Project Purpose

- Help 10 retail agencies comply with State regulations* that require water agencies to adhere to agency-wide water use efficiency budgets,
  - Project specifically creates dedicated landscape meter water efficiency budgets through GIS and in-field consultant work.
- PA 22 Committee approved two retail water agency partners per SAWPA member agency.

* Senate Bill 606 and Assembly Bill 1668
Overall Project Schedule

- Calendar Year:
  - 2020:
    - Q3: RFPs and Consultant Selection
    - Q4: Retail Agency Onboarding
  - 2021:
    - Q1: Create Budgets
    - Q3: Final Grant Report
  - 2022:
    - Q1: Q2: Q3: Q4
  - 2023:
    - Q1: Q2: Q3

= Current phase
Estimated 3 Year Project Costs

- Consultant = 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 $1,031,000

*$594,387 represents contract approved by PA 22 Committee.
**Includes outreach and MOU execution with retailers.
Latest Progress with Retail Partners

- In August and September 2021, the following retail water agencies partnered with SAWPA by signing the project MOU:
  - Riverside Public Utilities
  - Monte Vista Water District
  - Hemet, and
  - Perris.
Ongoing Recruitment with Retailers

- As of September, 2021, SAWPA and various SAWPA member agencies are still working with the following retailers to encourage them to participate:
  - San Bernardino Municipal Water Department,
  - Loma Linda,
  - Chino Hills, and
  - Jurupa Community Services District.
Recommendation

Receive and file.
Prop 1 Enhanced Decision Support Tool Update

Rick Whetsel | Senior Watershed Manager
Project Agreement 22 Committee | Item 4.C.
September 14, 2021

Proposition 1 IRWM Grant
Purpose of Project

1. Capture Photos
2. Orthorectify Photos to Create Maps
3. Analyze Maps to Create Efficiency Budgets
4. Share Budgets via Web-Based Tool
Project Budget

Total Cost = Approximately $1.5 Million
Orange County Area of Interest

Imagery data provided by Southern California Association of Governments and the Municipal Water District of Orange County to SAWPA (at not cost to SAWPA or member agencies).

- 948 square miles
- 31 retailers
Upper Watershed Area of Interest

Imagery data provided by SAWPA Consultant - Geophex. Cost of data funded by upper watershed SAWPA member agencies.

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

<table>
<thead>
<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>
<th>Nov</th>
<th>Dec</th>
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<tbody>
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<td>Project Start-up</td>
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<td>Online Air Photo Review Portal for SAWPA</td>
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<td>Raw Air Photo Post Proc. to Lvl02</td>
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<td>Aerial Triangulation</td>
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<td>Raw Air Photo Color Balance and generation of lvl03 non-proprietary TIFF imagery</td>
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**May 23 to Aug 1**
Initial Imagery Portal

- Allows staff to view initial captured upper watershed aerial imagery from Geophex, and
- Imagery not orthorectified so each pixel is not associated with an accurate coordinate.
Bureau of Reclamation Work Status

- Crafting model that will classify common outdoor landscape objects (such as trees, shrubs, grass),
- Trying to get mask layers from DWR 2018 landscape imagery project with Quantum Spatial,
  - Horse Corrals Mask,
  - Undeveloped Lands Mask, and
  - Agricultural Lands Mask.
- Received initial data from Orange County to begin landscape classification,
- We’ve continued to coordinate with USBR on the landscape classification list that DWR used for 2018 project (i.e. the 10 category table shown on upcoming slide).
Schedule Related Updates from the Bureau

- Orange County deliverables (i.e. area measurement estimates using Bureau GIS classification model) will be ready in Spring 2022.
- Bureau won't start upper watershed classification until they are done with OC due to limited staff resources.
- By early September 2021 - they will have looked at first retail agency (City of Orange) and start analysis.
# Classification Table Bureau To Use

## Canopy Priority Classification System

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Irrigation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Impervious</td>
<td>Impervious</td>
<td>Not Irrigable</td>
</tr>
<tr>
<td>2. Pools</td>
<td>Swimming pools/man made water features</td>
<td>Irrigated</td>
</tr>
<tr>
<td>3. Irrigated</td>
<td>3.1 Turf grass/ground cover</td>
<td>Irrigated</td>
</tr>
<tr>
<td>3.2 Canopy/planting beds</td>
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<td></td>
</tr>
<tr>
<td>4. Irrigable not irrigated</td>
<td>4.1 Turf grass/ground cover</td>
<td>Irrigable not irrigated</td>
</tr>
<tr>
<td>4.2 Canopy/other</td>
<td></td>
<td>Irrigable not irrigated</td>
</tr>
<tr>
<td>5. Non irrigated vegetation</td>
<td>Undeveloped for the purposes of irrigation</td>
<td>Not Irrigable</td>
</tr>
<tr>
<td>6. Undeveloped lands</td>
<td>Undeveloped Lands</td>
<td>Not Irrigable</td>
</tr>
<tr>
<td>7. Horse Corrals</td>
<td>Horse Corrals</td>
<td>Irrigated</td>
</tr>
<tr>
<td>8. Open Water</td>
<td>Other open natural water (rivers/ponds)</td>
<td>Not Irrigable</td>
</tr>
<tr>
<td>9. Artificial Turf</td>
<td>Artificial Turf</td>
<td>Not Irrigable</td>
</tr>
<tr>
<td>10. Agricultural Land</td>
<td>Agricultural Land (.25 acre mmu)</td>
<td>Irrigated</td>
</tr>
</tbody>
</table>
Update on Web-Based Tool

- Had internal staff meeting with GIS and planning department in August.
- Coordinated with Bureau on file formats needed to “upload” into eventual tool.
- OC imagery and area measurement polygons will “uploaded” into eventual tool first,
  - OC area measurement polygons ready (per previous slide) in Spring 2022.
- Staff will start to draft scope and work with Advisory Workgroup.
Questions