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**ORANGE COUNTY
COASTKEEPER®**

Smartscape Sub-Grantee Agreement Amendment

December 18, 2018

Ian Achimore
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Santa Ana Watershed Project Authority



Recommendation

- Approve staff's recommendation to execute Amendment No. 2 to the SAWPA Sub-Grantee Agreement with Orange County Coastkeeper.

Note: The first amendment was approved in June 2018. It added the eleventh task, Task K, to the list whereby Coastkeeper was provided with funding to demonstrate their customer workshops to the SAWPA member agencies and interested retail water agencies.





Smartscape Recap

- Developed as a partnership between SAWPA member agencies and OC Coastkeeper in 2015 during SARCCUP development;
- Supports water customers that have transitioned from turf grass to drought tolerant landscaping through specific tasks:

- Landscape site visits
- Develop written training materials
- Workshops, training, etc.

**See complete list in
attachment to the PA 22
Memo**



Roles of Project Partners



Smartscape Budget



	Grant Amount	Local Match	Total Cost
Coastkeeper-SAWPA Contract Amount (SARCCUP Component)	\$122,000	\$278,000	\$400,000

Note: OCWD's SARCCUP local cost share funding originally intended for Smartscape was added to Conservation-Based Water Rates portion of SARCCUP.

Recommendations for Feedback at October Meeting

Provided by Advisory Workgroup:

- A. OCKK develop a new irrigation **audit and tune up task**.
- B. OCKK provide **outreach** necessary to engage the public such as school districts and other public agencies.
- C. OCKK offer landscape design services at the same time **MWD turf removal rebates** are approved for individual customers.

PA 22 Request at October Meeting

- Develop costs and scope of the additional audit and “tune-up” task (for residential customers).
 - Feedback from IEUA and its retailers was to modify basic water audit task available through Smartscape.
 - This recommendation benefits SARCCUP by increasing pace of Smartscape implementation.



Audit and Tune Up Task Scope

- Coastkeeper perform project management
- Sub-contractor ConServ Inc. implements physical repairs and audit:
 - Valve repair,
 - Sprinkler head repair/replacement,
 - Minor PVC lateral irrigation pipeline repair, and
 - Repair driplines.



Images courtesy of Rain Bird, Inc.



Audit and Tune Up Cost Per Task

Task	Scope of New Task	Costs	Cost Assumptions
L)	Conduct residential irrigation audits and “tune-ups” to include	a) \$407 - Small Site, less than 10,000 sq ft a) \$575 - Large Site; over 10,000 sq ft (up to one acre)	Program Management costs for Inland Empire Waterkeeper Reflected in Costs a) Small Sites = \$52 included a) Large Sites = \$75 included

Note: Amendment recommended does not increase SAWPA-Coastkeeper contract costs (or Smartscape/SARCCUP budget).

Smartscape Projections

<u>How Many Future Tasks Need to Be Completed in Project Time Frame*</u>						
	EMWD	IEUA	SBMVWD	WMWD	Total	Costs per Task
Workshops	63		8		70	\$1,500
Audit/Tune-Up		195			195	\$489
Site Visits			45		45	\$250
Designs			11	93	104	\$1,000
Written Material			9		9	\$1,200
Signage			6		6	\$2,000
Total Projection	\$94,134	\$95,259	\$56,309	\$93,009	\$338,709	NA

*Time frame ends March 2020. Tasks shown for each agency are based on their preferred tasks.

Additional PA 22 Request: MWD Rebate Queue

WMWD Retail Water Agencies Participating in MWD Turf Rebate Program	Residential Turf Projects (4 Month Period – Actuals)	Residential Turf Projects (Annual Projection)
Corona, City of	5	15
Elsinore Valley MWD	66	198
Jurupa Community Services District	12	36
Norco, City of	1	3
Riverside Public Utilities	14	42
WMWD Retail	16	48
Grand Total	114	342
Drop Out Rate (Grand Total x 50% = Projection)	50%	50%
Projection	57	171

MWD Rebate Queue and Smartscape Projections

- Currently just WMWD's retail area is participating.
- If additional projects are needed to finalize the Smartscape Program in the WMWD service area, WMWD will start marketing the program to the other retail water agencies in its wholesale service area that are participating in the MWD rebate program.
- Approximately 93 of the design services are needed to close out the WMWD portion of the Smartscape Program.

