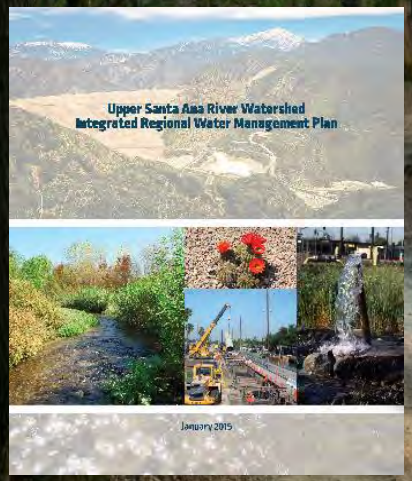
2020

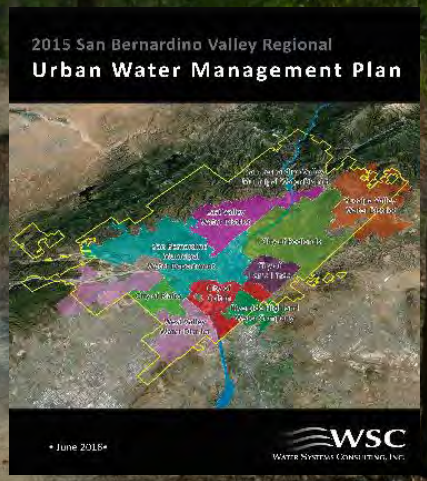
UPPER SANTA ANA RIVER WATERSHED

INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN

OWOW Steering Committee
September 23, 2021

Transforming Water Resources Planning

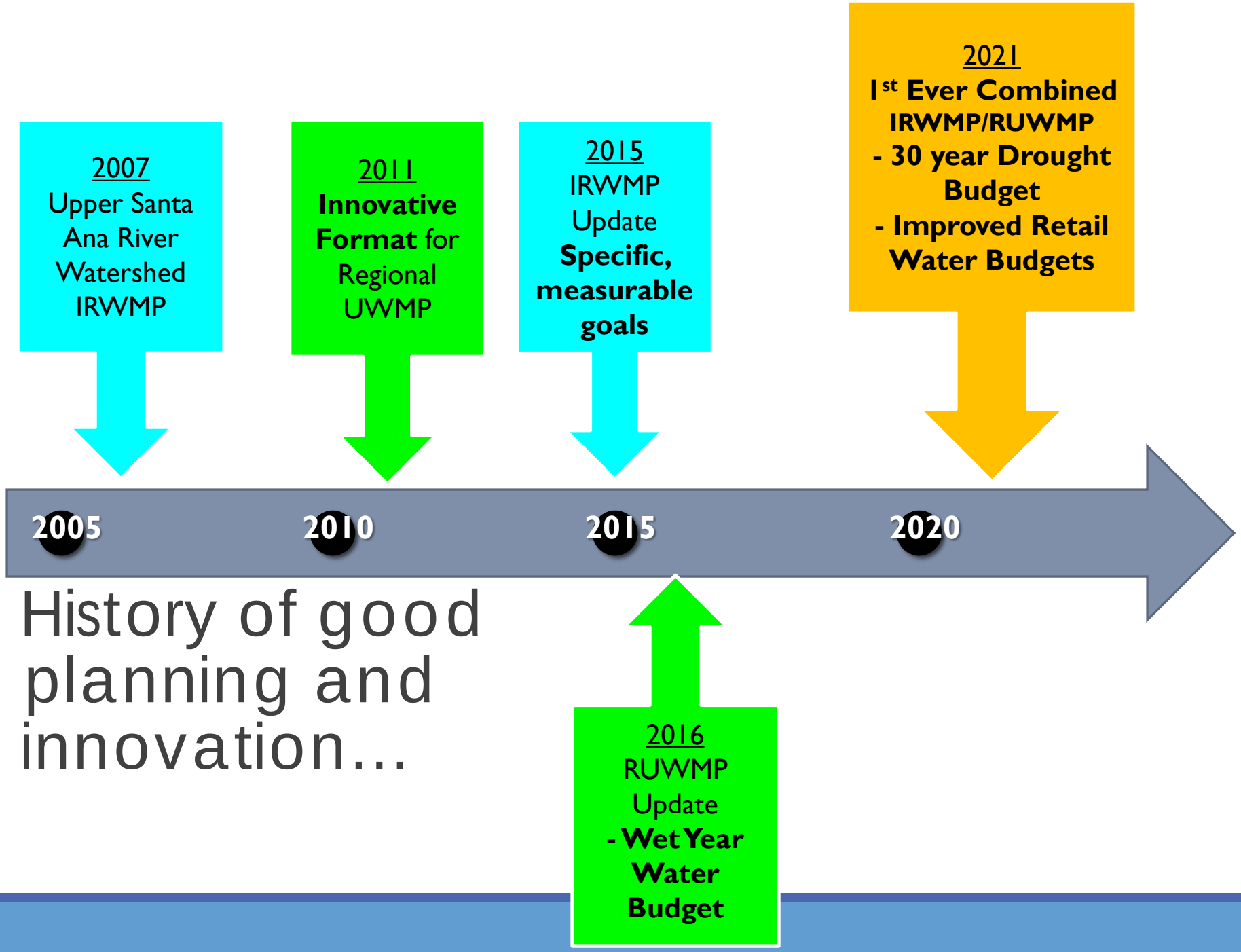




Combining the 2020 updates of the Integrated Regional Water Management Plan and the Regional Urban Water Management Plan

