

# Committee Budget for Fiscal Years Ending 2022 & 2023

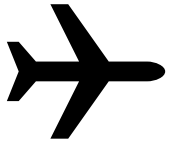


April 13, 2021

Ian Achimore  
Senior Watershed Manager  
Santa Ana Watershed Project Authority



# Projects/Grants that Go Into PA 22 Budget



Project	Schedule	Grant	Match
SARCCUP Water Budget Assistance	2020 to 2023	Prop 84 IRWM*	Member Agencies
Enhanced Watershed-Wide Decision Support Tool	2020 to 2023	Prop 1 IRWM, Bureau of Rec Cooperative Funding	Member Agencies, MWDOC

\*Integrated Regional Water Management (IRWM)

# Relation to SAWPA Commission Budget

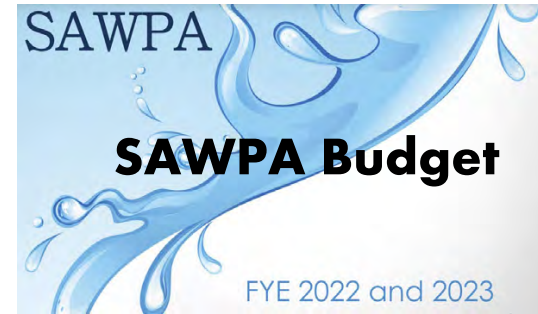
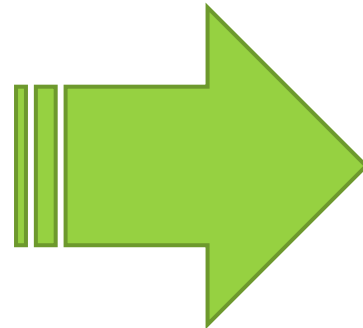
- ▶ PA 22 budget required per Section 10 of Project Agreement,
- ▶ PA 22 budget is also inserted into SAWPA two-year budget,
  - ▶ SAWPA two-year budget to be considered by Commission on April 20, 2021.
  - ▶ Specific PA 22 budget does not require separate approval by SAWPA member agency boards.



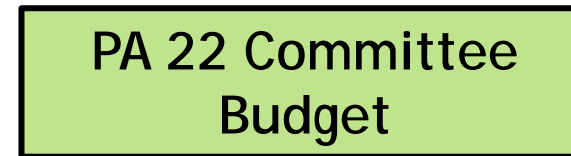
# Prop 84 & Prop 1 Grants: Origin of \$ Values in Committee Budget



(Multi-Year Timeline)



And



(Two Year Timeline)

# Separate Documents for Grant

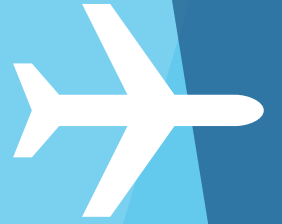


Transfer grant funding and track local match



Committee makes management decision on project

# Enhanced Watershed-Wide Decision Support Tool



- ▶ Scope: Estimate outdoor water budgets at the parcel level for retail and wholesale water agencies in the Santa Ana River Watershed, South OC and the southern portions of EMWD/WMWD.
- ▶ Budgets will be disseminated through a tool that will allow retail water agencies to compare their water usage to the budget.
- ▶ Expenses:
  - ▶ SAWPA project management,
  - ▶ Aerial Imagery acquisition,
  - ▶ Web-based tool development.

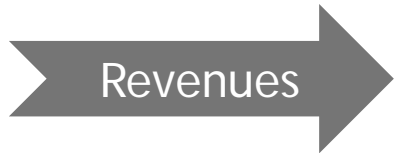
# SARCCUP Water Use Efficiency (WUE)



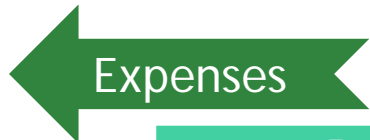
- ▶ Scope: Create dedicated landscape meter service areas (and updated vegetation measurements where needed).
- ▶ Budgets will be disseminated through a tool that will allow retail water agencies to compare their water usage to the budget.
- ▶ Expenses:
  - ▶ SAWPA project management, quality control process and committee management,
  - ▶ Quantum Spatial Contract (sub-consultants: Eagle Aerial and Waterfluence).

