td>120</td>
</tr>
<tr>
<td>Reinforced Concrete</td>
<td>86</td>
</tr>
<tr>
<td>Bar-Wrapped</td>
<td>12</td>
</tr>
</tbody>
</table>

![Pie chart showing the distribution of pipe materials by length.]

- **PCCP**: 28%
- **Steel (WSP)**: 40%
- **Reinforced Concrete**: 28%
- **Bar-Wrapped**: 4%
WSP Inspection Technologies

1. Electro–Magnetic/Broadband Electro–Magnetic
   Disadvantage: shutdown schedule

2. Acoustic–Based Leak Detection
   Disadvantage: accuracy, resolution

3. Magnetic Flux Leakage (MFL)
Magnetic Flux Leakage (MFL)

- Development
  - Oil/Gas Industry
  - Pipeline Inspection Gauge Devices
  - SFPUC – Mortar Lining

- Large Magnets

- Magnetic Field

- Sensors
  - Uniform – No Flaws
  - Distorted – Flaws
Request for Proposals (RFP)

Scope

- Condition Assessment of WSP
- Any technology

Response

- Downloaded 96 Firms
- Pre-Proposal/Site Visit 16 Firms

Proposals Received

- Pure Technologies US Inc. using MFL

Panel Review

Recommendation
Authorize the General Manager to award a professional services contract in the amount of $1,119,000 to Pure Technologies US Inc. to provide nondestructive testing services and condition assessment of Pipeline 4 from Twin Oaks Water Treatment Plant to Paint Mountain.
Presentation Outline

- BDCP status
- Water Authority’s proposed review plan
- Proposed timeline for analysis
- Alternatives proposed for staff evaluation and analysis
- Proposed elements and framework of analysis
- Proposed policy questions to shape and frame analysis
Status of Bay–Delta Conservation Plan

- BDCP is a process for obtaining permits under the state and federal ESA for construction and operation of a Delta water conveyance system.

- All 12 chapters of the administrative draft of the BDCP and the consultant draft of the EIR/EIS have been released for public review.

- Public draft BDCP and final draft EIR/EIS are expected to be released for public comment by October 1, 2013.
  - 90-day comment period
  - Decision on the EIR/EIS is planned for April 2014.
Water Authority’s BDCP Review and Analysis

Objective: Provide the Board with an assessment of which BDCP alternative is most consistent with and best advances the:

- Water Authority’s Delta Policy Principles
- Reliability and supply diversification goals in the Water Authority’s 2010 urban water management plan

Staff review will:

- Analyze four alternatives that best demonstrate a range of proposals among the alternatives
- Highlight key issues to help inform the Board’s understanding of policy options
- Identify significant implementation risks
- Emphasize how and why issues impact the Water Authority
## Water Authority BDCP Alternatives Review & Analysis Schedule

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Imported Water Committee/Board Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 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>
</tr>
<tr>
<td>Aug. 8, 2013</td>
<td>Overview of Bay–Delta and proposals for Delta fix, including description of alternatives</td>
</tr>
<tr>
<td>Aug. 22, 2013</td>
<td>Review of technical analysis – demand assumptions; alternative project yield assumptions; projected costs</td>
</tr>
<tr>
<td>Sept. 26, 2013</td>
<td>Review of technical analysis (cont.), including responses to policy questions</td>
</tr>
<tr>
<td>Oct. 10, 2013</td>
<td>Summary of technical analysis: Comparison of alternatives with Delta Policy Principles</td>
</tr>
<tr>
<td>Oct. 24 2013</td>
<td>Information: Identify areas of concern; potential CEQA–NEPA comment letter</td>
</tr>
<tr>
<td>Nov. 21, 2013</td>
<td>Action: EIR/EIS comment letter; earliest opportunity to consider adopting position on BDCP alternative(s)</td>
</tr>
</tbody>
</table>
Staff Proposes to Analyze Four Alternatives

- BDCP Preferred Alternative
  - Twin tunnel water conveyance – 9,000 cfs maximum diversion capacity
  - Preferred alternative of the Administration and Delta exporters

