Water Efficiency Budget Assistance Project Update

Ian Achimore | Senior Watershed Manager

PA 22 Committee Meeting | Agenda Item 5.A.

May 11, 2021
Purpose of Presentation

- Provide general project updates since last PA 22 Committee meeting,
- Share MOU template to be used with individual retail water agencies, and
- Share SAWPA and Municipal Water District of Orange County’s development of project approach for Orange County retail agency partners.
Water Efficiency Budget Assistance Project: Purpose of Project

- **SARCCUP Grant Scope:** Help up to 10 retail agencies comply with State regulations that require water agencies to adhere to agency-wide water budgets Senate Bill (SB) 606 and Assembly Bill (AB) 1668.
- PA 22 Committee approved that two retail agencies per SAWPA member agency would partner with SAWPA.

[Diagram showing steps: Recruit Retail Agency Partners → Create Dedicated Landscape Meter Water Budgets → Retailers Comply with SB 606 and SB 1668]
SB 606 and AB 1668 Requires Retail-Wide Water Budgets

Legislation requires the following categories to calculate agency-wide “objectives” (water budgets):

A. Indoor residential.
B. Outdoor residential.
C. Outdoor dedicated irrigation meters.
D. Efficient water losses (pipe leaks).
E. Approved variances (water use by horse corrals).
Steps (1 through 3) to Create Customer Water Efficiency Budgets

Source of Data:
- Retail Agency Billing Database
- Retail Customer Landscapes

Project Tasks:
1. Group Data by Dedicated Irrigation Meters
2. Measure Landscapes
3. Digitize Measurements

Final Product:
- Customer
- Water Usage
- Meter Location
- Meter Service Area
- Irrigated Area
- Irrigable Area

SAWPA QAQC Measurements
Overall Project Schedule
Estimated 3 Year Project Costs

- Consultant = Quantum Spatial (now doing business as “NV5”), Eagle Aerial and Waterfluence,*
- Contingency = Consultant (15% of consultant contract),
- Project Management, Outreach and MOUs = SAWPA staff costs, and
- Quality Control = SAWPA GIS staff costs.

Total Costs = Approximately $913,000

*$594,387 represents contract approved by PA 22 Committee.
**Includes outreach and MOU execution with retailers.
Project Updates (Recent Activities)

- Developed Memorandum of Understanding (MOU) template to use with retail agency partners,
  - Includes non-disclosure terms so retail agency data is protected,
  - Outlines roles and responsibilities of retailer, SAWPA and consultant, and
  - Includes termination clause where SAWPA may terminate by bringing to PA 22 Committee and retailer may terminate with their governing board’s approval.
Project Updates (Recent Activities)

New Project webpage:

Portal for Retail Agency Questions Here
Response provided within 48 hours via email and later posted to webpage
Retail Recruitment Workshops

- Workshop dates on May 3 and May 11,
- Registrants (at time of agenda packet development) include:
  1. City of Chino Hills,
  2. City of Upland,
  3. Cucamonga Valley Water District,
  4. Jurupa Community Services District,
  5. Monte Vista Water District,
  6. Riverside Public Utilities,
  7. San Bernardino Municipal Water District, and
  8. Yucaipa Valley Water District.

Retail Recruitment for Orange County agencies will be through another workshop/process
Retail Agency Recruitment Timeline

May 3 and 11 Workshops

60 days

Letter of Interest

30 days

MOU Signed

30 days

Provide Final Billing Dataset To SAWPA Consultant

August 31 and September 8

Create Customer Budgets

30 days
Orange County Process - Initial Recommendation

- After discussions with PA 22 Committee Advisory Workgroup, SAWPA is sharing recommendation for how Orange County retail water agencies could participate in Project,
  - Note: PA 22 Committee previously approved a plan where SAWPA partners with two retailers per SAWPA member agency,
- Under alternative approach, MWDOC would take the lead for all Orange County agencies, including the two that would have been managed by SAWPA, and
- SAWPA would provide an amount of grant/match from Project to cover these two retail water agencies.
If Ultimately Approved, Agreement Needed with MWDOC and SAWPA

- Cost Share and Grant could be provided to MWDOC for north Orange County retail agencies,
  - One approach is dividing consultant contract of $594,387 and associated customers **by five**.
  - This would reduce the SAWPA contract price and customers, as shown in the table below.

<table>
<thead>
<tr>
<th>Total Contract (Cost Share and Grant)</th>
<th>Price</th>
<th>Customers</th>
<th>1/5 Price</th>
<th>1/5 Customers</th>
<th>New SAWPA Contract*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$594,387</td>
<td>1,083</td>
<td>$118,877</td>
<td>217</td>
<td>$475,510</td>
</tr>
</tbody>
</table>

*866 customers

Note: Each customers is assumed to have approximately five water meters.
Benefits of MWDOC Partnership Approach

- Streamlines Project implementation in Orange County,
  - MWDOC already working with Quantum Spatial* consultant,
    - Under their contract, the retailers are funding consultant’s costs (i.e. they provide $ to MWDOC), and MWDOC serves as project manager of consultant,
  - Fixes perceived unfairness, as under current approach two OC retailers would receive consultant services fully funded (by SAWPA grant and cost share) and the other OC retailers would fully fund the consultant themselves via MWDOC,
  - Reduces SAWPA’s project management costs as less retailers are managed under the SAWPA led effort, and
  - SAWPA would still be able to claim grant-funded benefits because grant would go toward MWDOC’s retail water agencies in the watershed.

*Now doing business as “NV5”
Grant Benefits Claimed

- As part of Proposition 84 funded DWR grant agreement, SAWPA must claim a certain water savings benefit amount,
- Benefits claimed based on the amount of estimated participating customers and a water savings factor,* and
- SAWPA able to meet grant benefits claimed if MWDOC partnership approach is adopted by Committee.