Note: Woodard and Curran (W&C) are shown in the budget as they are the overall project management consultant for SARCCUP (water conservation, water bank, and habitat)

# Proposed Budget (Prop 1 Support Tool)



Budget Line Item	Current Two Year Budget *		Proposed Budget	
	FYE 2020	FYE 2021	FYE 2022	FYE 2023
Prop 1 Grant	\$160,667	\$321,334	\$179,384	\$240,751
Prop 1 Participant Fees	\$160,667	\$321,334	\$472,224	\$20,955
<b>TOTAL</b>	<b>\$542,788</b>	<b>\$642,668</b>	<b>\$651,608</b>	<b>\$261,706</b>



Budget Line Item	Current Two Year Budget *		Proposed Budget	
	FYE 2020	FYE 2021	FYE 2022	FYE 2023
SAWPA Labor (Prop 1 Related)	\$0	\$0	\$106,340	\$103,826
Aerial Imagery Products Consultants	\$290,134	\$580,266	\$545,268	\$157,880
<b>TOTAL</b>	<b>\$290,134</b>	<b>\$580,266</b>	<b>\$651,608</b>	<b>\$261,706</b>

\*Revenues ≠ expenses as Prop 1 grant was not secured at time of budget development.



# Proposed Budget (Prop 84 SARCCUP)



## Revenues

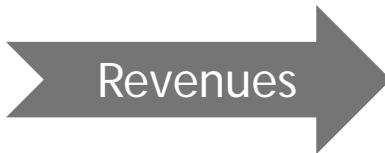
Budget Line Item	Current Two Year Budget		Proposed Budget *	
	FYE 2020	FYE 2021	FYE 2022	FYE 2023
Prop 84 Grant	\$455,144	\$515,850	\$337,313	\$136,370
Participant Fees	\$503,990	\$463,292	\$433,512	\$160,000
<b>TOTAL</b>	<b>\$959,134</b>	<b>\$979,142</b>	<b>\$770,825</b>	<b>\$296,370</b>

## Expenses

Budget Line Item	Current Two Year Budget		Proposed Budget *	
	FYE 2020	FYE 2021	FYE 2022	FYE 2023
SAWPA Labor	\$294,251	\$355,868	\$139,978	\$154,310
W&C Project Mgmt Consulting	\$257,114	\$215,505	\$170,000	\$160,000
Legal Fees	\$0	\$0	\$1,300	\$1,300
SARCCUP Water Use Efficiency Consultants/Partners	\$407,769	\$407,769	\$459,547	\$367,637
Quantum Spatial (in FYE 2022+)	\$332,093	\$332,093	\$459,547	\$367,637
OC Coastkeeper	\$75,677	\$75,677	\$0	\$0
<b>TOTAL</b>	<b>\$959,134</b>	<b>\$979,142</b>	<b>\$770,824</b>	<b>\$683,247</b>

\*Revenues ≠ expenses in FYE 2023 as reserves will be utilized for expenses.

# Combined Revenues & Expenses



Budget Line Item	Current Two Year Budget		Proposed Budget	
	FYE 2020	FYE 2021	FYE 2022	FYE 2023
Grant	\$615,811	\$837,184	\$516,696	\$377,121
Participant Fees	\$664,657	\$784,626	\$905,736	\$180,955
<b>TOTAL</b>	<b>\$1,280,468</b>	<b>\$1,621,810</b>	<b>\$1,422,432</b>	<b>\$558,076</b>



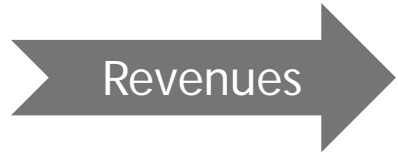
Budget Line Item	FYE 2020	FYE 2021	FYE 2022	FYE 2023
SAWPA Labor	\$294,251	\$355,868	\$246,317	\$258,135
Legal Fees	\$0	\$0	\$1,300	\$1,300
Consulting/Partners	\$955,018	\$1,203,541	\$1,174,815	\$685,517
Aerial Imagery Products (Prop 1/USBR)	\$290,134	\$580,266	\$545,268	\$157,880
W&C Project Management (SARCCUP)	\$257,114	\$215,505	\$170,000	\$160,000
Quantum Spatial (SARCCUP)*	\$332,093	\$332,093	\$459,547	\$367,637
Orange County Coastkeeper (SARCCUP)	\$75,677	\$75,677	\$0	\$0
<b>TOTAL</b>	<b>\$1,249,269</b>	<b>\$1,559,409</b>	<b>\$1,422,432</b>	<b>\$944,953</b>

\*Before FYE 2022, budget reflects water rate implementation.

Current Budget: Revenues ≠ expenses as Prop 1 grant was not secured at time of budget development.

FYE 2023: Revenues ≠ expenses as reserves will be utilized for expenses.

