SARCCUP Conjunctive Use
Project Changes
Project Agreement 23 Committee
April 2, 2019
Overview of Presentation

A. Quick Background on SARCCUP
B. Update on Existing Projects
C. Past Decisions and Discussions with PA 23 Committee
D. Recent Changes to SARCCUP Conjunctive Use Project
E. Updated Facilities and Grant Funding Allocation for DWR Amendment
Quick Background on SARCCUP

- Received $55M grant through OWOW process from Department of Water Resources for various benefits including:
  - 180,000 AF Conjunctive Use (Water Bank)
  - 680 acres of Habitat (Sucker Fish and Arundo Donax weed)
  - 15,200 AF Water Use Efficiency

- SAWPA member agencies are lead project proponents for SARCCUP

- SAWPA has grant agreement with DWR to pass funding through to SAWPA member agencies through separate sub-grantee agreements
  - SAWPA also implements water use efficiency, project/committee management.

SARCCUP Groundwater Basins:
SARCCUP Conjunctive Use Storage Approved by Committee and DWR

<table>
<thead>
<tr>
<th>Groundwater Basin (SARCCUP Agency)</th>
<th>Initial (Grant Agreement)</th>
<th>Jan-2018 (Amendment 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Bernardino (SBVMWD)</td>
<td>60,000</td>
<td>64,000</td>
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<tr>
<td>Chino (IEUA)</td>
<td>96,000</td>
<td>50,000</td>
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<tr>
<td>San Jacinto (EMWD)</td>
<td>19,500</td>
<td>19,500</td>
</tr>
<tr>
<td>Elsinore (WMWD)</td>
<td>4,500</td>
<td>4,500</td>
</tr>
<tr>
<td>Orange County (OCWD)</td>
<td>0</td>
<td>36,000</td>
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<tr>
<td>Riverside-Arlington (WMWD)</td>
<td>0</td>
<td>6,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>180,000</strong></td>
<td><strong>180,000</strong></td>
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</tbody>
</table>
Update on Existing Projects
San Jacinto Basin (EMWD)

Well 201
Well 202
Well 203
Update on Existing Projects

Riverside-Arlington Basin (WMWD)

Concrete Placement for Pump Station Footings Complete
12/27/2018

Installation of Vertical Turbine Pumps and Motors
1/3/2019
Update on Existing Projects

Arundo Maintenance (OCWD)
PA 23 Committee Discussions

- November 2016: Grant Agreement Adopted

- December 2017: DWR Grant Agreement Amendment No. 1 approved by PA 23 Committee

- December 2018: PA 23 Committee updated on Chino Basin not able to dedicate 50,000 AF storage for SARCCUP

- April 2019: PA 23 Committee to consider DWR Grant Agreement Amendment No. 2
## Options for Reallocating Chino Basin Storage

<table>
<thead>
<tr>
<th>Option</th>
<th>Basin</th>
<th>April 2019 Storage Amount (AF)</th>
<th>Facilities Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Monte Vista WD, Cucamonga Valley WD, Jurupa Community Services District (JCSD) - in-lieu or desalter (IEUA)</td>
<td>Chino</td>
<td>NA</td>
<td>MV/CV/JCSD - wellhead treatment</td>
</tr>
<tr>
<td>2 - WMWD (JCSD wells)</td>
<td>Chino</td>
<td>0 - 14,000</td>
<td>Well w/Treatment</td>
</tr>
<tr>
<td>3 - WMWD (JCSD wells)</td>
<td>Chino</td>
<td>NA</td>
<td>JCSD - wellhead treatment</td>
</tr>
<tr>
<td>4 - OCWD Wells</td>
<td>Orange County</td>
<td>36,000 - 42,000</td>
<td>Five Wells</td>
</tr>
<tr>
<td>5 - Increase Riverside (WMWD)</td>
<td>Riverside - Arlington</td>
<td>7,000 - 22,000</td>
<td>Imported water pipeline turnout (WR23) &amp; wells</td>
</tr>
<tr>
<td>6 - CVWD/JCSD (WMWD)</td>
<td>Chino (to WMWD)</td>
<td>(not additional, same as prior)</td>
<td>Etiwanda Pipeline</td>
</tr>
<tr>
<td>7 - Central Valley (IRWD)</td>
<td>Central Valley</td>
<td>TBD</td>
<td>None needed (requires purchase agreements)</td>
</tr>
<tr>
<td>8 - Lakeview Sub-basin (EMWD)</td>
<td>Lakeview</td>
<td>TBD</td>
<td>TBD</td>
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</table>
Proposed Reduction in Chino Basin: JCSD Well/Treatment