- Delta Vision Foundation’s BDCP Plus Strategy
  - Isolated water conveyance facility – range of 5,000 cfs – 6,000 cfs diversion capacity
  - Emphasizes integrated implementation with storage and local projects to achieve co–equal goals
Staff Proposes to Analyze Four Alternatives

- NRDC’s Portfolio-Based Conceptual Alternative
  - Single tunnel water conveyance proposal – 3,000 cfs diversion capacity
  - Portfolio suite also includes south of Delta storage, ecosystem restoration, and local water projects

- No Action Alternative
  - Status quo with regard to conveyance facilities and capacity
BDCP Alternatives Analysis Framework

- **Description of alternatives**
  - Project components
  - South of Delta storage
  - Operational scenarios
  - Habitat restoration
  - Cost estimates
  - Delta export capacity
  - Local projects
  - Project water supply yield
  - Environmental impacts and mitigation

- **Demand assumption for each alternative**
- Amount and adequacy of project water supply yield
- Cost
- Risk and benefit analysis
- Financial impact to the Water Authority
- Analysis of alternatives within framework policy questions
BDCP Policy Questions – Water Supply Reliability

Does the alternative:

◦ Result in a more predictable and reliable Delta water supply?
◦ Provide regulatory certainty and assured quantity of water supplies?
◦ Integrate and support development of local water resources?
◦ Consider projected demands for the federal and state contractors in sizing of the export facility?
◦ Require additional facilities not included in the alternative to achieve reliability goals?
◦ Satisfy the co–equal goals of water supply reliability and ecosystem restoration?
BDCP Policy Questions – Ecosystem Restoration

- Does the alternative:
  - Have a reasonable prospect of restoring the Delta ecosystem to a point where species can recover and major water quality issues are addressed?
  - Present durable and reliable permit terms to provide assurances that fish and wildlife issues will not disrupt water supply delivery and reliability over the life of the permit?
BDCP Policy Questions – Facilities

- Is the conveyance facility identified in the alternative feasible from an engineering perspective?
- How reasonable are facility cost estimates?
- Is the design and construction schedule realistic?
What are the comparative risks associated with each alternative?
- Legal – compliance with statutory requirements
- Cost
- Rate base
- Water supply

What are the comparative benefits associated with each alternative?
- Protection against natural disasters
- Climate change – changing hydrology of the Delta
- Ease of implementation
- Diversification of supplies
BDCP Policy Questions – Financial Analysis

- What are the sources of funding?
- What is the cost–benefit analysis?
- What are the cost impacts on MWD?
- What is the range of potential cost allocation?
- What is the impact on MWD rates under each alternative?
- What is the range of rate impacts on the Water Authority?
- What risk does the Water Authority have under each alternative?
Board Member Guidance

- Is the scope of framework for analysis appropriate and sufficient?
- Are there additional issues that should be addressed?
- Are the policy questions the right ones to answer to evaluate and consider the BDCP alternatives?
Next Steps

- Staff will incorporate guidance from Member Agencies and Board to:
  - Refine and shape the scope of review and analysis
  - Develop a thorough and consistent evaluation product

- Process of seven meetings of the Imported Water Committee and Board between July 25 and November 21, 2013
  - Goal: approve comment letter on EIR/EIS

- At appropriate time, consider formal board position on alternative(s)
Preview of August 8 Board Workshop

- August 8 Board workshop: Staff will present information in the following areas:
  - Provide historical context of the BDCP
    - Background on Delta conflicts and challenges
    - Previous collaborative efforts to resolve Delta conflicts
    - Genesis of BDCP effort
    - Role of 2009 comprehensive Delta legislation
  - Overview of four BDCP alternatives staff proposes to analyze, including detailed descriptions of each alternative
sdcwa.org Website Improvement

Legislation, Conservation and Outreach Committee
July 25, 2013

Jason Foster, Public Outreach and Conservation Director
Tenille Otero, Public Affairs Representative
Background

- 2001 – Website upgraded

- 2009 – IT Strategic Plan identifies need to redevelop website

- 2009-2010 – Developed needs assessment using stakeholder input

- October 2010 – Launched redeveloped website
  - Incorporated needs assessment, latest web best practices