# Combined Totals - Comparison to Actual Spending



Budget Line Item	Adopted FYE 2020	Adopted FYE 2021	Actual * FYE 2020	Projected * FYE 2021
Grant	\$615,811	\$837,184	\$166,668	\$110,122
Participant Fees	\$664,657	\$784,626	\$503,990	\$543,292
<b>TOTAL</b>	<b>\$1,280,468</b>	<b>\$1,621,810</b>	<b>\$670,658</b>	<b>\$653,414</b>

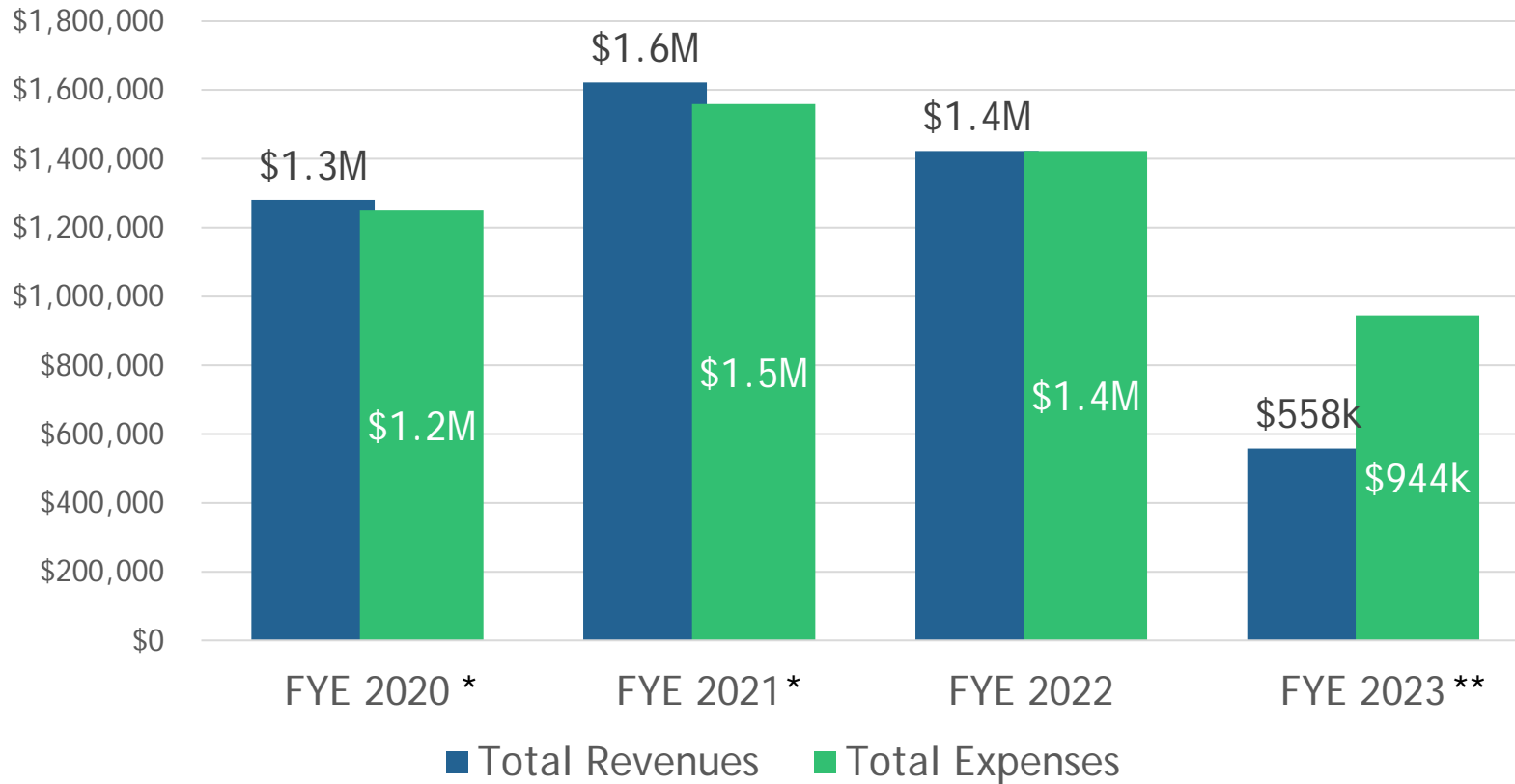


Budget Line Item	Adopted FYE 2020	Adopted FYE 2021	Actual * FYE 2020	Projected * FYE 2021
SAWPA Labor	\$294,251	\$355,868	\$69,131	\$85,122
Legal Fees	\$0	\$0	\$0	\$1,340
Consulting/Partners	\$955,018	\$1,203,541	\$154,973	\$171,361
Aerial Imagery Products (Prop 1/USBR)	\$290,134	\$580,266	\$0	\$0
W&C Project Management (SARCCUP)	\$257,114	\$215,505	\$154,973	\$79,452
Quantum Spatial (SARCCUP)	\$332,093	\$332,093	\$0	\$91,909
Orange County Coastkeeper (SARCCUP)	\$75,677	\$75,677	\$0	\$0
<b>TOTAL</b>	<b>\$1,249,269</b>	<b>\$1,559,409</b>	<b>\$224,104</b>	<b>\$257,823</b>

Current Budget:  
Revenues ≠ expenses  
as Prop 1 grant was  
not secured at time  
of budget  
development.