Table Included in Grant Agreement – Project Monitoring Plan Section

<table>
<thead>
<tr>
<th>Proposed Physical Benefits</th>
<th>Numeric Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Supply Created</td>
<td>Implement Project for <strong>up to 10 water agencies to provide approximately 1,200 acre feet of water savings over a three-year period.</strong></td>
</tr>
</tbody>
</table>

*Water savings factor based on a Acre Feet Per Year (AFY) estimate using MWDOC’s study “Evaluation of Comprehensive Landscape Water Use Efficiency Program (CLWUE)”.*
Interested Agencies and Customers in Orange County

- Table reflects agencies who have expressed interest in the Project in Orange County and an estimated number of dedicated irrigation meter (DIM) customers that may need consultant services.
- Note: This list is preliminary and subject to change as agencies refine their needs.
- Agencies not currently included on this list are still welcome to participate.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Estimated Number of DIM Customers</th>
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<tbody>
<tr>
<td>City of Anaheim</td>
<td>528</td>
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<tr>
<td>City of Brea</td>
<td>156</td>
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<tr>
<td>City of Buena Park</td>
<td>177</td>
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<tr>
<td>El Toro Water District</td>
<td>176</td>
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<tr>
<td>City of Fountain Valley</td>
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<td>City of Fullerton</td>
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<td>City of Garden Grove</td>
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<tr>
<td>Golden State Water Company</td>
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<tr>
<td>City of La Habra</td>
<td>91</td>
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<tr>
<td>Laguna Beach County Water District</td>
<td>43</td>
</tr>
<tr>
<td>Mesa Water District</td>
<td>616</td>
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<tr>
<td>Moulton Niguel Water District</td>
<td>200</td>
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<tr>
<td>City of Newport Beach</td>
<td>704</td>
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<tr>
<td>City of Orange</td>
<td>73</td>
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<td>City of San Clemente</td>
<td>247</td>
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<td>City of Seal Beach</td>
<td>47</td>
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<tr>
<td>South Coast Water District</td>
<td>209</td>
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<tr>
<td>Trabuco Canyon Water District</td>
<td>28</td>
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<tr>
<td>City of Westminster</td>
<td>276</td>
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<td>Yorba Linda Water District</td>
<td>232</td>
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</table>

Estimated Total: 4,703

★ = In Santa Ana River Watershed
Other Items to Consider Regarding Project Approach in Orange County

- SAWPA still focused on two retail agencies per SAWPA member agency service area, especially in the upper watershed,
  - Staff would change approach for OC if later approved by Committee,
- SAWPA has discussed the 1/5 split with Nv5 and is awaiting feedback, and
- Approach for MWDOC partnership would come back as a final recommendation at next Committee meeting in June 2021, depending on PA 22 Committee feedback in today’s meeting,
Committee Questions and Feedback

Regarding:

- General project updates related to workshops and agencies participating,
- Project Webpage,
- MOU template for retail partners, and
- MWDOC/SAWPA initial recommended approach for North Orange County.
Enhancements to Watershed-Wide Water Budget Decision Support Tool Update

Ian Achimore | Senior Watershed Manager
PA 22 Committee | Agenda Item 5.B
May 11, 2021

Proposition 1
IRWM Grant
Recommendation

Receive and file.
Overall Project Scope

Formal Project Name: Enhancements to Watershed-Wide Water Budget Decision Support Tool

- **Task 1 - Imagery**: Evaluate and acquire imagery to evaluate landscape for the entire urbanized Santa Ana River Watershed and South Orange County.

- **Task 2 - Landscape Analysis**: Measure landscapes to provide water budgets to retail agencies to support the achievement of water efficiency targets prescribed by the State.

- **Task 3 - Decision Support Tool**: Deploy tool to enable retail agencies to analyze customer water use data to assess customer efficiency, target water over use, and serve as a mechanism for customer outreach.

Proposition 1 IRWM Grant
## Previous PA 22 Committee Action Regarding Project

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Committee Action</th>
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| March 2019        | Approval of:  
  1) Application submission to Bureau of Reclamation for $597,500 in-kind staff time partnership,  
  2) Application submission to DWR for $500,000 Prop 1 IRWM Round 1 grant funding.          |
| July 2020         | Approval of cost share for upper watershed SAWPA member agencies using formula.                                                                   |
| February 2021     | Consider approval of RFP for upper watershed imagery and elevation measurements.                                                                    |
| April 2021        | Approval of contract with Geophex, Ltd. For upper watershed aerial imagery.                                                                          |
Orange County Imagery Status

- 3-inch resolution imagery produced by Eagle View via contract with Southern California Association of Governments (SCAG),
- Final imagery files available for analysis by SAWPA and partner, Bureau of Reclamation, in July 2021, and
- Effort funded, in part, by OCWD and MWDOC.
  - Not funded by Proposition 1 or USBR partnership, but the 3-inch data is available to SAWPA to implement the Enhanced Decision Support Tool Project.
Area of Interest for Upper Watershed

- Imagery Capture Area
- 2,032 square miles
- 45 retailers
# Geophex Schedule Update

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<tr>
<th>Project Phase</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
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<td>Online Air Photo Review Portal for SAWPA</td>
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Bureau of Reclamation Work Status

- Monthly check-in meetings with SAWPA staff,
- Finalizing server storage to use for maintaining large terabytes of upper watershed and Orange County imagery,
- Starting to craft model that will classify common outdoor landscape objects (such as trees, shrubs, grass), and
- Awaiting initial data from Orange County to begin landscape classification.
Recommendation

Receive and file.