New Landscape Transformation Program



[More Info](#)



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Emergency Drought Grant Program Update



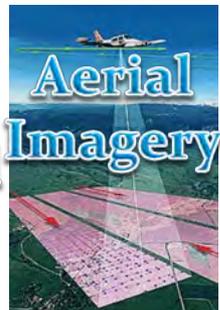
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Emergency Drought Grant Program Components

Project 1: Conservation Based Reporting Tools and Rate Structure Implementation



Project 2: High Visibility Turf Removal and Retrofit



Note the Following Items

- The funding amounts for Project 2 show that the Sub-Grantee agreements have been amended, per the approval of the PA 22 Committee on August 24, 2017.
 - That action increased the funding available to EMWD, IEUA and WMWD.
- The funding amounts reflect the latest invoices that have been submitted to SAWPA by October 31, 2018.

Overall Program Status

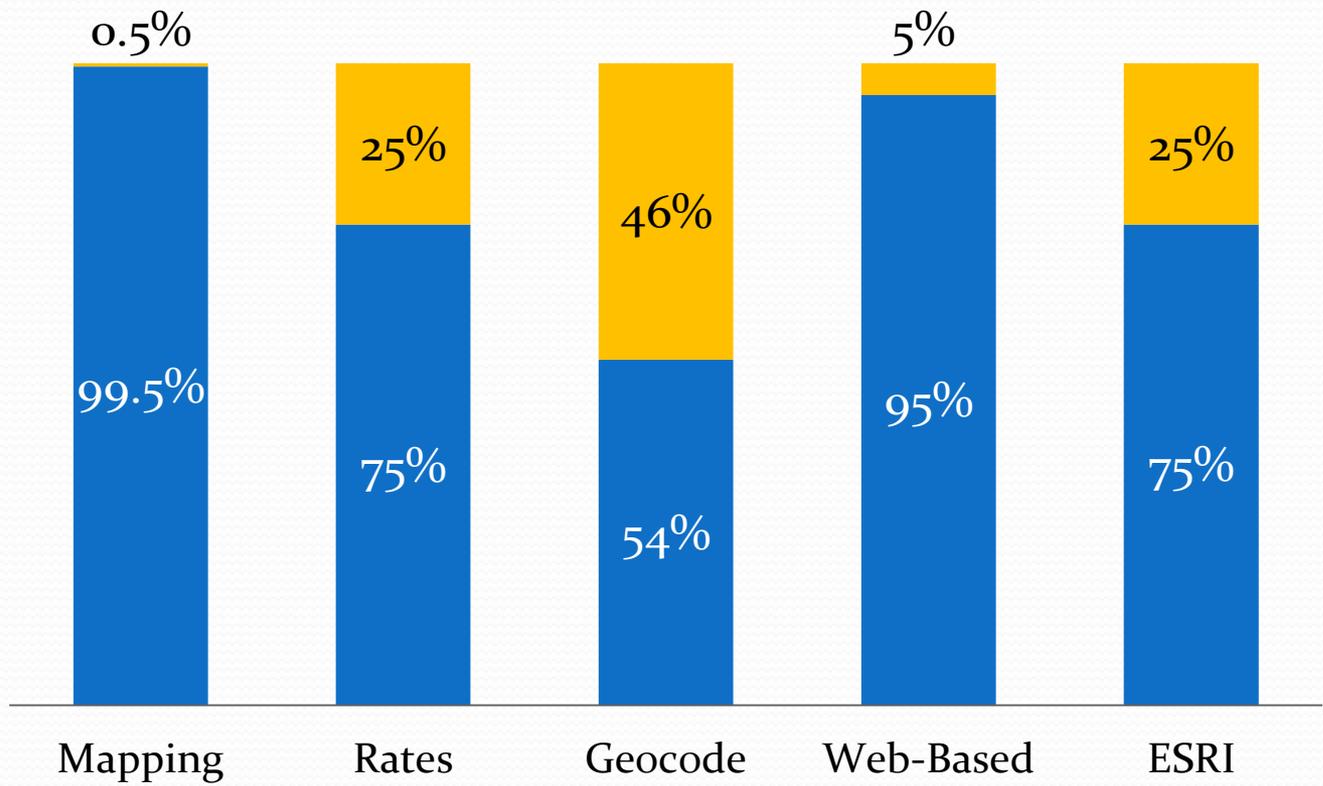
	Grant	Required Funding Match	Total
In Grant Agreement	\$ 12,860,110	\$ 7,051,533	\$ 19,911,643
Invoiced (\$)	\$7,235,073	\$ 5,943,834	\$13,178,907
Invoiced (%)	56%	84%	66%