\*Different than adopted budgets due to changes in project scopes and subsequent approval from DWR.

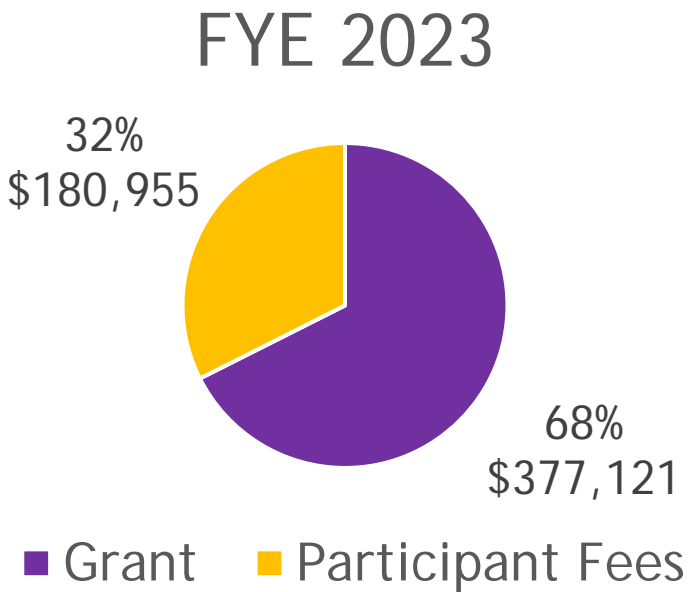
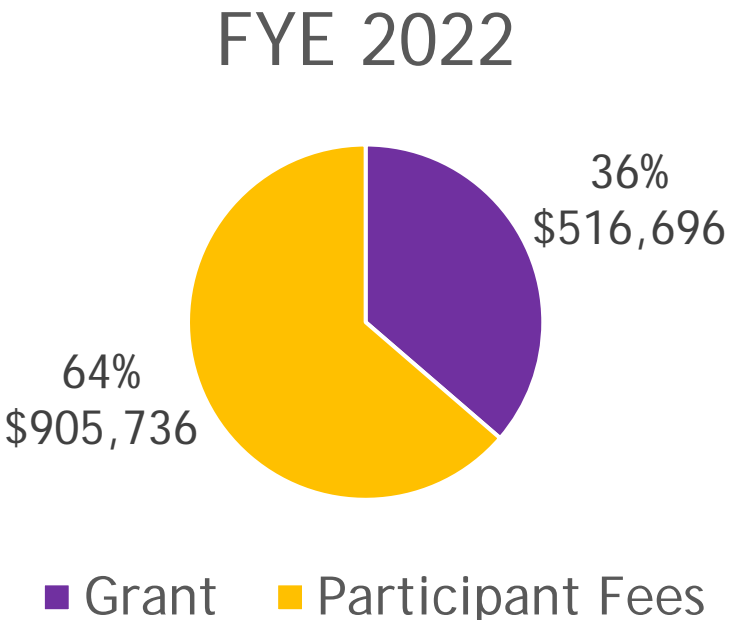
# Combined Totals - Revenues and Expenses



\*Revenues ≠ expenses as Prop 1 grant was not secured at time of budget development.

\*\*Revenues ≠ expenses as reserves will be utilized for expenses.

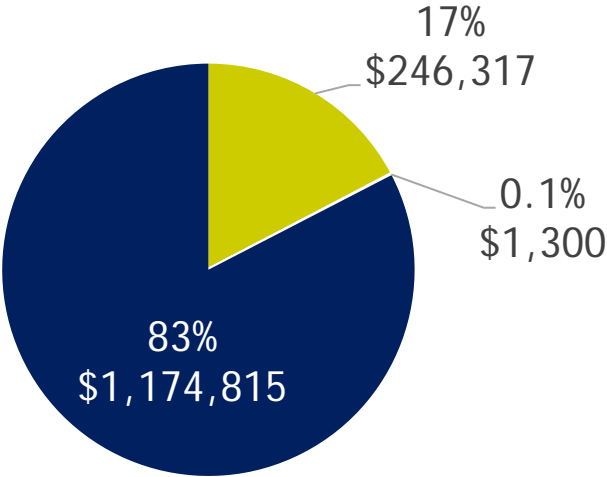
# Revenue-Split for Proposed Budget



Grant funds: Consultants, SAWPA staff (Committee management).  
Participant Fees fund: Consultants, Legal Fees, SAWPA staff (for project management)