- 2010-2013 – Maintenance and assessment
Evaluation Process

- 2012 – Identified potential improvements
  - Public survey
  - Feedback from Board members, member agency staff, Water Authority employees, external stakeholders
  - Website enhancement committee (Public Outreach & Conservation, Administrative Services, and General Manager’s Office staff)
- Analyzed and prioritized feedback, updates in best practices, evolving communication needs
- Identified four key areas to improve functionality
Areas of Improvement

- **Home Page**
  - Decrease areas of competing information and improve readability and ease of use

- **Sub Pages**
  - Improve readability and ease of use

- **Sitemap**
  - Revise navigation structure to make information easier to find with fewer clicks

- **Search Function**
  - Provide users more options to find specific or complex information more easily
Projects, Facilities & Operations

Building and operating the infrastructure required to meet the county’s water needs now and into the future requires careful planning. The Water Authority uses a sophisticated approach to cost-effectively build, operate, maintain, and secure its water facilities as an integrated system.

The Water Authority will increase the height of the San Vicente Dam by 117 feet, making it the tallest dam in the United States and the tallest dam in the world. The raised dam will store an additional 132,000 acre-feet of water, more than doubling the capacity of San Vicente Reservoir.

The infrastructure that delivers water to and throughout the San Diego region is a massive network of facilities that addresses all aspects of transporting, treating, and storing water. The Water Authority has looked far into the future to ensure that this system will capably provide long-term demand management, emergency water supply storage, water treatment, and system versatility for generations to come.

The Water Authority’s Capital Improvements Program, initiated in 1989, coordinates the planning and building of critical water facilities in a thoughtful, visionary fashion to ensure that infrastructure development reflects and
Projects, Facilities & Operations

Building and operating the infrastructure required to meet the county’s water needs now and into the future requires careful planning. The Water Authority uses a sophisticated approach to cost-effectively build, operate, maintain, and secure its water facilities as an integrated system.

The Water Authority is a leader in the design and construction of innovative water infrastructure projects. The Authority has been at the forefront of developing innovative solutions to meet the water supply needs of the region.

The infrastructure that delivers water to and throughout the San Diego region is a massive network of facilities that addresses all aspects of transporting, treating, and storing water. The Water Authority has looked to the future to ensure that this system will continue to provide long-term demand management, emergency water supply storage, water treatment, and system versatility for generations to come.

The Water Authority’s Capital Improvement Programs are initiated in the early planning stages of projects. The goals are to ensure that infrastructure development reflects and addresses the region’s growth and environmental needs.

The Water Authority is committed to conducting its business in an environmentally sensitive manner. The Water Authority, through its environmental programs, aims to minimize impacts on the environment from its projects and programs.

The Water Authority also is committed to supporting cost-effective sustainability.
Next Steps

- July – Finish testing and site conversion
- Early August – Launch improved site
- 2013-2014 – Monitor and analyze usage
Small Contractor Outreach and Opportunities Program

SCOOP Committee Recommendation for Program Goal

July 25, 2013
About SCOOP

The purpose of SCOOP is to maximize small business participation on Water Authority procurements, including:

- **Contracts** - as primes, subcontractors and suppliers
- **Purchase orders and vouchers** - as vendors
Definitions

- Small Business
  - Based on size standards established by the U.S. Small Business Administration or the State of California

- Contractor
  - Consultants and contractors, including primes and subs

- Vendor
  - Providers of goods and services for which contracts are not required
About the SCOOP goal

- Based on new contract and purchase awards
- Established by the Board for the two-year budget period
- Applies to each fiscal year individually
- Measures small business dollars as a percentage of total dollars awarded
  - Includes analysis of:
    - Small business availability
    - Types of forecast procurement opportunities
Collected forecast solicitations from each department

Reviewed information sources for San Diego businesses
- Small Business Administration
- Dun & Bradstreet
- The Network

Conducted queries to obtain number of businesses for skills needed for each project