Status by Component (Project 1)



Grant Funds Invoiced

■ Invoiced ■ Not Invoiced



Scheduled dates of completion:

Mapping: (Completed) July 2017

Rates: April 2019

Geocoding : June 2018

Web-Based Tool: (Completed) June 2018

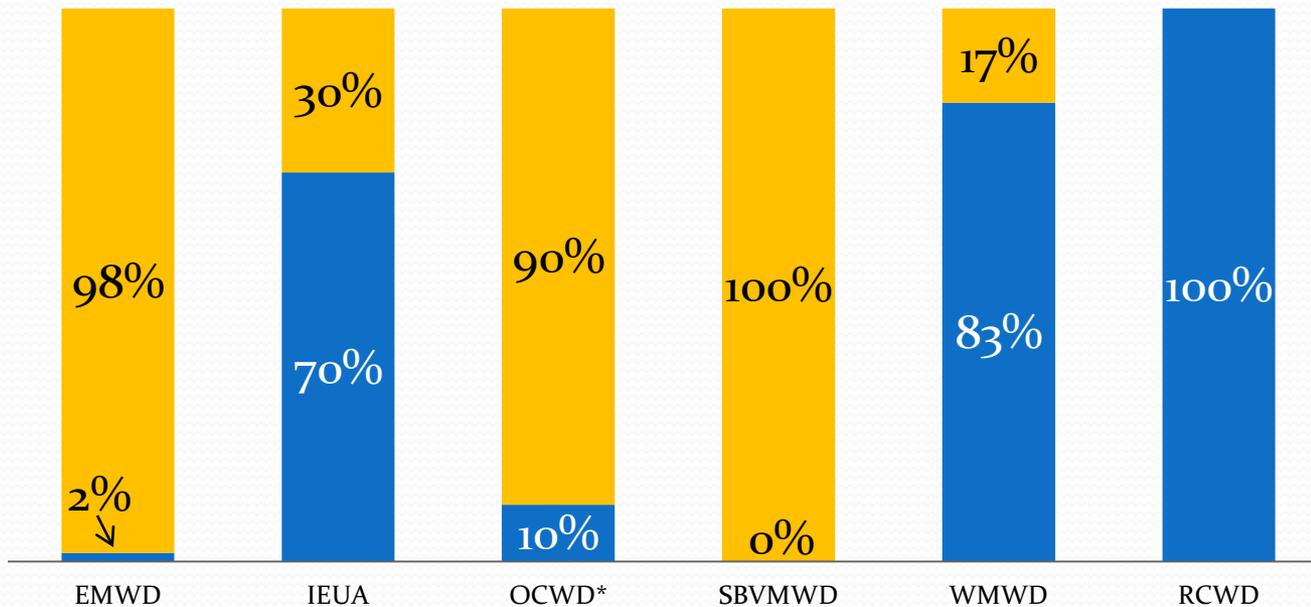
ESRI Tool: October 2018



Status by Agency (Project 2)

Grant Funds Invoiced

■ Invoiced ■ Not Invoiced



Scheduled date
of completion:

March 2019

*OCWD has an agreement with MWDOC that passes down the conditions from their Sub-Grantee agreement to MWDOC



Questions

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Risk and Rewards Analysis for Aerial Imagery Partnership Study with the Department of Water Resources



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Santa Ana Watershed Project Authority
December 18, 2018

DWR and New Water Use Efficiency Legislation



- DWR is the lead for technical assistance related to urban water use targets per new water conservation legislation (AB 1668 and SB 606)
- PA 22 Committee recommended SAWPA staff connect with DWR Water Use Efficiency Program Manager Peter Brostrom and share Drought Grant tools,
- SAWPA met with Brostrom twice and he recommended a study SAWPA can manage.