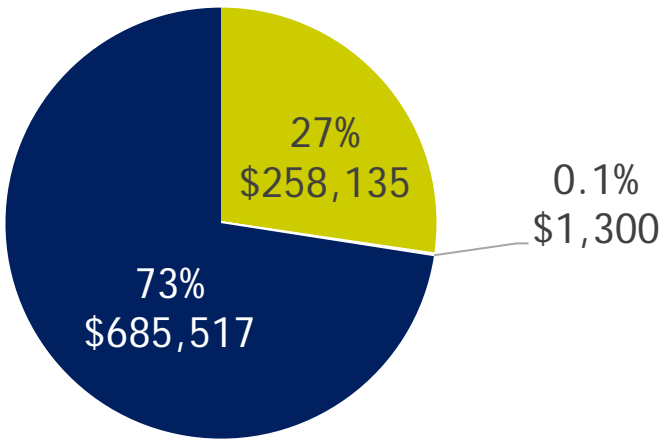
# Expense-Split for Proposed Budget

FYE 2022



- SAWPA Labor
- Legal Fees
- Consulting/Partners

FYE 2023



- SAWPA Labor
- Legal Fees
- Consulting/Partners

# Recommendation

It is recommended that the Committee adopt the PA 22 Committee Budget for Fiscal Years Ending 2022 and 2023.



# Approval of Contract for 2021 Upper Watershed Aerial Imagery

Ian Achimore | Senior Watershed Manager

PA 22 Committee | Agenda Item 4.B.

April 13, 2021

Proposition 1  
IRWM Grant





# Recommendation

Authorize the General Manager to execute a contract with Geophex Ltd. In the amount of \$210,353.

# Overall Project Scope

Proposition 1  
IRWM Grant

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.

# Previous PA 22 Committee Action Related to Project

Meeting Date	Committee Action
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.

# Funding for Project

Prop 1 IRWM Grant	Reclamation Support	Cost Share*	Total Cost
\$500,000	\$597,500	\$631,207	\$1,728,707

\*For upper watershed  
and Orange County

# Past PA 22 Committee Discussion

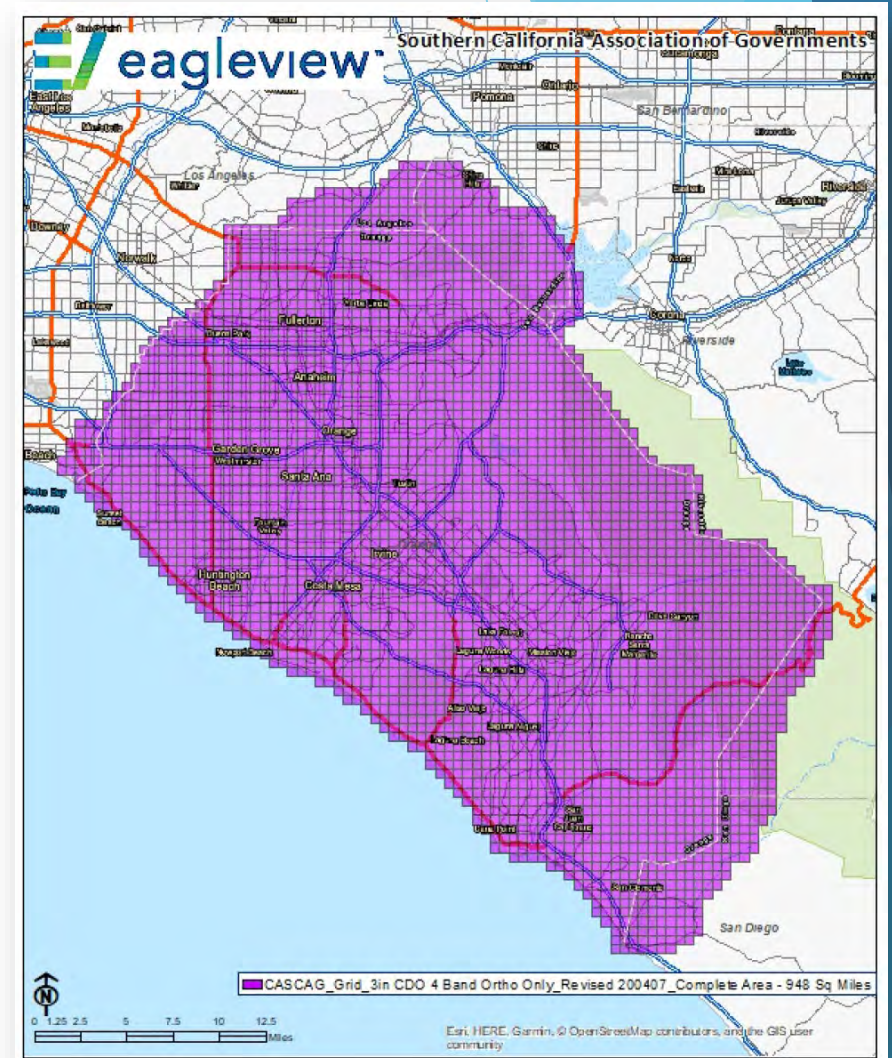
- ▶ At July 2020 meeting, PA 22 Committee agreed to proportional share the cost for upper watershed aerial imagery.
- ▶ Proportions based on values of these three categories within their wholesale service areas:
  1. Population,
  2. Square mileage and
  3. Parcel amount.