- WMWD worked with Jurupa Community Services District (JCSD) on well (1,500 gallons per minute) and associated treatment that would provide up to 14,000 AF of storage.
- Agency prefers to wait to make a final decision regarding that project once their general manager position has been filled and can fully consult with WMWD about SARCCUP.
- $5M in grant funding would be provided to JCSD from WMWD grant proceeds, if they move forward.
  - Under that scenario, WMWD would have to remove Colorado River Crossing Project from SARCCUP (currently associated with Riverside-Arlington Basin).
Proposed Change in Orange County Basin: OCWD Wells

- OCWD requested expressions of interest from the 19 Groundwater Producers in its service area.
- Nine Groundwater Producers responded with $45.7M in requests, including:
  - 9 new wells
  - 1 well head treatment system
  - 1 well equipping
- OCWD selected five Groundwater Producers to construct five new wells.
  - The wells will be used to increase production during dry years to extract SARCCUP water banked in OCWD basin.
## Updated Storage Volumes for Amendment 2

<table>
<thead>
<tr>
<th>Groundwater Basin (SARCCUP Agency)</th>
<th>Jan-2018 (Amendment 1)</th>
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</thead>
<tbody>
<tr>
<td>San Bernardino (SBVMWD)</td>
<td>64,000</td>
</tr>
<tr>
<td>Chino (IEUA/WMWD)</td>
<td>50,000</td>
</tr>
<tr>
<td>San Jacinto (EMWD)</td>
<td>19,500</td>
</tr>
<tr>
<td>Elsinore (WMWD)</td>
<td>4,500</td>
</tr>
<tr>
<td>Bedford-Coldwater (WMWD)</td>
<td>0</td>
</tr>
<tr>
<td>Orange County (OCWD)</td>
<td>36,000</td>
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<tr>
<td>Riverside-Arlington (WMWD)</td>
<td>6,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>180,000</strong></td>
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## Updated Storage Volumes for Amendment 2

<table>
<thead>
<tr>
<th>Groundwater Basin (SARCCUP Agency)</th>
<th>Storage (AF) Jan-2018 (Amendment 1)</th>
<th>Storage (AF) Apr-2019 (Amendment 2)</th>
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<td>San Bernardino (SBVMWD)</td>
<td>64,000</td>
<td>64,000</td>
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<tr>
<td>Chino (IEUA/WMWD)</td>
<td>50,000</td>
<td>0 - 14,000</td>
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<tr>
<td>San Jacinto (EMWD)</td>
<td>19,500</td>
<td>19,500</td>
</tr>
<tr>
<td>Elsinore (WMWD)</td>
<td>4,500</td>
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<tr>
<td>Bedford-Coldwater (WMWD)</td>
<td>0</td>
<td>4,500</td>
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<tr>
<td>Orange County (OCWD)</td>
<td>36,000</td>
<td>36,000 - 42,000*</td>
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<tr>
<td>Riverside-Arlington (WMWD)</td>
<td>6,000</td>
<td>6,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>180,000</strong></td>
<td><strong>136-144,000</strong></td>
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</table>

*If Chino is 0 AF (pending JCSD-WMWD discussions) OC will increase to 42,000 AF*
### Updated Grant Amounts for Amendment 2

<table>
<thead>
<tr>
<th>Agency*</th>
<th>Grant</th>
<th>Grant Agreement</th>
<th>Amendment No. 2</th>
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<tr>
<td>EMWD</td>
<td>$13,151,353</td>
<td>$13,151,353</td>
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<td>IEUA</td>
<td>$17,715,788</td>
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<td>OCWD</td>
<td>$1,889,954</td>
<td>$9,865,257</td>
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<tr>
<td>SBVMWD</td>
<td>$18,443,930</td>
<td>$4,627,170</td>
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<td>WMWD</td>
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<td>$26,952,109</td>
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<td>TOTAL</td>
<td>$55,000,000</td>
<td>$55,000,000</td>
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</table>

**Reason for Changes in Table:**
- Decision support model results (SBVMWD and WMWD)
- Orange County Wells (OCWD)
- Reallocate Chino Basin Storage (IEUA)

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*Portion of funding provided to SAWPA by each agency for SARCCUP water use efficiency and project management*
One of the Best Programs in the State

- Water Bank
  - Even with proposed change, SARCCUP is one of the largest groundwater storage programs in Southern California.
  - Price per acre-foot for delivering SARCCUP water is still very competitive when compared with other supplemental water supply/banking programs.