<table>
<thead>
<tr>
<th>NAICS Codes</th>
<th>TOTAL # SD Firms</th>
<th>TOTAL # of SBE in SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>541340 - Drafting Services</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>238190 - Other Foundation, Structure, and Building Exterior Contractors</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>238990 - All Other Specialty Trade Contractors</td>
<td>1442</td>
<td>1416</td>
</tr>
<tr>
<td>237310 - Highway, Street, and Bridge Construction</td>
<td>303</td>
<td>288</td>
</tr>
<tr>
<td>541620 - Environmental Consulting Services</td>
<td>240</td>
<td>215</td>
</tr>
<tr>
<td>541360 - Geophysical Surveying and Mapping Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>541370 - Surveying and Mapping (except Geophysical) Services</td>
<td>101</td>
<td>99</td>
</tr>
<tr>
<td>541350 - Building Inspection Services</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>237110 - Water and Sewer Line and Related Structures Construction</td>
<td>131</td>
<td>110</td>
</tr>
<tr>
<td>541380 - Testing Laboratories</td>
<td>138</td>
<td>119</td>
</tr>
<tr>
<td>541330 - Engineering Services</td>
<td>1922</td>
<td>1715</td>
</tr>
<tr>
<td>238140 - Masonry Contractors</td>
<td>213</td>
<td>213</td>
</tr>
<tr>
<td>238110 - Poured Concrete Foundation and Structure Contractors</td>
<td>502</td>
<td>498</td>
</tr>
<tr>
<td>237990 - Other Heavy and Civil Engineering Construction</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>Relining Project</td>
<td>5223</td>
<td>4898</td>
</tr>
</tbody>
</table>
Adjustments

- Small business percentage goal adjusted once other values are factored in
  - Non-opportunity contracts
  - Forecast Spend on Miscellaneous Contracts 
    (*contracting opportunity not yet identified*)
    - Vendor Contracts
    - Purchase Orders
  - Historical achievement
  - Market factors
Forecast Spend FY14-15

Total Estimated Forecast Spend
$159,654,250

Construction Total
$134,149,500

Professional Services Total
$18,048,750

Miscellaneous POs
$1,000,000

Non-Opportunity Contracts Total
$1,456,000

Vendor
$5,000,000
## Historical Small Business Achievement

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total $ Awarded</th>
<th>Small Business $</th>
<th>Small Business Achievement %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>$474,559,207</td>
<td>$76,299,845</td>
<td>16%</td>
</tr>
<tr>
<td>2007</td>
<td>$118,736,945</td>
<td>$20,883,056</td>
<td>18%</td>
</tr>
<tr>
<td>2008</td>
<td>$41,179,477</td>
<td>$15,744,673</td>
<td>38%</td>
</tr>
<tr>
<td>2009</td>
<td>$110,694,189</td>
<td>$27,466,189</td>
<td>17%</td>
</tr>
<tr>
<td>2010</td>
<td>$170,771,174</td>
<td>$21,167,391</td>
<td>12%</td>
</tr>
<tr>
<td>2011</td>
<td>$40,862,936</td>
<td>$16,805,729</td>
<td>41%</td>
</tr>
<tr>
<td>2012</td>
<td>$27,575,263</td>
<td>$13,728,837</td>
<td>26%</td>
</tr>
<tr>
<td>2013</td>
<td>$33,951,942</td>
<td>$11,656,924</td>
<td>34%</td>
</tr>
</tbody>
</table>
Staff Recommendation

- Recommend a SCOOP program goal of 25 percent for fiscal years 2014 and 2015
SCOOP Committee Considerations

- Historical achievement
- Changing market conditions
- New Sheltered Market Program
- Aggressive, stretch goal

SCOOP Committee Recommendation

Recommend a SCOOP program goal of 30 percent for fiscal years 2014 and 2015
San Diego County Water Authority
2013 Regional Water Facilities Optimization and Master Plan Update

Water Planning Committee
July 25, 2013

Presented by: Ken Weinberg, Director of Water Resources
Development of Draft Master Plan Documents

- Supply/Demand Analysis and Scenario Planning
- Evaluation Thresholds and Decision Metrics
- Baseline System Performance
- Storage Utilization Analysis
- New Supply and Conveyance Options (Long-Term)
- Recommended System Improvements (Near-Term)
- Project Costs, Supply/Conveyance Cost Comparisons
- Overview of CEQA Process (Supplemental PEIR)
- Consider Approval/Selection of Recommended Projects
- In-line Hydroelectric Opportunities
- Review Specific Project Cost Estimates
Development of Draft Master Plan