Bostrom's Recommended Study

Scope

- SAWPA ensures approximately three retailers use the aerial imagery data via the ESRI Customer Parcel Water Budget Tool and upload their billing data to compare customer budgets to the volume of water used per customer.
- By involving the retail agency partners, DWR would be interested in knowing:
 - How many customers are over budget,
 - How many customers are under budget, and
 - What's the most effective way to let customers know they are over budget?



DWR's Needs for this Study

- DWR wants to ensure aerial imagery data can be a tool for retail water agencies, rather than just a mandated water budget.
- DWR wants to understand a major challenge for water users related to the new legislation - comparing area measurement data (outdoor water budgets) to billing data (customer water use).
- DWR wants to understand:
 - Are a marginal group of customers in a given service area driving an agency's high water use, and
 - How difficult is it to change the habits of that marginal group?

PA 22 Committee's October Meeting Request



- PA 22 memo includes risks vs. rewards analysis.
- Subsequently SAWPA staff has discussed this with member agency staff and made updates to scope.
 - Focus on just dedicated landscape meters (new legislation requires State to develop standards for this customer class).
 - Less of a need for residential focus:
 - Residential budgets easier to create and gains in efficiency will not result in as much volumetric savings compared to CII.

Win-Win for Retail Water Agencies

- By 11/2023 retailers will need to estimate the size of their meter service areas for dedicated landscape customers so they can calculate their total water use objective (target) for their retail service area.

Water Use Objective is sum of:	Indoor residential	Outdoor residential	Outdoor dedicated landscape	Estimated efficient water losses
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Outdoor dedicated landscape meter usage objective =
Irrigable area (from imagery) x (Reference ET x **ET Adjustment Factor**)


State Standard

Benefit to Retailers: Data Matching (Currently Provided through Grant)

Customer Data (Water Usage) from Retailer	Imagery from SAWPA and analysis	Parcel from County	Outdoor water budgets	Meter Geolocation and matching
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Done with GIS
technician;
remote visual
assessment



Benefit to Retailers: Data Matching with Customer Input

Customer Data (Water Usage) from Retailer	Imagery from SAWPA and analysis	Parcel from County	Outdoor water budgets	Meter Geolocation and matching
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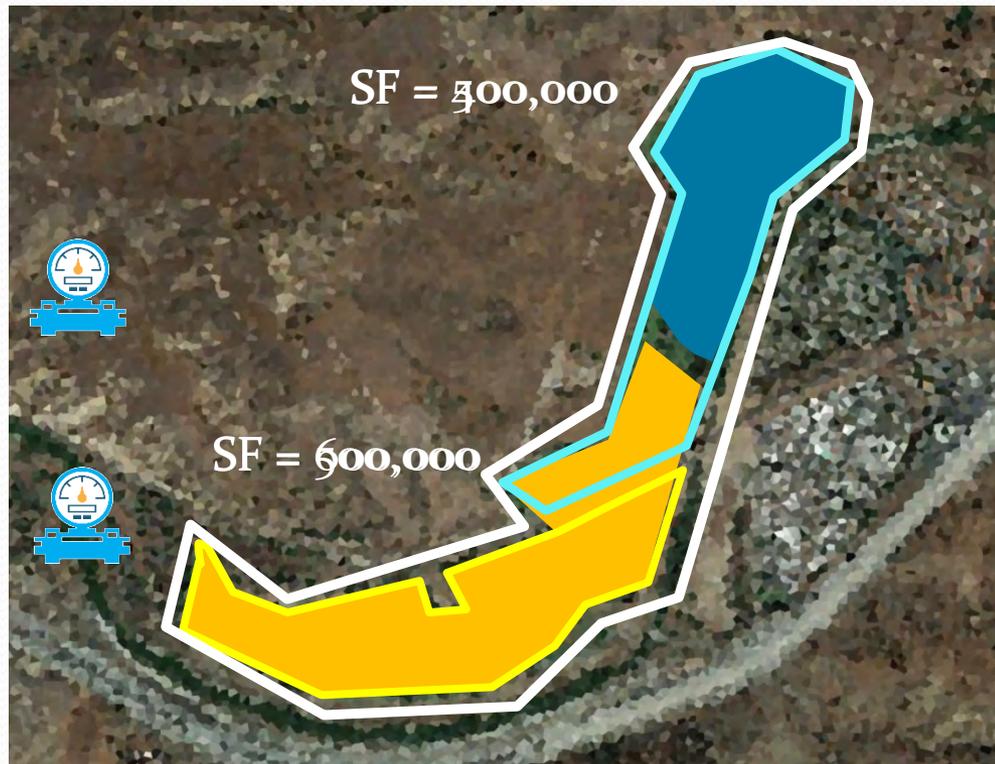