Agency*	Proportion Approved by PA 22 Committee
EMWD	29%
IEUA	22%
SBVMWD	21%
WMWD	29%
<b>Total</b>	<b>100%</b>

\*OCWD is not shown as they are acquiring imagery through the Southern California Association of Governments (SCAG) for Orange County's portion of watershed.

# Orange County Imagery Status

- ▶ 3-inch resolution imagery produced by Eagle View via contract with Southern California Association of Governments (SCAG),
- ▶ Final GEOTIFF 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.



# Purpose of 2021 Upper Watershed Imagery

- ▶ Utilize it for Bureau of Reclamation analysis that will create outdoor water budgets,
  - ▶ Utilize it for residential budgets, as well as CII budgets going forward,
  - ▶ Utilize it for habitat and vegetation mapping, and
  - ▶ Utilize it for water agency (including flood control) planning and engineering departments.
- ▶ The imagery will be available to the member agencies, in addition to being available for the Project.

## Assembly Bill 1668

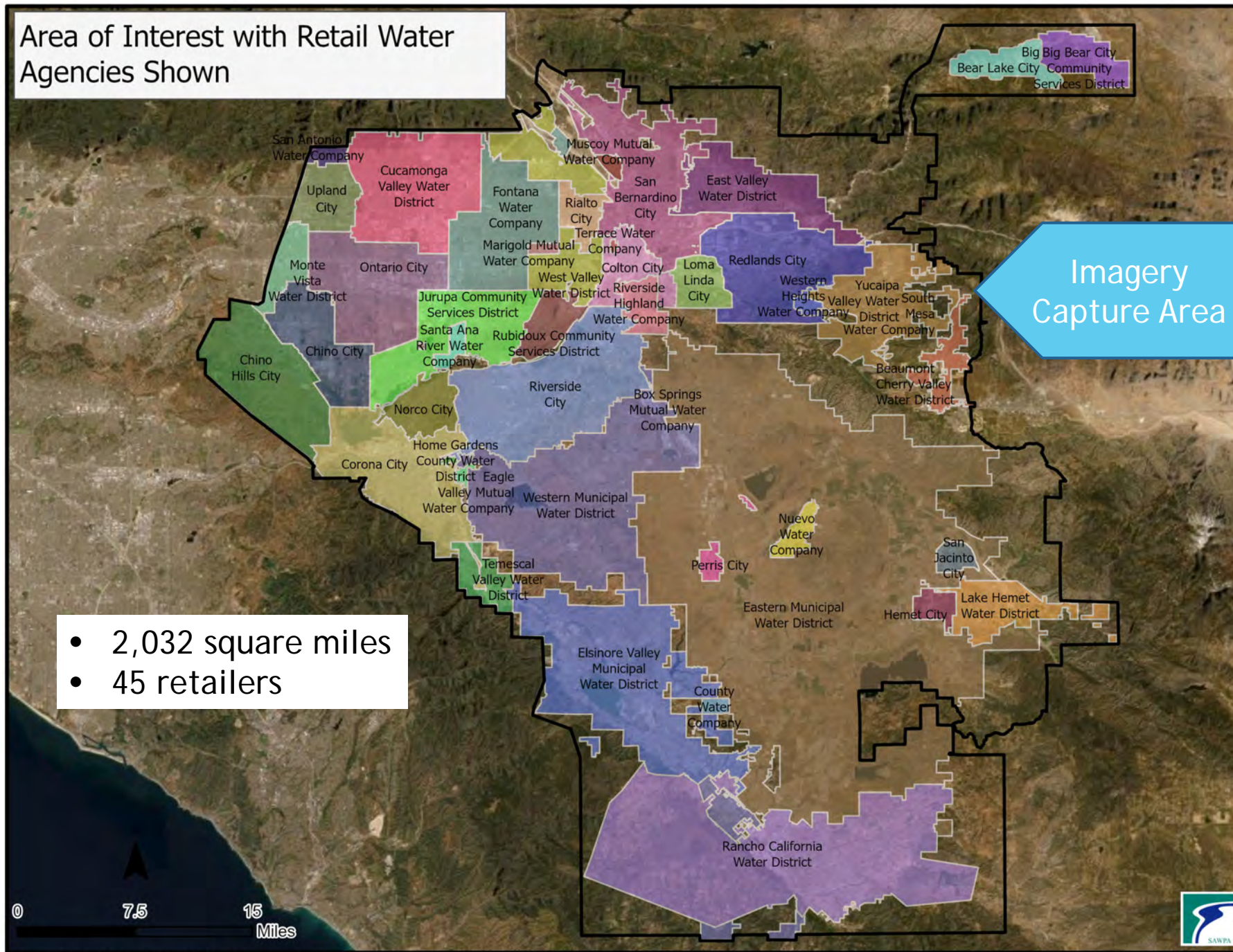
*Provides for the use of alternative sources of data if alternative sources are shown to be as accurate as, or more accurate than, the data provided by the department.*