- Habitat improvement (no change)
  - Improving **680 acres** of riparian habitat,
  - Creating approximately **3.5 stream miles** of aquatic habitat for sensitive species such as the Santa Ana Sucker, and

- Water conservation (no change)
  - Conserving **2,400 AF** for implementation of budget-based rates by approximately five retail water agencies.
  - Save **12,800 AFY** for removal of water thirsty Arundo Donax invasive weed in the Santa Ana River area
# Overview of All Amendment No. 2 Related Items

<table>
<thead>
<tr>
<th>Amendment Item</th>
<th>Basin</th>
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<tbody>
<tr>
<td>Update Individual Groundwater Basin Storage Amounts</td>
<td>- Chino: Change to the range of 0 AF to 14,000 AF,</td>
</tr>
<tr>
<td></td>
<td>- Elsinore: Move 4,500 AF to Bedford-Coldwater</td>
</tr>
<tr>
<td></td>
<td>- OC: Increase to range of 36,000 AF to 42,000 AF</td>
</tr>
<tr>
<td>Update Total Groundwater Basin Storage Amounts</td>
<td>Change from 180,000 AF to the range of 136,000 AF to 144,000 AF</td>
</tr>
<tr>
<td>Reallocate Chino Basin Grant Proceeds</td>
<td>Chino Basin (-$8M grant change)</td>
</tr>
<tr>
<td>Add Construction of Orange County Wells</td>
<td>Orange County (+$8M grant increase)</td>
</tr>
<tr>
<td>Change Post Performance Reporting Period from 10 to 3 years</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Recommendation

Approve the following:

- Changes in SARCCUP project facilities, associated groundwater basin storage amounts, the total SARCCUP storage amount, and other related changes,
- Execution of a Grant Agreement Amendment No. 2 with DWR as well as and corresponding Sub-Grantee agreement amendments with the SAWPA member agencies that incorporate these changes.
Project Agreement 23
Committee Budget for
Fiscal Years Ending
2020 & 2021

April 2, 2019

Ian Achimore
Senior Watershed Manager
Santa Ana Watershed Project Authority
Important SARCCUP Milestones

- Received $55M Prop 84 grant through OWOW process from Department of Water Resources (DWR)
  SAWPA member agencies are lead project proponents for SARCCUP (they receive pass through funding from SAWPA)

- SAWPA Commission forms PA 23 Committee and SAWPA staff implement several SARCCUP components:
  - Water use efficiency portion
  - Woodard & Curran project manager contract
  - PA 22 and PA 23 committee management

PA 23 Budget
Relation to SAWPA Commission

Budget

- PA 23 budget required per Section 10 of Project Agreement
- PA 23 budget is also inserted into SAWPA two year budget
  - SAWPA two year budget is up for adoption at April 2 Commission meeting
  - PA 22 Committee budget is also within SAWPA budget
- Adoption of budget by member agencies allows SAWPA staff to invoice member agencies for SARCCUP water use efficiency and project management tasks
Origin of $ Values in Committee Budget

Prop 84 Grant Agreement (SAWPA and DWR)
(Five Year Timeline)

SAWPA Budget
FYE 2020 and 2021 Draft Budget

And

PA 23 Committee Budget
(Two Year Timeline)
Separate Documents for SARCCUP Funding

Prop 84 Grant Agreement

Purpose

Transfer grant funding and track local match

Committee Budget

Purpose

Committee makes management decision on project
Grant Agreement Budget

Prop 84 Grant Agreement

Total Cost in Grant Agreement: $151,571,657

Task List in Grant Agreement:
- Habitat
- Conjunctive Use
- Project and Committee management
- Water Use Efficiency

PA 23 Budget

- Grant, $55,000,000
- Cost Share, $96,571,657
SAWPA staff also manages the preparation and materials for both the PA 22 and PA 23 Committees:
- Planning agenda materials,
- Coordinating items that require management approval with the SARCCUP project proponents,
- Brings new water use efficiency proposals for approval.