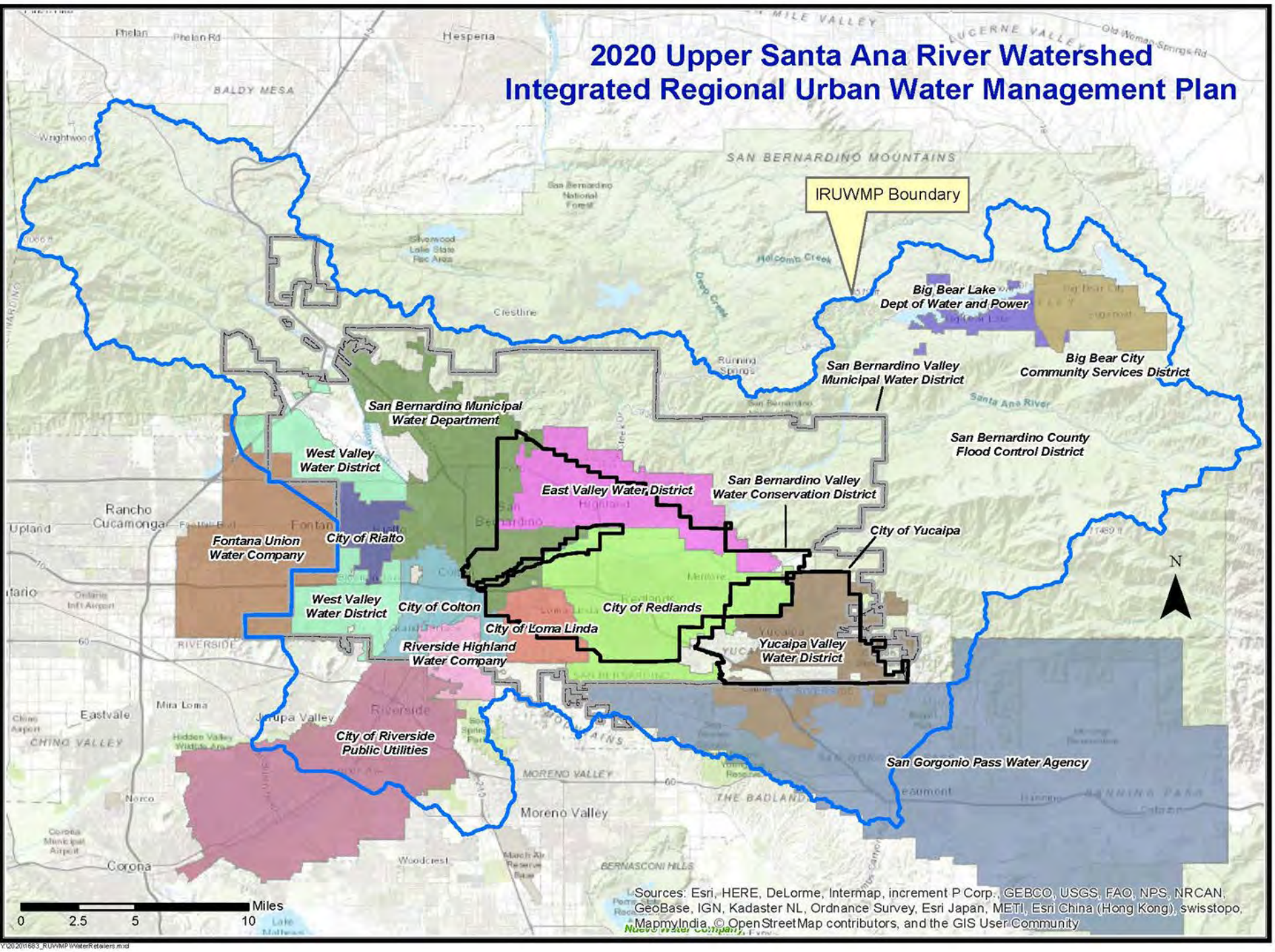
Meeting Key Challenges

- First IRUWMP document in the State
- 7-month schedule
- Multiple participants, complex information and data management



History of good planning and innovation...