# Request for Proposals Developed

- ▶ Similar to 2015 RFP for high resolution watershed imagery
  - ▶ Asked for prices for a range of different resolutions including 3-inch and 12-inch pixels.
- ▶ Major changes from 2015 RFP:
  - ▶ Just upper watershed as OC is covered by SCAG project,
  - ▶ Flight paths to be centered around retail water agencies,
  - ▶ Elevation deliverables that allow for slope adjustments, and
  - ▶ Web-based dashboard to QA/QC imagery after its flown.
- ▶ RFP Coordination by SAWPA
  - ▶ Coordinated with water conservation advisory group and informed GIS and planning managers of SAWPA member agencies, as well as US Bureau of Reclamation.



# Area of Interest with Retail Water Agencies Shown



# Contract Deliverables

- ▶ Flight Plan
- ▶ Project Control Report
- ▶ Metadata Report
- ▶ Initial Raster Imagery (not orthorectified)
- ▶ Final GEOTIFF tiles
- ▶ Compression files (ECW)
- ▶ Elevation calculation deliverables
- ▶ Bi-weekly updates
- ▶ Four meeting updates (two to Advisory Group, two to PA 22 Committee)

Available via web-portal  
that member agencies  
have access too

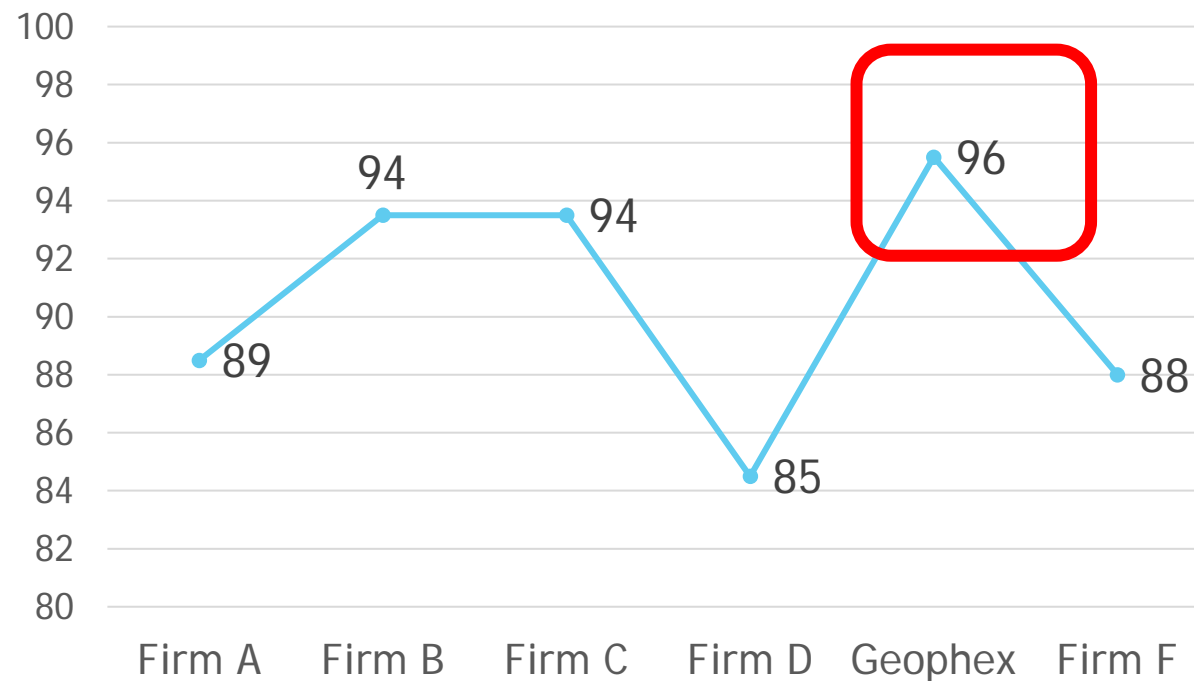
Major deliverables, used  
for imagery analysis

# Proposals Received

- ▶ Eagle View,
- ▶ Digital Mapping Inc.,
- ▶ Geophex,
- ▶ Sanborn,
- ▶ Surveying & Mapping LLC, and
- ▶ TetraTech.