SAWPA manages the contract with Woodard and Curran (W&C) which does the following:
- Coordinates/reviews the invoicing DWR,
- Facilitates bi-weekly SARCCUP planning managers meetings,
- Maintains schedule and deliverable tracking.
SARCCUP Water Use Efficiency

- Contains two components:
  - Conservation-Based Rates Program
  - Smartscape Program
- Both involve SAWPA working with outside entities
  - Orange County Coastkeeper implements water audits, landscape design assistance
  - Approximately five retail water agencies study and implement a new rate structure
## Committee Budget

### Revenues

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<tr>
<th>Budget Line Item</th>
<th>FYE 2020</th>
<th>FYE 2021</th>
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</thead>
<tbody>
<tr>
<td>SARCCUP Prop 84 Grant</td>
<td>$455,144</td>
<td>$515,850</td>
</tr>
<tr>
<td>SARCCUP Local Match (SAWPA member agency contributions)</td>
<td>$503,990</td>
<td>$463,292</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$959,134</strong></td>
<td><strong>$979,142</strong></td>
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</table>

### Expenses

<table>
<thead>
<tr>
<th>Budget Line Item</th>
<th>FYE 2020</th>
<th>FYE 2021</th>
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</thead>
<tbody>
<tr>
<td>SAWPA Labor</td>
<td>$294,251</td>
<td>$355,868</td>
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<tr>
<td>Consulting (Woodard and Curran)</td>
<td>$257,114</td>
<td>$215,505</td>
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<tr>
<td>Program Expenses (For SARCCUP Water Use Efficiency)</td>
<td>$407,769</td>
<td>$407,769</td>
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<tr>
<td>Conservation-Based Water Rates</td>
<td>$332,093</td>
<td>$332,093</td>
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<tr>
<td>Smartscape Program</td>
<td>$75,677</td>
<td>$75,677</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$959,134</strong></td>
<td><strong>$979,142</strong></td>
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</tbody>
</table>
## Expenditure Projections by SARCCUP Agencies

<table>
<thead>
<tr>
<th>Project Proponent</th>
<th>FYE 2020</th>
<th>FYE 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Municipal WD</td>
<td>$2,386,581</td>
<td>$2,386,581</td>
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<tr>
<td>Inland Empire Utilities Agency</td>
<td>$2,815,928</td>
<td>$2,815,928</td>
</tr>
<tr>
<td>Orange County WD</td>
<td>$368,014</td>
<td>$368,014</td>
</tr>
<tr>
<td>San Bernardino Valley MWD</td>
<td>$1,003,520</td>
<td>$1,003,520</td>
</tr>
<tr>
<td>Western Municipal WD</td>
<td>$6,082,338</td>
<td>$6,082,338</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$12,656,381</strong></td>
<td><strong>$12,656,381</strong></td>
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</table>
Recommendation

It is recommended that the Project Agreement 23 Committee adopt the PA 23 Committee Budget for Fiscal Years Ending 2020 and 2021.
Santa Ana River Conservation and Conjunctive Use Program – Project Schedule Updates

Presenter: Brian Dietrick, Woodard & Curran

April 2, 2019
2017 2018 2019 2020 2021

Grant Contract
Master Plan - Decision Support Model
Joint CEQA
San Jacinto CEQA

Key Agreements:
San Jacinto Watermaster
MWDSC/SBVMWD and MWDSC/EMWD/WMWD/IEUA/MWDOC

Sub-Grantee (5)
SARCCUP Operating (SBVMWD/OCWD/EMWD/WMWD/IEUA)

Projects:
SAWPA: Implementation – Smartscape and Conservation-Based Rates
EMWD: Planning/Permits/Design
OCWD: Arundo Removal Study/Permits/Design
SBVMWD: Design/Bio Surveys/Agency Review/Engineering
WMWD: Planning/Design/Well Siting/Permits

Construction – Water Bank
Construction – Arundo Removal
Construction: Well Drilling, PS, CRA Crossing, JCSD
Construction - Habitat

Schedule extension may be needed

Reporting extends through 2024
Construction Deadline Sept. 2021
SAWPA Water Use Efficiency Project

### Key Agreements and Grant Deliverables:
- **SAWPA-OCCK Sub-Agreement**
- **State-SAWPA Grant Agreement Amendment No. 1**
- **Amendment No. 2**
- **Project Monitoring Plans**
- **Retail Agency Sub-Agreements for Water Rates**
- **Conservation Rates - Outreach**
- **Conservation Rates - Implementation**
- **OCCK Smartscape - Implementation**

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**Construction Deadline**: Sept. 2021