Done with field staff; meet with informed customer



Benefit to Retailers: Data Matching with Input and Field Verification

Customer Data (Water Usage) from Retailer	Imagery from SAWPA and analysis	Parcel from County	Outdoor water budgets	Meter Geolocation and matching
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Done with actual technician measurement of remote watered areas



Study Scope Modification

- Partner with three retailers to:
 - 1) Have them utilize the ESRI Customer Parcel Water Budget Tool, and
 - 2) Provide them with refined meter service areas for dedicated landscape customers (which would be incorporated into the Tool's budgets).
- Answer the questions:
 - How many **dedicated landscape** customers are over budget?
 - How many **dedicated landscape** customers are under budget?
 - What's the most effective way to let **dedicated landscape** customers know they are over budget?
 - Are a marginal group of these customers causing the agency to be exceeding their total water target?

Other Questions for the Study

- What are the costs and benefits of the different methodologies for creating dedicated landscape meter service areas:

Costs

- Remote sensing and GIS technician.
- Remote sensing and meeting with informed customer.
- Remote sensing and field measurements.



Risks

- The State being interested in water agencies collecting new categories of data.
- The State developing state regulatory standards, or possibly legislation, that are more stringent than what the majority of urban water agencies can realistically achieve.
- The State describing the data out-of-context, thus reflecting a poor image of the three retail agencies.

Rewards

- A thorough demonstration that urban water agencies have difficulty in matching meter data to landscape data.
- The need to develop more variance categories giving urban water agencies additional flexibility in meeting the new water conservation legislation's water budget targets.
- Our region taking a leadership role related to water use efficiency state policy and aerial imagery.
- Helping us refine imagery collection and related water use efficiency tools.

Risks vs. Rewards

- The risks and rewards have different weights depending on perspective of the individual PA 22 member agencies.
- In light of the changes recommended by SAWPA member agency staff of honing in on dedicated landscape meter usage, staff's conclusion is that the rewards are greater than the risks.

(Note: After this meeting, staff will contact Peter Brostrom to brief him on these proposed changes.)

Next Steps

- Meet with member agencies and Peter Brostrom.
- Develop budget and scope for PA 22 approval.
- Share budget and scope with Peter Brostrom.

Receive and File

Draft Scope

- Partner with three retailers to:
 - 1) Have them utilize the ESRI Customer Parcel Budget Tool,
 - 2) Provide them with refined meter service areas for dedicated landscape meters (that would be incorporated into the tool's budgets),
 - 3) Evaluate the difficulty of incentivizing these customers to remain within their budgets.

- Answer the questions:
 - How many **dedicated landscape** customers are over budget,
 - How many **dedicated landscape** customers are under budget, and
 - What's the most effective way to let **dedicated landscape** customers know they are over budget?
 - Are a marginal group of these customers causing the agency to be over their total efficiency budget?