History and Upcoming Milestones of the QSA

Imported Water Committee
July 28, 2016

Dan Denham, Colorado River Program Director
Late 1970s:
Water loss, canal spills, flooding

- Department of Water Resources finds misuse of water by IID
- Matter referred to State Water Board for adjudicatory hearing

70% of total Salton Sea inflow is comprised of agricultural drainage water
June 1984:
State Water Board Decision 1600

- IID in violation of California Constitution and Water Code regarding “reasonable and beneficial use”
- Water loss within IID could be reduced through reasonable conservation
April 1986:
IID Initial Transfer (MWD) EIR

- Mitigation measures not identified
- Salton Sea impacts identified as “significant”
- IID Board files Notice of Determination with “findings of overriding considerations”
September 1988:
Water Rights Order 88-20

- State Board determines that a long-term conservation goal of 367,900 AF is attainable for IID
- 100,000 AF transfer from IID to MWD already under consideration
- MWD to fund costs of implementation in exchange for water
The 1990s:

California’s Growing Water Needs

Colorado River Apportionments (million acre-feet)

Central Arizona Project groundwater recharge facility
The 1990s:
CA Drought and
MWD Cutbacks

- Water Authority is MWD’s largest customer - 30% of total sales
- Water Authority 95% dependent on MWD water
- Water Authority’s supplies cut by 31%; 50% threatened

February 1991
September 1995:
Water Authority and IID Reach MOU for 500,000 AF/Year

• Water Authority seeks independent, reliable, and diversified supply
• MWD declines IID’s offer for additional transfer
• IID finds economic value in San Diego
April 1998:
Transition from MOU to Transfer Agreement

- Water Authority and IID agree to terms for 300,000 AF transfer for up to 75 years and jointly petition the State Water Board
- MWD Exchange Agreement negotiations on dual track
- Length of Exchange Agreement term (30 yrs) vs Transfer Agreement (45 yrs) a major sticking point
MWD and CVWD file court actions against water transfer

• MWD and CVWD question:
  - State Water Board jurisdiction over Colorado River water
  - Seven Party Agreement regarding Priority 1-3 diversions
• MWD and CVWD dismiss protest when IID makes 100,000 AF available to them
November 1998:
Water Authority and MWD
Reach First Wheeling Agreement

• Parties agree to 30-year term with an initial price of $90/AF

• Agreement contingent upon:
  - Completion of environmental compliance
  - Securing canal lining funding
  - Quantification of IID and CVWD entitlements
1998 to 2002:
Joint Water Authority/IID Petition to the State Water Board

- Petition for a “change in point of diversion” and “change in place of use and purpose” of IID water
- To approve the petition, the Board needed to make a number of findings under CA water code
Environmental Impact Analysis

• Extensive mitigation measures were added for the Salton Sea including:
  - 15-years of mitigation water to maintain salinity and elevation
  - Habitat studies
  - Air quality monitoring
• State Water Board has continuing authority to add, delete, or modify mitigation measures
Stalled Negotiations

- Ramp-up schedule of 200,000 AF deferred to 2021
- No resolution of who pays for environmental impacts
- With no QSA signed in December 2002, Secretary attempts to reduce IID’s water allocation for 2003
2002 to 2003

QSA-Enabling Legislation

- Cost sharing agreement and QSA JPA established
- Water Authority, IID, and CVWD financial contributions:
  - Capped at $387M ($133M in 2003 $) for *mitigation*
  - Capped at $67 million for *restoration* ($30M in 2003 $)
October 2003: The Final Deal

| Priority 3 was quantified for IID and CVWD guaranteeing MWD 550,000 AF |
|-----------------------------|-------------------------------|
| IID/MWD 110,000 AF transfer extended an additional 13 years to 2041 resulting in an additional 1.5 MAF of water for MWD |
| CVWD received 100,000 AFY from IID at $50/AF - $125/AF in 1999 dollars |
| Due to quantification, MWD able to implement PVID program that has produced 1 MAF since 2005 |
| Due to quantification California (MWD and IID) has the ability to store up to 1.5 MAF in Lake Mead |
| IID received funding mechanisms to pay for major water conservation projects while protecting its senior water rights on the river |
| Water Authority secured $257 million in state subsidies to line portions of the All American and Coachella canals that produce 80,000 AFY for 110 years |
| Water Authority to receive 200,000 AFY of senior priority conserved water from IID |
| 16,000 AFY to the San Luis Rey Settlement Parties at no cost to settle a longstanding water rights dispute with the federal government |
Canal Lining Projects