**Reporting extends through 2024**
<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tbody>
<tr>
<td>Grant Contract</td>
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<td></td>
</tr>
<tr>
<td>IEUA Conjunctive Use Project</td>
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<tr>
<td>SAWPA-IEUA Sub-Agreement</td>
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<td>Reporting extends through 2024</td>
</tr>
<tr>
<td>Joint CEQA</td>
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<td>Construction Deadline: Sept. 2021</td>
</tr>
</tbody>
</table>
Grant Contract

EMWD Conjunctive Use Project

- Sub-Agreement
- EMWD San Jacinto WM Agreement
- Right-of-Way Acquisition

San Jacinto CEQA

Design

- Mt. Ave – Prelim.
- Mt. Ave - Final
- Drilling – Prelim.
- Equipping – Prelim.
- Equipping - Final

Construction

- Well Drilling
- Mountain Avenue West
- Well Equipping

Reporting extends through 2024

Construction Deadline Sept. 2021

3/20/2019
### OCWD Arundo Removal Project

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
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<td>2017</td>
<td>Grant Contract</td>
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<tr>
<td>2018</td>
<td>SAWPA-OCWD Sub-Agreement</td>
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<td>2019</td>
<td>Joint CEQA</td>
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<tr>
<td></td>
<td>Arundo Removal Study</td>
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<td>Permitting</td>
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<tr>
<td></td>
<td>Design</td>
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<tr>
<td>2020</td>
<td>Construction</td>
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<td>2021</td>
<td>Reporting extends through 2024</td>
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**Deadlines:**
- Construction Deadline: Sept. 2021
- Reporting extends through 2024
<table>
<thead>
<tr>
<th>Year</th>
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<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>Grant Contract</td>
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<tr>
<td>Sub-Agreement</td>
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<tr>
<td>SBVMWD Habitat Restoration Project</td>
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<tr>
<td>Establish Mitigation Bank</td>
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<td>Restoration Integrated Design/Planning/Bio Surveys</td>
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<tr>
<td>Wildlife Agency Design Review</td>
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<tr>
<td>Habitat Permits/CEQA</td>
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<tr>
<td>Final Engineering/Construction Package</td>
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<tr>
<td>Construction – SA Sucker Habitat</td>
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Construction Deadline: Sept. 2021
Reporting extends through 2024

3/20/2019
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<tbody>
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<td>WMWD Conjunctive Use Project</td>
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<tr>
<td>WMWD-EVMWD Agreement</td>
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<td>SAWPA-WMWD Sub-Agreement</td>
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<td>Land Purchase</td>
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<td>Design</td>
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<tr>
<td>Drilling – Prelim.</td>
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<tr>
<td>Elsinore Basin - Wells</td>
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<tr>
<td>La Sierra Pipeline/Sterling Pump Station</td>
<td></td>
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<tr>
<td>Riverside Basin – Wells/Cannon Campbell Pump Station/Colorado River Aqueduct (PS/CRA) Crossing</td>
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<tr>
<td>Sterling Pump Station</td>
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<td>Elsinore Basin - Wells</td>
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<td>La Sierra Pipeline/Sterling PS</td>
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<td>Riverside Basin – Wells/Cannon Campbell PS/CRA Crossing</td>
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Santa Ana River Conservation and Conjunctive Use Program (SARCCUP)

SARCCUP PA-23 Meeting
April 2, 2019
Agenda

• SARCCUP Background
• Purpose of Agreement and Major Terms and Conditions with Metropolitan
• SARCCUP Operational Scenarios and Examples
  – A: Direct Delivery
  – B: Delivery via In-Lieu Exchange
  – C: Storage in SARCCUP Valley Bank (SBBA)
• SARCCUP Operating & Finance Committee
• Recommended Next Steps
• Questions
SARCCUP Background

Background and Status:

• Watershed-scale program that will bank imported water to enhance water supply reliability and increase available dry-year supplies in the Santa Ana River Watershed

• $100 million program developed by the five regional water agencies in a collaborative effort to target Proposition 84 funding

• Successfully received over $55 million in grant funding in the last round of Proposition 84 funding
SARCCUP Background

SARCCUP elements:

• **Water Use Efficiency:** Assistance for agencies to develop conservation-based rates

• **Habitat Creation:** Establish habitat for Santa Ana Sucker fish and water-consuming non-native *arundo donax* removal along the Santa Ana River