Since January 2013

- 9 Water Planning Committee Meetings covering Master Plan elements
  - 5 Regular Committee Meetings
  - 4 Special Meetings/Workshops

- Member Agency Technical Advisory Committee (TAC)
  - 6 Meetings (including reservoir coordination meeting)
  - 3 workshops since January 2013
  - Reviewed and commented on detailed modeling and analysis results
  - Provided input on information presented to Water Planning Committee
Supply/Demand scenario planning has provided a reasonable range of demands on Aqueduct System

No Supply/Demand Gaps under Normal Weather
  - Dependent on member agencies achieving conservation and local supply targets

Supply/Demand Gaps will occur under Multi-Dry Year Weather and MWD water shortage allocation
  - Frequency of dry-weather occurrence
  - Magnitude of dry-weather shortfall
Developed evaluation metrics and performance thresholds
- Provided basis for new conveyance capacity and supplies
- Identified frequency and magnitude of maximum facility utilization and supply shortages
- Planned around acceptable risk levels

Conveyance risks increase by 2020
- Untreated capacity constraints
- New infrastructure needed between 2020 – 2025

Supply shortage risks increase beyond 2025
- Compounded with lower levels of local supplies and conservation
Preliminary List of Potential Projects

⇒ **Near/ Mid-Term Projects**
   (Project Implementation before 2025)
   1. ESP North County Pump Stations
   2. ESP San Vicente Pump Station 3rd Pump Drive and Power Supply
   3. Pipelines P3/P4 Conversion
   4. Mission Trails Flow Regulatory Structure
      4a. Lake Murray Control Valve
      4b. South County Intertie
   5. System Storage
   6. System Isolation Valves (various locations)
   7. Asset Management Program (various locations)
   8. Facility Planning Studies

⇒ **Potential Long-Term Projects**
   (Project Implementation beyond 2025)
   1. Pipeline 6
   2. Second Crossover Pipeline
   3. Camp Pendleton Desalination
   4. Colorado River Conveyance
## Preliminary Revisions to CIP Appropriations 2014 through 2025

<table>
<thead>
<tr>
<th>Description</th>
<th>2014 – 2025 Project Budgets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Existing CIP (all projects) (^1)</td>
<td>$2,961M</td>
</tr>
<tr>
<td>Potential Deferrals of Long-Term Projects beyond 2025 (^2)</td>
<td>($653M)</td>
</tr>
<tr>
<td>Deleted Service Connections</td>
<td>($20M)</td>
</tr>
<tr>
<td>Potential Long-Term Project Evaluations (^3)</td>
<td>$3.5M to $4.5M</td>
</tr>
<tr>
<td>Potential Re-scoping of Near-Term Projects</td>
<td>($8M) to $62M</td>
</tr>
<tr>
<td>Proposed New Near –Term Projects (^4)</td>
<td>$40M to $60M</td>
</tr>
<tr>
<td>Revised Total CIP (all projects)</td>
<td>$2,344M to $2,434M</td>
</tr>
<tr>
<td><strong>Net Change to 2014-2025 CIP Budget</strong></td>
<td>($546M) to ($637M)</td>
</tr>
</tbody>
</table>

1. Total CIP is $3.1 billion and includes expenditures beyond 2025.
2. Defers portion of Pipeline 6 and Second Crossover Pipeline beyond 2025.
3. Includes Camp Pendleton Desalination and Colorado River feasibility evaluations.
4. Includes system isolation valves and portion of P3/P4 Conversion Project south of delivery point. Estimate for total project ranges between $200-$220M.
Near-Term Projects (2014–2025)

- Address untreated water conveyance constraints
  - South County
  - MWD Delivery Point
- Improve operational flexibility to optimize existing assets
- Defer ~$700 million in CIP expenditures beyond 2025
- Revise scope and timing of existing projects (budgeted at $150 million) in current CIP
## Preliminary Master Plan Conclusions

### Long Term Projects (Beyond 2025)

<table>
<thead>
<tr>
<th>Project</th>
<th>Purpose</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Crossover Pipeline</td>
<td>Address untreated water delivery constraint s/o Twin Oaks</td>
<td>2035+</td>
</tr>
<tr>
<td>Pipeline 6 *</td>
<td>Address untreated water delivery constraint at MWD delivery point</td>
<td>2035+</td>
</tr>
</tbody>
</table>