- 8.5 MAF of water over 110-year life of the agreement
- Post-construction environmental mitigation is ongoing
- $257M subsidy from state for the $448M project
- ~$15/AF for operations and maintenance costs
The Cost of IID Water

Gross Domestic Product Implicit Price Deflator

30-Year Average Annual Increase: 2.2%
• Mitigation water to the Salton Sea ends in 2017
• Air Quality pilot projects currently moving forward
• Air Quality mitigation expected as largest expense post-2017
Basin States Activities

• 2007 Interim Guidelines
• Lake Mead recently hit historical low level and nearing shortage trigger
• Recent Drought Contingency Planning discussions may alter shortage cutbacks with impacts to California
December 31, 2017

Transfer and Exchange Agreement Milestones

Transfer Agreement Early Termination

• Initial term is 45 years from 2003-2047
• Option to terminate 10 years early

Exchange Agreement Extension

• Current term is 35 years from 2003-2037
• Option to extend the term by 10 years to match initial transfer

Canal lining water is separate and guaranteed for 110 years
Boulder Canyon Project
Post 2017 Allocations

Engineering & Operations Committee Meeting
July 28, 2016
Hoover Dam

- Power marketing by Western Area Power Administration
- Hoover Power
  - 2,074 MW Capacity
  - 4,527,000 MWh per year
- Power Limitations
Boulder Canyon Benefits

- SDCWA Allocation
  - 1.6 MW Capacity
  - 3,533 MWh per year Energy
- Wholesale Power Contracting
Energy Comparison

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<tr>
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<th>Supplies</th>
<th>Demands</th>
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<td>MWh / Year</td>
<td>26,426</td>
<td>275,303</td>
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Power Deliveries

- Electricity scheduling, transmission, and distribution
- Delivery Options
  - Carlsbad Desalination Plant
  - Water Authority Facilities
  - Member Agency Facilities
  - California Independent Systems Operator (CAISO)
Expenses & Revenue

- Energy & Capacity
- Environmental
- Capital Advancements
- Scheduling Coordinator
- California Independent Systems Operator
- Transmission & Distribution
Authorize the General Manager to execute the Electric Service Contract and Restated Implementation Agreement with the Western Area Power Administration to purchase power from the Boulder Canyon Project.
Ramona Pipeline Pump Well Notice of Completion

Engineering & Operations Committee Meeting
July 28, 2016
General Location Map
Existing Pipe Removed
New Pipe Section
New Pump Well Vault
Completed Project
## Contract Summary

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<tr>
<th>Description</th>
<th>Amount</th>
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<td>Original Contract Amount</td>
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<tr>
<td>Change Order</td>
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<tr>
<td><strong>Final Contract Amount</strong></td>
<td><strong>$493,687</strong></td>
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Authorize the General Manager to accept the Ramona Pipeline Pump Well project as complete, record the Notice of Completion, and release funds held in retention to Palm Engineering Construction Company Inc., following the expiration of the retention period.
Summer recess began on July 1

August 1 – Legislature returns for last month of 2016 legislative session
  ◦ 2015–16 legislative session concludes August 31
Water Authority Sponsored Legislation

- **AB 33 (Quirk)**
  - If the CPUC increases energy storage targets for IOUs, pumped hydropower storage facilities of any size would be eligible to meet targets
  - Senate Appropriations Committee – hearing on August 1

- **AB 2515 (Weber)**
  - Require DWR to regularly update the Model Water Efficient Landscape Ordinance
  - Synchronize MWELO update cycle with CALGreen Building Code revision cycle
  - Senate Appropriations Committee – hearing on August 1
November 2016 Ballot Initiatives

- On July 1, California Secretary of State certified ballot initiatives for 2016 general election ballot:

  - 17

- Legislature could still add measures to the ballot during the final month
  - $3.2 billion park bond measure?
  - Transportation fee?
November 2016 Ballot Initiatives