• **Watershed-Scale Cooperative Water Banking Program:** Water banking facilities in four locations with coordinated operations to store water in wet years and provides a new extraordinary supply during droughts and emergencies resulting in additional regional Dry-Year Yield (DYY)
SARCCUP Background

Storage by Location

- San Bernardino Area Basin: 64,000
- San Jacinto: 19,500
- Chino: 14,000
- Orange County: 36,000
- Riverside: 6,000
- Elsinore: 4,500

Total = 136-144,000 AF

Anticipated Storage Allocation by Agency

- EMWD: 36,000 AF
- Valley: 36,000 AF
- WMWD: 36,000 AF
- OCWD/WMWD: 36,000 AF

Total = 136-144,000 AF
SARCCUP Background

Chino Basin (0-14,000 af)

San Bernardino Area Basin (64,000 af)

San Jacinto Basin (19,500 af)

Riverside Basin (6,000 af)

Bedford-Coldwater Basin (Elsinore) (4,500 af)

Orange County Basin (36,000 af)
Purpose of Agreement and Major Terms and Conditions with Metropolitan
Purpose of Agreement

• Establish Terms and Conditions for the purchase, delivery and use of surplus Valley State Water Project (SWP) water.

• Describe relationship with SARCCUP-MWD member agencies, MWD and Valley.

• Set cost for surplus Valley water and financial arrangements.

• Determine processes for water deliveries and exchanges for the “Put” and “Take” scenarios.

• Understand MWD’s policy regarding Extraordinary Supply designation.
SARCCUP Operational Principles

• In all cases, MWD pays for surplus Valley SWP water and SARCCUP-MWD member agencies pay MWD full-service Tier 1 rate at time of delivery.
• All deliveries are through MWD facilities or MWD “virtual meter”.
• No banked groundwater introduced into MWD system - in-lieu deliveries.
• Three delivery options:
  A. Direct delivery from MWD facilities to the SARCCUP storage facilities
  B. Delivery to the SARCCUP storage facilities in-lieu via MWD facilities
  C. Delivery to Valley’s recharge facilities (MWD “virtual meter”) for storage in SBBA bank
• Two recovery options:
  1. Direct Delivery between SARCCUP-MWD member agencies using local conveyance facilities
  2. In-Lieu exchanges between SARCCUP-MWD member agencies through redirected MWD deliveries
• SARCCUP operations as described are all within MWD’s Administrative Code and MWD’s Water Supply Allocation Plan.
Major Terms and Conditions

• MWD to purchase surplus water from Valley
• MWD makes available an amount equivalent to 50% of the amount purchased to SARCCUP-MWD member agencies at the full-service Tier 1 rate
• MWD/Valley: have a separate agreement for purchase of water
...continued

- Agencies may purchase more than 50% equivalent if MWD does not take all water offered by Valley
- All water can be designated as Extraordinary Supply
- Wheeling of water through bank facilities is permitted
SARCCUP Operational Scenarios and Examples
## Examples with Delivery and Recovery Scenarios

<table>
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<th>Recovery (Take) Scenarios*</th>
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<td>IV</td>
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<td>1 – Direct Delivery</td>
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<td>V**</td>
<td>C – Delivery to Valley</td>
<td>1 – Direct Delivery</td>
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* Based on Operational Term Sheet for MWD and SARCCUP-MWD Member Agencies Agreement

** MWD Declines to Participate
Example I
Put: Scenario A (Direct Delivery)
Take: Pump & Use Locally
Example I – Put: MWD purchases available surplus Valley water for the benefit of MWD and WMWD for storage

MWD Member Agencies

1,000 AF

State Water Project

2,000 AF Valley Surplus

WMWD banks 1,000 AF in its own basins

SARCCUP Operating & Finance Committee

WMWD

1,000 AF Recharged

EMWD

San Jacinto

Valley

SBBA

MWDOC (OCWD)

Orange County

Elsinore & Riverside
Example 1 – Put$: MWD purchases available surplus Valley water for the benefit of MWD and WMWD for storage

MWD Member Agencies

State Water Project

SARCCUP Operating & Finance Committee

WMWD banks 1,000 AF in its own basins

WMWD

1,000 AF Recharged

MWDOC (OCWD)

Orange County

WMWD x 1,000 AF

MWD x 1,000 AF

Valley

SBBA

$MWD x 1,000 AF

($Commodity + $Energy) x 2,000 AF

EMWD

San Jacinto

Elsinore & Riverside

Start Here

San Jacinto

EMWD

Orange County

MWDOC (OCWD)