### Beyond 2025 – Mutually Exclusive Options to Pipeline 6

<table>
<thead>
<tr>
<th>Project</th>
<th>Purpose</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado River Conveyance *</td>
<td>Convey QSA supply through a CWA-owned facility</td>
<td>2035+</td>
</tr>
<tr>
<td>Camp Pendleton Desalination *</td>
<td>Address potential regional supply shortages</td>
<td>2025+</td>
</tr>
</tbody>
</table>

* Implementation of a project would preclude other options.
Preliminary Master Plan Conclusions

Long-Term Projects (beyond 2025)

- Adaptive management strategy for long-term supply projects
  - Monitor local and imported water supply development per 2010 UWMP Scenario Planning
  - Monitor water demand trends and achievement of GPCD targets
  - Monitor other regional and statewide water issues affecting long-term supply options
  - Provide staff direction on continuing to develop long-term options
    - Colorado River Conveyance
    - Camp Pendleton Desalination
  - Determine implementation of facilities based on needs and cost efficiencies
CEQA Process
Benefits of Program EIR

- Avoid duplicative reconsideration of broad policies, alternatives, and program wide mitigation measures
- Provide a more exhaustive consideration of regional effects than would be practical in a project specific EIR
- Provide the basis for determining whether a subsequent activity may have new effects which had not been considered before
- Allow reduction in paperwork
Preliminary List of Potential Projects

⇒ Near/ Mid-Term Projects
(Project Implementation before 2025)
1. ESP North County Pump Stations
2. ESP San Vicente Pump Station 3rd Pump Drive and Power Supply
3. Pipelines P3/P4 Conversion
4. Mission Trails Flow Regulatory Structure
   4a. Lake Murray Control Valve
   4b. South County Intertie
5. System Storage
6. System Isolation Valves (various locations)
7. Asset Management Program (various locations)
8. Facility Planning Studies

⇒ Potential Long-Term Projects
(Project Implementation beyond 2025)
1. Pipeline 6
2. Second Crossover Pipeline
3. Camp Pendleton Desalination
4. Colorado River Conveyance
Why a Supplemental Program EIR?

CEQA Guidelines 15163

(a)(2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.”
<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 25, 2013</td>
<td><strong>Water Planning Committee</strong> – Board input for preparation of the Draft Master Plan, CAP, and SPEIR for public review. Obtain Committee approval of “Staff Recommended Projects.”</td>
</tr>
<tr>
<td>August 22, 2013</td>
<td><strong>Water Planning Committee</strong> – Board review of potential in-line hydroelectric opportunities and project specific cost estimates.</td>
</tr>
<tr>
<td>September 12, 2013</td>
<td><strong>Special Water Planning Committee</strong> – Workshop on outcomes of the Climate Action Plan (CAP) and review SPEIR content.</td>
</tr>
<tr>
<td>September 2013</td>
<td><strong>Initial Draft Master Plan</strong> - Member Agency and other interested parties review of draft document.</td>
</tr>
<tr>
<td>September 26, 2013</td>
<td><strong>Water Planning Committee</strong> – Review elements of the draft Master Plan, CAP, and SPEIR prior to public review release.</td>
</tr>
<tr>
<td>October 2013</td>
<td>Public Release of Draft SPEIR and Climate Action Plan</td>
</tr>
<tr>
<td>October-Nov 2013</td>
<td><strong>Public Hearing</strong> on Draft SPEIR, CAP and Draft Master Plan.</td>
</tr>
<tr>
<td>February 2014</td>
<td><strong>Regular Board Meeting</strong> - Certification of Final SPEIR and approval of Final Master Plan and CAP.</td>
</tr>
</tbody>
</table>
Staff Recommendation

1. Approve the list of proposed projects to be analyzed in a Supplemental PEIR prepared pursuant to CEQA for the 2013 Regional Water Facilities Optimization and Master Plan Update.
   - ESP San Vicente Pump Station 3rd Pump Drive and Power Supply
   - Pipelines P3/P4 Conversion
   - System Storage
   - System Isolation Valves (various locations)
   - Asset Management Program (various locations)