- Propositions 51 through 67 on November general election ballot

- Examples of key initiatives:
  - Proposition 53: “Cortopassi Initiative”
    - Statewide vote on revenue bonds for projects involving the state – when the bonds are in excess of $2 billion
  - Proposition 51: $9 billion general obligation school bond
  - Proposition 62: Repeal of death penalty
  - Proposition 64: Marijuana legalization
  - Proposition 67: Overturn of ban on single-use plastic bags
Recently announced it will initiate a review of California special districts

August 25: First scheduled hearing

Mission of LHC is to:
- Investigate government operations
- Issue reports, recommendations, and legislative proposals
- Promote efficiency, economy, and improved service

13-member Commission
- 5 appointed by Governor
- 2 appointed by Speaker of Assembly
- 2 appointed by Senate Rules Committee
- 4 are sitting legislators (2 Assembly/2 Senate)
Previous LHC Action Regarding Special Districts

- 1999–2000: LHC study and report
  - \textit{Special Districts: Relics of the Past or Resources for the Future}
  - Focus on special district:
    - Reserves
    - Property tax revenue
    - Transparency
    - Accountability
    - Financial practices
    - Board member compensation and benefits

- Many legislative efforts relating to property tax revenue redistribution and local government finance in subsequent years
Live WaterSmart Campaign Update

Legislation, Conservation and Outreach Committee
July 28, 2016
Campaign Objectives

• Deliver consistent message

• Promote positive, permanent commitment to efficiency
  • Indoors & outdoors
  • Water-efficient landscapes

• Emphasize available programs, proper behaviors
Campaign Launch

• July 26 event
• Partners lend support
Regional Media Coverage

- 7 TV stations, plus print & radio
Promotion on Websites

[Image of a webpage with a pop-up that reads "Live WaterSmart! Get a FREE WaterSmart checkup." There is also a banner for San Diego County Water Authority with links to different sections like Residential, Indoor Incentives, Outdoor Incentives, Tools & Services, Landscape Classes, Drought Info, Find Your District, and School Programs.]
Live WaterSmart!

Living WaterSmart is about making smart choices to use water as efficiently as possible, whether or not we are experiencing a drought. Working together, we can help ensure a reliable water supply to keep San Diego County prosperous and beautiful...both now and for generations to come.

For a comprehensive list of ways to Live WaterSmart, go to www.WaterSmartsd.org

How to Live WaterSmart

Top 10 Residential Water Efficiency Tips

- 1) Seek (free) professional help.
- 2) Look for trouble.
- 3) Load 'em up.
- 4) Come clean with the car.
- 5) Turn off the tap.
- 6) Start making WaterSense.
- 7) Tame your turf's thirst.
- 8) Work from the ground up.
- 9) Handle with care.
- 10) Get an upgrade.

For programs, incentives and more resources to help you or your business Live WaterSmart, go WaterSmartSD.org.
Social Media

#sandiego county #water use drops 23% in June. Way to #LiveWaterSmart!

June 2016: Water Use Even as Heat Rises

23%

Toni G. Atkins
Politician

SD Regional EDC @SDRegionalEDC · 22h
Just launched: #LiveWaterSmart campaign by @sdcwa. Make the most of every water drop in SD no matter the weather.

Thanks @SDGE for promoting water efficiency with #LiveWaterSmart at today's campaign launch.

San Diego County Water Authority
Mall Signage Partnership

- Mission Valley
- Horton Plaza
- Parkway Plaza
- Plaza Bonita
- North County
Advertising
Events and Promotions

• National Night Out (Aug. 2)
• Back-to-school outreach
• Restaurant Week (September)
Promotional Items

Food Scrapers

Wristbands
Promotional Items

Removable Vehicle Decals

Hose Nozzles

Erasers for kids
In Development

• Member agency materials

• Translations
Changes in San Diego Agriculture

Eric Larson
Executive Director
San Diego County Farm Bureau
National Rankings

- #20 farm economy among all counties
- #1 in nursery production
- #1 in avocado production
- #1 in number of farms
- #1 in number of organic farms
# Top Local Crops