Orange County
Example I – Take$: WMWD pumps the stored water and uses it locally

MWD Member Agencies

State Water Project

SARCCUP Operating & Finance Committee

WMWD pumps the stored water and uses it locally

MWDOC (OCWD)
Orange County

WMWD

1,000 AF Extracted

EMWD
San Jacinto

SBBA

Valley

Start Here
Example II
Put: Scenario B (Indirect Delivery)
Take: Scenario 1 (Direct Delivery)
Example II – Put: MWD purchases available surplus Valley water for the benefit of MWD and EMWD for storage in WMWD’s Bank

MWD Member Agencies

1,000 AF

State Water Project

Start Here

2,000 AF Valley Surplus

WMWD banks 1,000 AF in Elsinore/Riverside basins for EMWD

SARCCUP Operating & Finance Committee

WMWD

MWDOC (OCWD)

Orange County

EMWD

San Jacinto

Valley

SBBA

Orange County

MWDOC (OCWD)

Elsinore & Riverside
Example II – Put $: MWD purchases available surplus Valley water for the benefit of MWD and EMWD for storage in WMWD’s Bank

WMWD banks 1,000 AF in Elsinore/ Riverside basins for EMWD

MWD Member Agencies

State Water Project

Valley

SBBA

EMWD

San Jacinto

MWDOC

(OCWD)

Orange County

SARCCUP

Operating & Finance Committee

$\text{MWD x Recharge} \times 1,000 \text{ AF}$

$\text{WMWD x 1,000 AF}$

1,000 AF Recharged

$\text{WMWD} \times 1,000 \text{ AF}$

2,000 AF Valley Surplus

($\text{Commodity} + \text{Energy}) \times 2,000 \text{ AF}$
Example II – Take$: EMWD calls on its banked supply from WMWD’s Bank

WMWD delivers 1,000 AF to EMWD when called

WMWD delivers water to EMWD via existing connections
Example III
Put: Scenario B (Indirect Delivery)
Take: Scenario 2 (In-Lieu Delivery)
Example III – Put: MWD purchases available surplus Valley water for the benefit of MWD and EMWD for storage in WMWD’s Bank

- **MWD Member Agencies**
  - 1,000 AF

- **State Water Project**
  - 2,000 AF
    - Valley Surplus

- **WMWD banks 1,000 AF in Elsinore/ Riverside basins for EMWD**

- **SARCCUP Operating & Finance Committee**
  - MWDOC (OCWD)
    - Orange County
  - WMWD
    - Elsinore & Riverside
  - EMWD
    - San Jacinto

- **SBBA**
  - Valley
Example III – Put$: MWD purchases available surplus Valley water for the benefit of MWD and EMWD for storage in WMWD’s Bank

SARCCUP Operating & Finance Committee

WMWD banks 1,000 AF in Elsinore/ Riverside basins for EMWD

MWD Member Agencies

State Water Project

1,000 AF

2,000 AF Valley Surplus

($.Commodity + $Energy) x 2,000 AF

1,000 AF Recharged

$MWD x 1,000 AF

Valley

SBBA

MWDOC (OCWD)

Orange County

EMWD

San Jacinto

MWWD

Elsinore & Riverside

($MWD + $Recharge) x 1,000 AF
Example III – Take: EMWD calls on its banked supply from WMWD’s Bank – Delivery via In-Lieu

EMWD calls on banked water and delivery is in-lieu via MWD
Example III – Take$: EMWD calls on its banked supply from WMWD’s Bank – Delivery via In-Lieu

EMWD calls on banked water and delivery is in-lieu via MWD

1,000 AF

Extract x

1,000 AF

EMWD calls on banked water and delivery is in-lieu via MWD

Normal Delivery – 1,000 AF

$MWD x

Normal Delivery + 1,000 AF

$MWD x

1,000 AF

$Extract x 1,000 AF
Examples using the SARCCUP Valley Bank
Goals and Objectives

• The Valley Bank (SBBA) is critical to SARCCUP program success and DWR Prop 84 funding requirements – while location happens to be outside of MWD service area, SARCCUP-MWD member agencies are paying MWD the current full-service Tier 1 rate for surplus Valley water that MWD purchases.