2020 Upper Santa Ana River Watershed
Integrated Regional Urban Water Management Plan



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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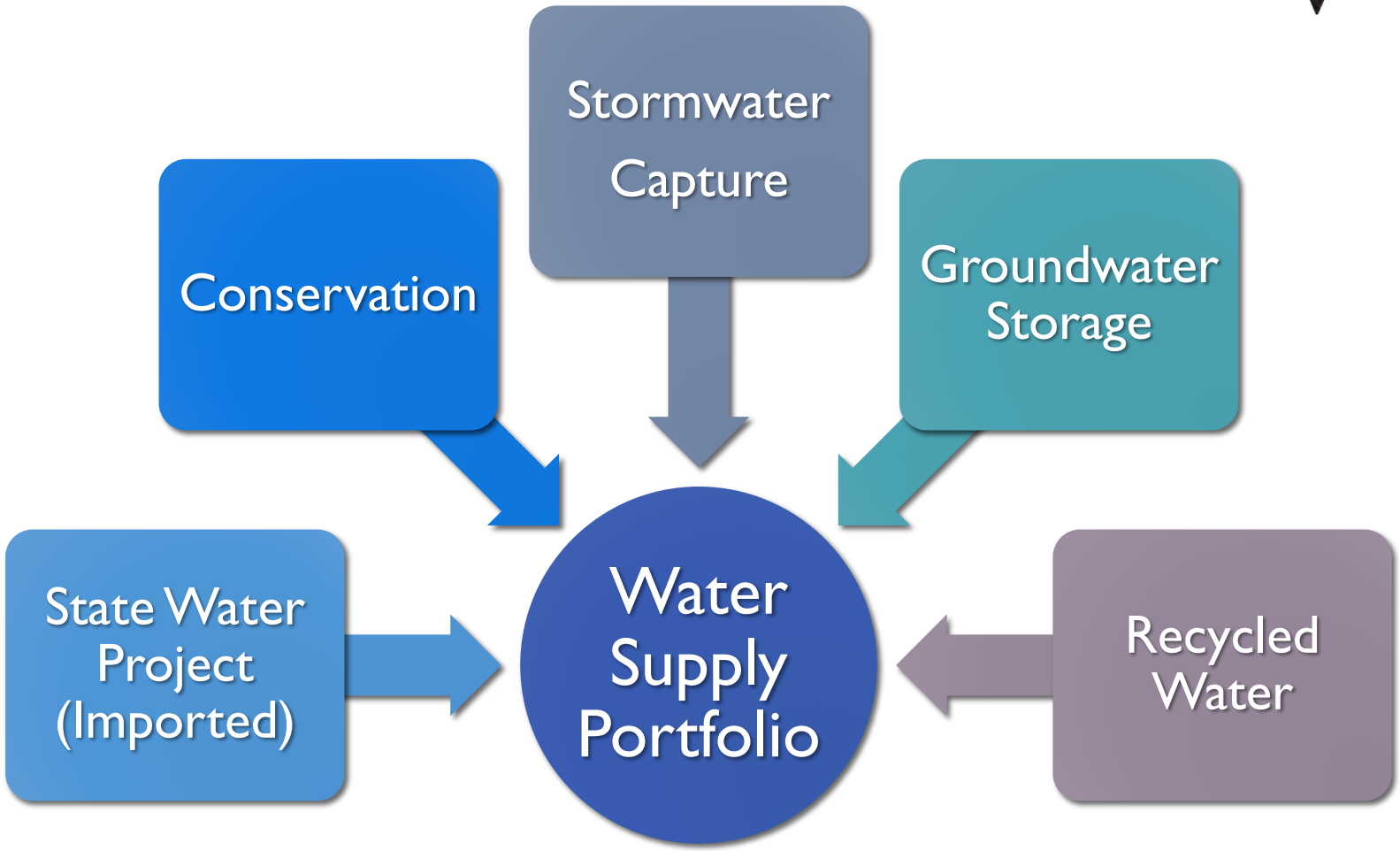
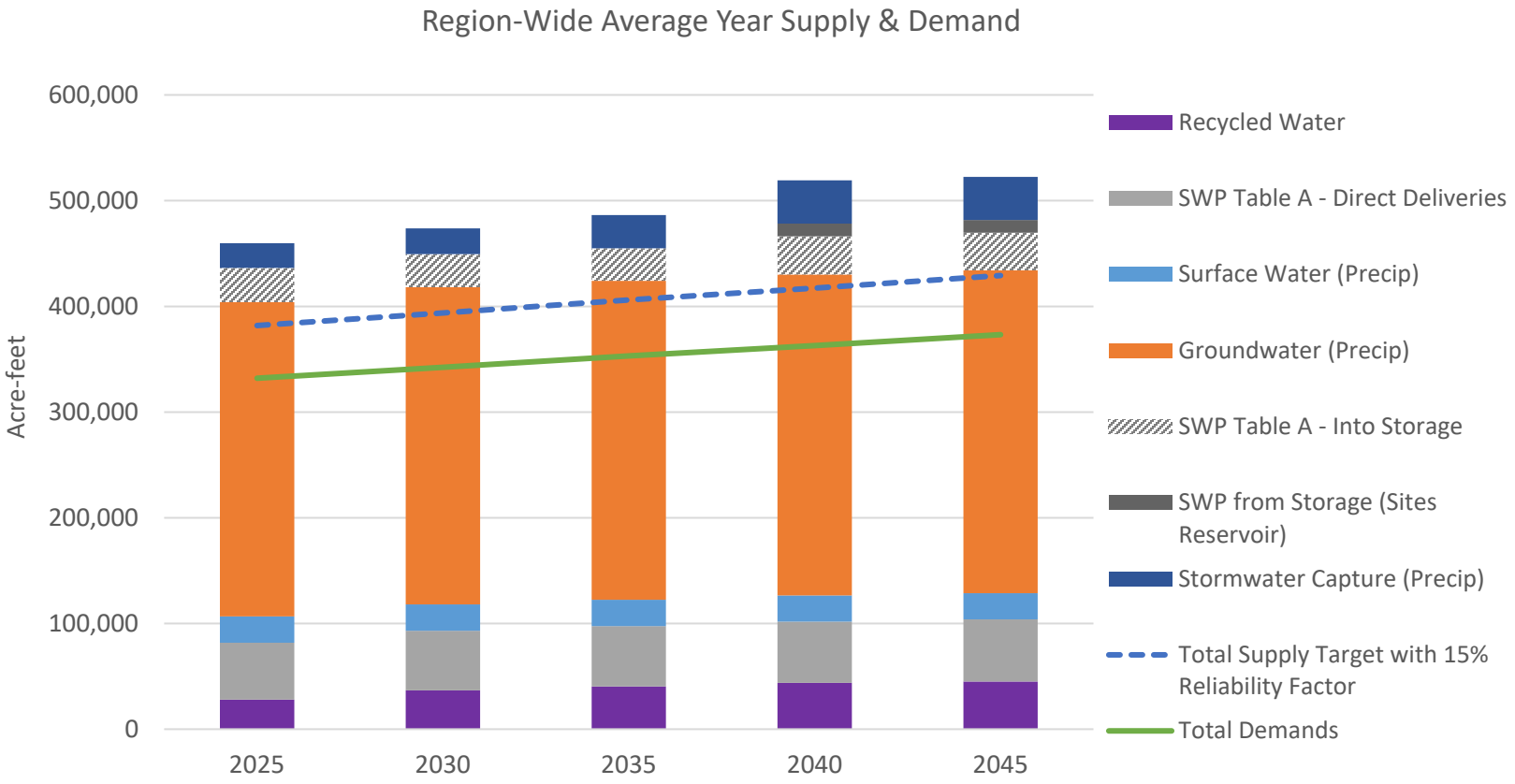
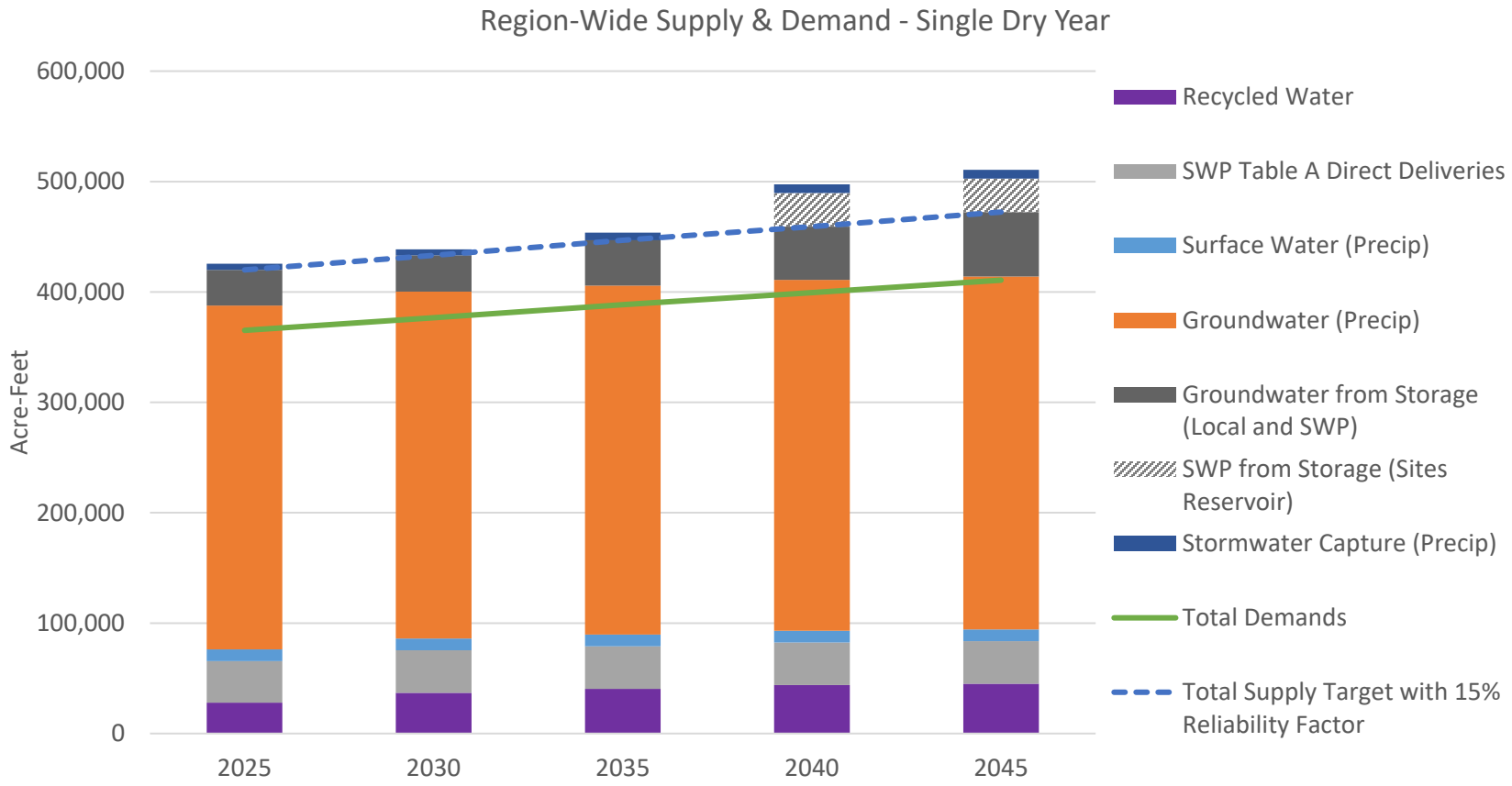