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<tr>
<td>1</td>
<td>Ornamental Plants</td>
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<tr>
<td>2</td>
<td>Avocados</td>
</tr>
<tr>
<td>3</td>
<td>Tomatoes</td>
</tr>
<tr>
<td>4</td>
<td>Lemons</td>
</tr>
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<td>5</td>
<td>Eggs</td>
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<td>Berries</td>
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<td>Oranges</td>
</tr>
<tr>
<td>9</td>
<td>Herbs</td>
</tr>
<tr>
<td>10</td>
<td>Vegetables</td>
</tr>
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TSAWR Water Use

- 2007 water used = 110,309 acre feet
- 2015 water used = 41,055 acre feet
- Why the decline?
  - Investments in efficiency
  - Crop and technique changes
  - Water turned off
Why Water Turned Off

- Price of water has doubled in six years, nearly tripled in 11
- Investment in new technologies or crop change is expensive
- Older growers can’t rationalize the investment
- Acreage not always suited for different crop or different cropping technique
Water Price Challenges

- Commodity prices are static or declining
- Less rain means more water purchased
- Trend to hotter weather
- Poor water quality requires addition of a leaching quotient when irrigating
Water Turned Off
Micro Irrigation
Pressure Compensation
Tensiometers
Avocado Dense Planting
Hydroponics
Olives
Wine Grapes
Dragon Fruit
Low Water Use Plants
Amendment to professional services contract with Louis Berger Group

Water Planning Committee
July 28, 2016

Presented by: Bob Yamada
Director of Water Resources
LBG Expanded Scope of Work

- Technical & engineering support for CAM development
  - CAM documents key understandings between the parties
- Ensure appropriate cost determination & allocation
- Review Poseidon’s contractor procurements
- Ensure final WPA amendment:
  - mirrors risk transfer provisions
  - includes Water Authority involvement and approval rights similar to original WPA
Staff Recommendation

Authorize the General Manager to approve Amendment No. 6 to the professional services contract with Louis Berger Group for technical support services for the proposed intake and discharge modifications for the Claude “Bud” Lewis Carlsbad Desalination Plant, in the amount of $147,900, for a total contract value of $1,287,692, and extending the term from its current end date of December 31, 2016 to June 30, 2017.
Introduction

- Mitigation Program Background
- Mitigation Lands & Credits Status
- Why Purchase Now?
- Contingencies

USFWS: Southwestern Willow Flycatcher
Comprehensive Environmental Mitigation Program

- Manage existing regulatory commitments
- Develop Mitigation Credit Agreements
- Develop wetland mitigation sites
- Add missing habitat types and/or species to Water Authority’s mitigation credit inventory by:
  - Acquiring new mitigation lands or credits
  - Partnering with others to achieve mitigation goals
What is a Mitigation Bank

- A defined property where natural habitat has been preserved, restored or enhanced
- Owner/operator offers habitat acreage as a means to fulfills others’ permit requirements for mitigation lands
- Banks provide an opportunity to transfer mitigation risks to bank operator.
Why Purchase Now?

- Brook Forest Mitigation Bank provides:
  - Unique opportunity to purchase wetlands credits at a discount
  - Risks are mitigated by Bank
  - Wetland property is scarce in SD County
  - Most difficult to mitigate

USGS: Southwestern Willow Flycatcher
Brook Forest’s Commitments

- Responsible to construct wetlands & achieve performance standards
- Provide construction & performance financial securities
- Purchase cost includes long-term management endowment
- Credits available by Oct. 2017
Purchase Contingencies

- **Brook Forest:** Limited time to complete transaction

- **Water Authority:**
  - State and Federal Wildlife Agencies approve minor amendment to Natural Community/Habitat Conservation Plans
  - Written acknowledgement from the U.S. Army Corps of Engineers that the Brook Forest wetland mitigation credits can be held for future use for impacts yet to be determined.
Advance Wetland Mitigation Credit Purchase Agreement with Brook Forest

Staff recommendation:
Authorize the General Manager to conduct negotiations and potentially enter into an agreement to purchase six wetland (re-establishment) mitigation credits for an amount not to exceed $2.1 million.
Overview of San Diego Integrated Regional Water Management Program

Water Planning Committee
July 28, 2016

Presentation by:
Mark Stadler, Principal Water Resources Specialist/San Diego IRWM Program Manager
Loisa Burton, Senior Management Analyst/San Diego IRWM Program Grant Administrator
An innovative way to increase reliable water supplies, improve water quality and protect natural resources