• SARCCUP-MWD member agencies pay the MWD full-service Tier 1 rate at time of “Put”, in line with deliveries to SARCCUP storage facilities within MWD service area.
Example IV: Storage in SARCCUP Valley Bank
(50% MWD, 50% SARCCUP-MWD Member Agencies)

Put: Scenario C (Delivery to Valley)
Take: Scenario 1 (Direct Delivery)
Example IV – Put: MWD purchases available surplus Valley water for the benefit of MWD & SARCCUP-MWD Member Agencies to store in Valley Bank

- Valley declares surplus of 6,000 AF
- 50% is delivered to MWD
- 50% is delivered (through a MWD “virtual meter”) for recharge in Valley’s Bank for benefit of SARCCUP-MWD member agencies
- Banked water is purchased through MWD at time of “Put”
Example IV – Put$: MWD purchases available surplus Valley water for the benefit of MWD & SARCCUP-MWD Member Agencies to store in Valley Bank

- MWD pays Valley ($Commodity + $Energy) for the full 6,000 AF
- SARCCUP-MWD member agencies pay MWD full-service Tier 1 rate at time of “Put” for 50% (3,000 AF)
- SARCCUP-MWD member agencies pay Valley to recharge the 3,000 AF at time of “Put”
Example IV – Take$: SARCCUP-MWD Member Agencies call on their banked supply from Valley Bank – Direct Delivery via WMWD

- WMWD extracts and delivers banked water to SARCCUP-MWD member agencies through WMWD/ SARCCUP facilities
- SARCCUP-MWD member agencies pay WMWD to extract and deliver the banked water
Example V: MWD Declines to Participate
(0% MWD, 100% SARCCUP-MWD Member Agencies)
Put: Scenario C (Delivery to Valley)
Take: Scenario 1 (Direct Delivery)
Example V – Put: MWD declines to participate in available surplus Valley water but purchases surplus water for benefit of SARCCUP-MWD Member Agencies to store in Valley Bank

- Valley declares surplus of 6,000 AF
- MWD declines to participate
- SARCCUP-MWD member agencies choose to participate (100% share)
- 6,000 AF is delivered (through a MWD “virtual meter”) for recharge in Valley’s Bank for the benefit of SARCCUP-MWD member agencies
- Banked water is purchased through MWD at time of “Put”
Example V – Put$: MWD declines to participate in available surplus Valley water but purchases surplus water for benefit of SARCCUP-MWD Member Agencies to store in Valley Bank

- MWD pays Valley ($Commodity + $Energy) for the full 6,000 AF recharged
- SARCCUP-MWD member agencies pay MWD the full-service Tier 1 rate at time of “Put”
- SARCCUP-MWD member agencies pay Valley to recharge the 6,000 AF at time of “Put”
Example V – Take$: SARCCUP-MWD Member Agencies call on their banked supply from Valley Bank – Direct Delivery via WMWD

- SARCCUP-MWD member agencies call for 6,000 AF of banked supply
- WMWD extracts and delivers banked water to SARCCUP-MWD member agencies through WMWD/SARCCUP facilities
- SARCCUP-MWD member agencies pay WMWD to extract and deliver their portion of the banked water

MWD Member Agencies

State Water Project

SARCCUP Operating & Finance Committee

Valley

EMWD
MWDOC
(OCWD)

San Jacinto
Orange County
(4,000 AF)

WMWD

Elsinore & Riverside
(2,000 AF)

SBBA
6,000 AF Bank

4,000 AF via Existing Connections & SA River

$Extract x 2,000 AF each agency

6,000 AF via RPU PL & Cannon Campbell PS

Start Here
SARCCUP Operating & Finance Committee

1. To be formed prior to project operations

2. Committee Members
   – Representatives from SARCCUP-MWD Member Agencies

3. Purpose of Committee
   – To coordinate purchases, delivery and extractions of water for water banking facilities
   – Manage and oversee related activities (consultant?)
     • Track transactions among MWD, Valley and SARCCUP-MWD Member Agencies
     • Prepare annual reports and other reports as needed
     • Prepare, maintain and periodically update financial and operational model
   – Prepare recommendations for SARCCUP-MWD member agencies’ governing boards as needed
Recommended Next Steps
Recommended Next Steps

1. SARCCUP Operating Agreement with Metropolitan
   a. Finalize Term Sheet with SARCCUP member agencies
   b. Provide Term Sheet to MWD and meet to discuss
   c. Prepare Final Agreement with Metropolitan

2. Finalize any remaining issues with Valley-MWD Agreement for review and approval by MWD Board

3. Prepare Amendment No. 2 to grant agreement (revised storage volumes, revised projects, and schedule changes)
Questions