# Proposals Ranking

Rating of Proposals (100 Points Available)

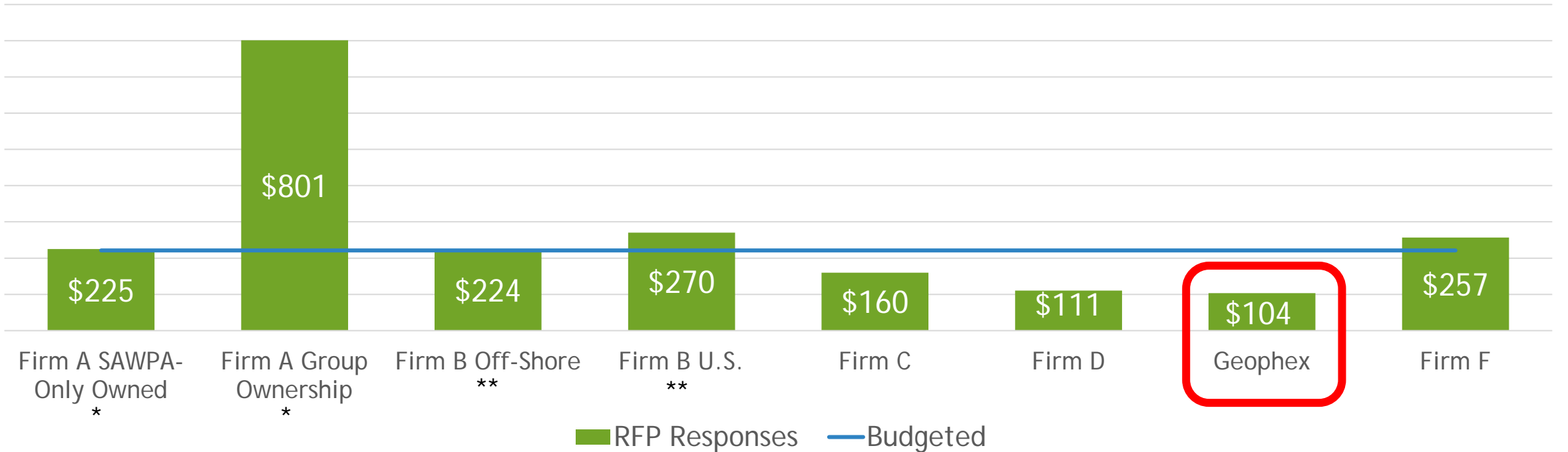


## Proposal Criteria Include:

1. Qualifications,
2. Quality of Proposal
3. Price
4. Schedule

# Recommend Firm vs. Budget

## Price Per Square Mile - 3 Inch



\*SAWPA would only own data (i.e. not transfer it to member agencies without additional fee) unless higher Firm A price is paid.

\*\*Off-Shore vs. U.S. pricing reflects the difference between quality control being performed overseas vs. in the U.S. for Firm B.



# Invoicing to SAWPA Member Agencies Using Approved Ratios

Agency*	Proportion Approved by PA 22 Committee	Geophex Contract Costs Using the Proportions
EMWD	29%	\$60,273
IEUA	22%	\$45,420
SBVMWD	21%	\$43,201
WMWD	29%	\$61,460
<b>Total</b>	<b>100%</b>	<b>\$210,353</b>

\*OCWD is not shown as they are acquiring imagery through SCAG for Orange County's portion of watershed.

# About Geophex



*Geophex*  
*Surveys*

- ▶ 28 years of experience in aerial mapping,
- ▶ Various California clients including County of Orange, Mojave Water Agency, San Diego Port Authority, and City of Roseville,
- ▶ Experience in orthophotography, field surveying, elevation modeling, and LiDAR, and
- ▶ Performed similar project for Santa Ana River Watershed in Summer 2015.





# Elevation Deliverables

- ▶ Not proposing to move forward with elevation deliverables at this time,
- ▶ No major interest by SAWPA member agencies and MWDOC currently, and
- ▶ Have option to come back later to PA 22 Committee to execute contract.

# Recommendation

Authorize the General Manager to execute a contract with Geophex Ltd. in the amount of \$210,353 for three-inch resolution aerial imagery.