Fosters cooperation among public agencies and non-profit public interest organizations

A mechanism through which the Region is eligible for state grant funding from voter-approved bond measures
State support for IRWM

- IRWM is the state’s “preferred method of funding” local water supply efforts
  - High priority for state since 2002, through 3 gubernatorial administrations
  - Key initiative in last 3 State Water Plan Updates
  - 3 voter-approved bond measures: $2 billion
  - 48 IRWM planning regions in California
San Diego IRWM Region

All or part of the 11 hydrologic units within San Diego County that discharge to coastal waters.
IRWM Governance Structure

Regional Water Management Group

- San Diego County Water Authority
- City of San Diego
- County of San Diego

Regional Advisory Committee
34 agencies and organizations, some with statutory authority over water management

Workgroups
focused on specific water resources topics

Interested Parties and Members of the Public

Tri-County FACC
- San Diego
- Upper Santa Margarita
- South Orange County
Regional Advisory Committee

- Formed in December 2006
- 28 voting members with diverse backgrounds and experience
  - Both public agencies and non-profits
- 7 non-voting members
- Provides input on key issues
Tri-County Agreement

- Prop 84 (2006) established 11 IRWM funding areas in state
- San Diego funding area comprises 3 planning regions
- $83 million for funding area
- Tri-County agreement established to divide funding and foster inter-regional cooperation
- Agreement honored in all 5 Prop 84 grant programs
  - Unique in state in this regard
2007 & 2013 IRWM Plans

- First San Diego IRWM Plan published 2007
- Plan updated in 2013
  - Satisfies new DWR IRWM Plan requirements
  - Maintain eligibility for grant funds
- Both 2007 and 2013 plans approved by Board
Public engagement in Plan update

- Collaboration with Regional Board Planning Study
- Land Use Planning Study
- Climate Change Planning Study
- Integrated Flood Planning Study
- Regulatory Workgroup
- Land Use Workgroup
- Climate Change Workgroup
- Integrated Flood Workgroup
- Governance & Financing Workgroup
- Priorities & Metrics Workgroup

2013 IRWM Plan
San Diego Region also received $1 million planning grant from Prop 84 fund to support 2013 Plan Update.
IRWM grant administration

- Water Authority is RWMG “lead agency” for:
  - Applying for grants
  - Negotiating and signing grant agreements
  - Administering grant funding
  - Representing RWMG to funding agencies such as DWR
IRWM grant administration

- Water Authority responsible for:
  - Contracting directly with project sponsors
  - Monitoring contractual requirements compliance
  - Reporting progress of projects and submitting invoices for reimbursement
  - Distributing funding to project sponsors

- To defray administrative costs, Water Authority receives 3 percent of all IRWM grant funding awarded to the region
IRWM Grant Award Will Total $129M by 2020

Grant Award ($)

Millions

2008
2016
2020

Calendar Year

Grant Program

- Proposition 1 ($38M) (estimate)
- Proposition 84 ($65M)
- Proposition 50 ($25M)

IRWM Grant Award Will Total $129M by 2020
IRWM Program Will Fund Approximately 87 Projects by 2020

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<tr>
<th>Calendar Year</th>
<th>Grant Award ($)</th>
<th>No. of Projects</th>
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<td>57</td>
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<td>2020</td>
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Grant Program:
- Proposition 1 (estimated 30 projects)
- Proposition 84 (39 projects)
- Proposition 50 (18 projects)
Second San Diego IRWM Summit

• Celebration of RAC’s 10th anniversary & program accomplishments
• Look forward to next 10 years of IRWM in region

• Held at Tiger Trail, San Diego Zoo Safari Park
• Even the tigers were listening in …
What’s next for San Diego IRWM?

- Prop 1 grant program: $38 million for San Diego IRWM Program under extended Tri-County pact
  - First funds available in late 2016 or early 2017
  - September: Seek Board approval of grant application
- Seek out new funding sources beyond DWR grants
- Implement action items in 2013 Plan
- Expand access to IRWM funds for:
  - Disadvantaged communities, non-profits and tribes
- Maintain diverse and active RAC
If you wish to go quickly, go alone.

If you wish to go far, go together.

-- African proverb