2. Direct staff to complete the Initial Draft of the 2013 Regional Water Facilities Optimization and Master Plan Update and distribute it to member agencies for review and comment
JULY 25, 2013
SAN DIEGO COUNTY WATER AUTHORITY BOARD MEETING

WATER PURIFICATION DEMONSTRATION PROJECT RESULTS

Marsi A. Steirer
Deputy Director
COMPONENTS

- Advanced Water Purification (AWP) Facility
- Independent Advisory Panel (IAP)
- San Vicente Reservoir Study
- Regulatory requirements
- Energy and cost analysis
- Education and outreach program
AWP Facility Testing & Monitoring Plan

- Testing period August 1, 2011 to July 31, 2012
- Measured for 342 constituents and parameters in recycled water, purified water, and imported water
- Conducted 9,000 individual water quality laboratory tests
- Implemented continuous and daily monitoring before and after each treatment step to verify integrity of each treatment process
AWP Facility Testing & Monitoring Results

- Purified water met all federal and state drinking water standards
- Overall water quality was exceptional, comparable to distilled water
- Lab tests plus continuous monitoring ensured only high quality water was produced
- Continuous and daily monitoring verified the integrity of the treatment process and equipment
INDEPENDENT ADVISORY PANEL

• Convened to provide expert peer review of the technical, scientific, and regulatory aspects of the Demonstration Project

• Requested by California Department of Public Health (CDPH)

• Provided feedback regarding
  – San Vicente Reservoir
  – AWP Facility
  – Proposed regulatory framework
INDEPENDENT ADVISORY PANEL CONCLUSIONS

- Ten IAP meetings over three years
- IAP issued summary “letter of findings” November 16, 2012
- Unanimously concluded that the San Vicente Reservoir augmentation project would be a landmark development for indirect potable reuse and would contribute to San Diego’s water portfolio

“...The Panel believes that the ... Report ... (is) responsive to the directives set forth by the City Council.”
SAN VICENTE RESERVOIR STUDY

• Determine water quality effects of purified water in the reservoir

• Establish the retention time and dilution of purified water in the reservoir

• Secure regulatory approval from CDPH and San Diego Regional Water Quality Control Board
SAN VICENTE RESERVOIR STUDY RESULTS

• Reservoir provides an environmental barrier that satisfies anticipated regulatory requirements

• Purified water will be diluted at least 200:1 under all anticipated reservoir operations

• Water quality in San Vicente will not be affected by adding purified water
REGULATORY FRAMEWORK

• Regulatory agencies, CDPH, Regional Water Board, and County Dept of Environmental Health, attended IAP meetings

• Regulators commented on:
  – AWP Facility equipment
  – Testing & Monitoring Plan
  – San Vicente Reservoir Study
REGULATORY FRAMEWORK RESULTS

• California Department of Public Health (CDPH) concept approval letter 9/7/2012

  “Based on CDPH’s review of the City’s ... submittal ... CDPH approves the San Vicente Reservoir Augmentation Concept.”

• City received a letter of concurrence from the Regional Water Board on 2/12/2013

  “The ... Water Board, with concurrence from USEPA, strongly supports the efforts of the City to develop the San Vicente Reservoir Augmentation Project...”
Energy:

• Energy consumption and greenhouse gas emissions of purified water delivered to San Vicente comparable to that of imported water

Cost:

• $2,000 per acre-foot to produce and convey 15 mgd of purified water to San Vicente Reservoir
PUBLIC OUTREACH & EDUCATION PROGRAM

Program Statistics to date:

- Speakers Bureau presentations/attendees 159/4,138
- Community events/attendees 58/7,500
- Facility tours/visitors 270/3,610
PUBLIC OUTREACH & EDUCATION

The San Diego Voice & Viewpoint

Speeding Towards Water Purification in San Diego

SAN DIEGO — Earlier this year, the City of San Diego concluded that treated water could be purified and sold to residents as a new source of water for San Diego. In the spirit of Cape Cod, the City of San Diego is spreading the word about the new technology that produces purified water. Tidbits adolescents around the City will probably not only the technology but also some other benefits - including superpowers - as an added perk.

Water is invaluable to keeping San Diego drinking. Yet San Diego has very little local rainfall and must rely on importing approximately 95 percent of its water from Northern California and the Colorado River. With the risk of earthquakes, droughts, and climate extremes and declining stocks of imported water, the reliability of this imported supply is threatened.

San Diego City Council Approves Water Purification

Water Reliability Coalition says new safe, reliable drinking water could supply up to 40 percent of the city's demand.

Final Report Says Recycling Water Is Not So Expensive

The report indicates recycling water does save scene money by reducing the need for imported water and by conserving the volume of water the city must handle.

Tide turns for water purification plan

‘Taking the Waste Out of Wastewater’

San Diego studies making drinking water from waste water

Purification system that makes toilet water clean enough to drink is closer to coming to San Diego.
PUBLIC OUTREACH & EDUCATION PROGRAM RESEARCH RESULTS

USE ADVANCED TREATED RECYCLED WATER AS AN ADDITION TO DRINKING WATER SUPPLY

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Favor</td>
<td>10%</td>
<td>35%</td>
<td>36%</td>
</tr>
<tr>
<td>Somewhat Favor</td>
<td>16%</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>Somewhat Oppose</td>
<td>19%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Strongly Oppose</td>
<td>45%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Unsure</td>
<td>10%</td>
<td>9%</td>
<td>4%</td>
</tr>
</tbody>
</table>
PUBLIC OUTREACH & EDUCATION PROGRAM
RESEARCH RESULTS

ACCEPTING OF RECYCLED WATER TO SUPPLEMENT DRINKING WATER IF RESPONDENT LEARNED CERTAIN FACTS

- **Strict Drinking Water Standards**: 73% in 2012, 54% in 2011
- **Used in Other Communities**: 66% in 2012, 50% in 2011
- **Supply 10% of Drinking Water**: 71% in 2012, 51% in 2011

[Bar chart showing the results for different criteria over the years]
BIOCOM
Building Industry Association of San Diego
Building Owners and Managers Association, San Diego Chapter
Citizens Coordinate for Century 3
Coastal Environmental Rights Foundation
Empower San Diego
Endangered Habitats League
Environmental Health Coalition
Equinox Center
Friends of Infrastructure
Industrial Environmental Association
National Association of Industrial and Office Properties
San Diego and Imperial Counties Labor Council
San Diego Audubon Society
San Diego Regional Economic Development Corporation
San Diego Coastkeeper
San Diego County Apartment Association
San Diego County Taxpayers Association
San Diego Business Leadership Alliance
San Diego Regional Chamber of Commerce
San Diego River Park Foundation
Surfrider Foundation, San Diego Chapter
Sustainability Alliance of Southern California
Utility Consumers’ Action Network
SUMMARY

ADVANCED WATER PURIFICATION FACILITY
Operated 12 months; produced water that met all state and federal standards

SAN VICENTE RESERVOIR STUDY
Satisfied all anticipated regulatory requirements

REGULATORY FRAMEWORK
Received conceptual approval for a full-scale project from CDPH & Regional Water Board

ENERGY & COST ANALYSIS
Determined energy use is comparable to imported water and costs $2,000 per AF

EDUCATION & OUTREACH
Increased understanding and approval of water purification

PROJECT REPORT
 Adopted by City Council in April 2013
ROAD MAP TO IMPLEMENTATION

1. Determine a preferred implementation plan and schedule that considers potable reuse options for maximizing local water supply and reducing flows to the Point Loma Wastewater Treatment Plant.

2. Continue outreach efforts

3. Develop a strategy for allocating potable reuse costs among local water and wastewater funding sources

4. Develop a financing plan

5. Monitor the development of direct potable reuse regulations

6. Join the Direct Potable Reuse Initiative led by the WateReuse Research Foundation

7. Coordinate potable reuse implementation strategy with Point Loma 2015 Permit Renewal Application

8. Continue AWPF operations
POTABLE REUSE FACILITY ALTERNATIVES
CONTACT INFO

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msteirer@sandiego.gov
619.533.4112
Purewatersd.org

Water Purification Demonstration Project

@PureWaterSD

purewatersd