Stormwater Capture
Conservation
Groundwater Storage
State Water Project (Imported)
Water Supply Portfolio
Recycled Water

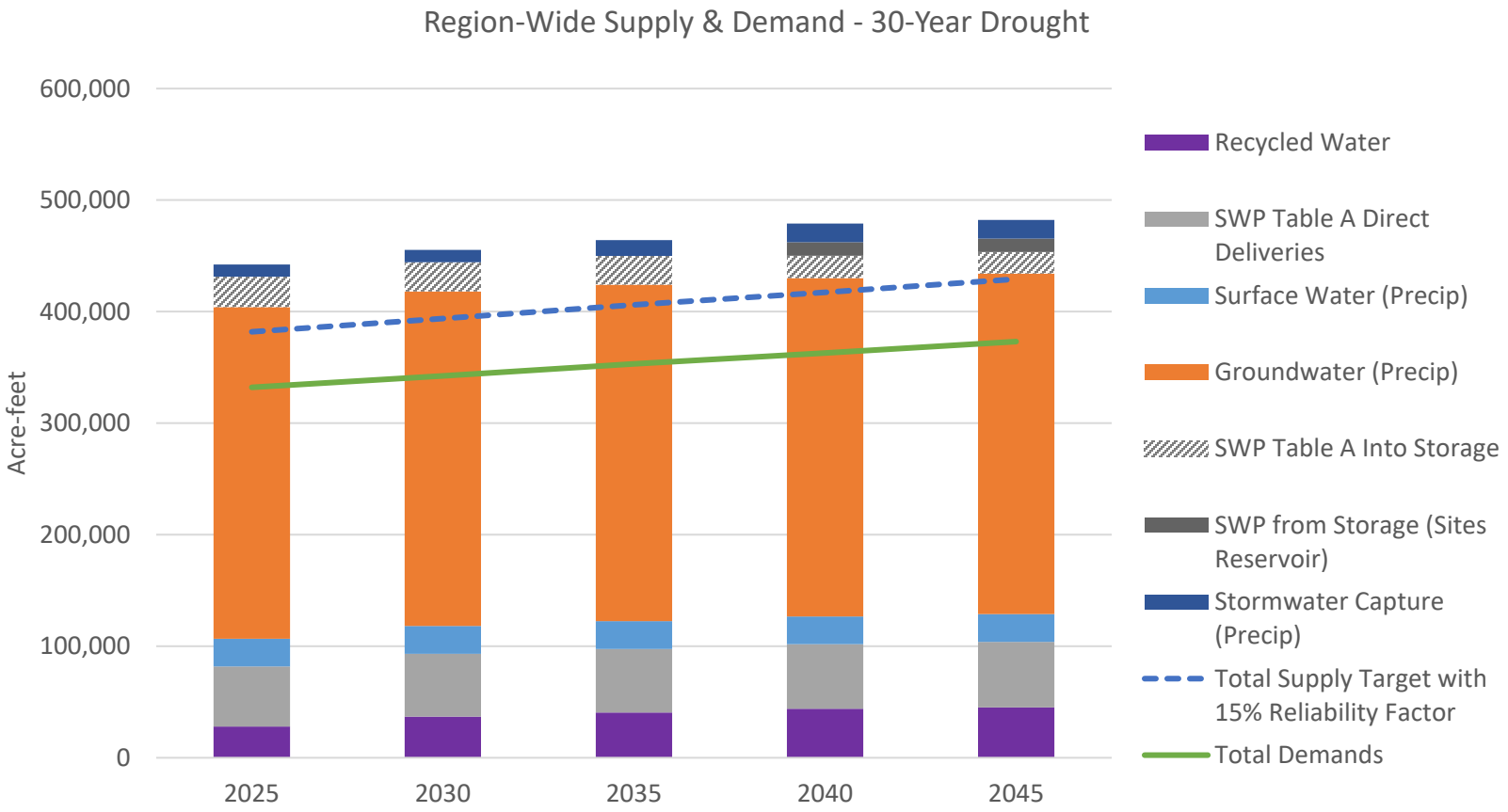
Reliable Water Supply – Average Year



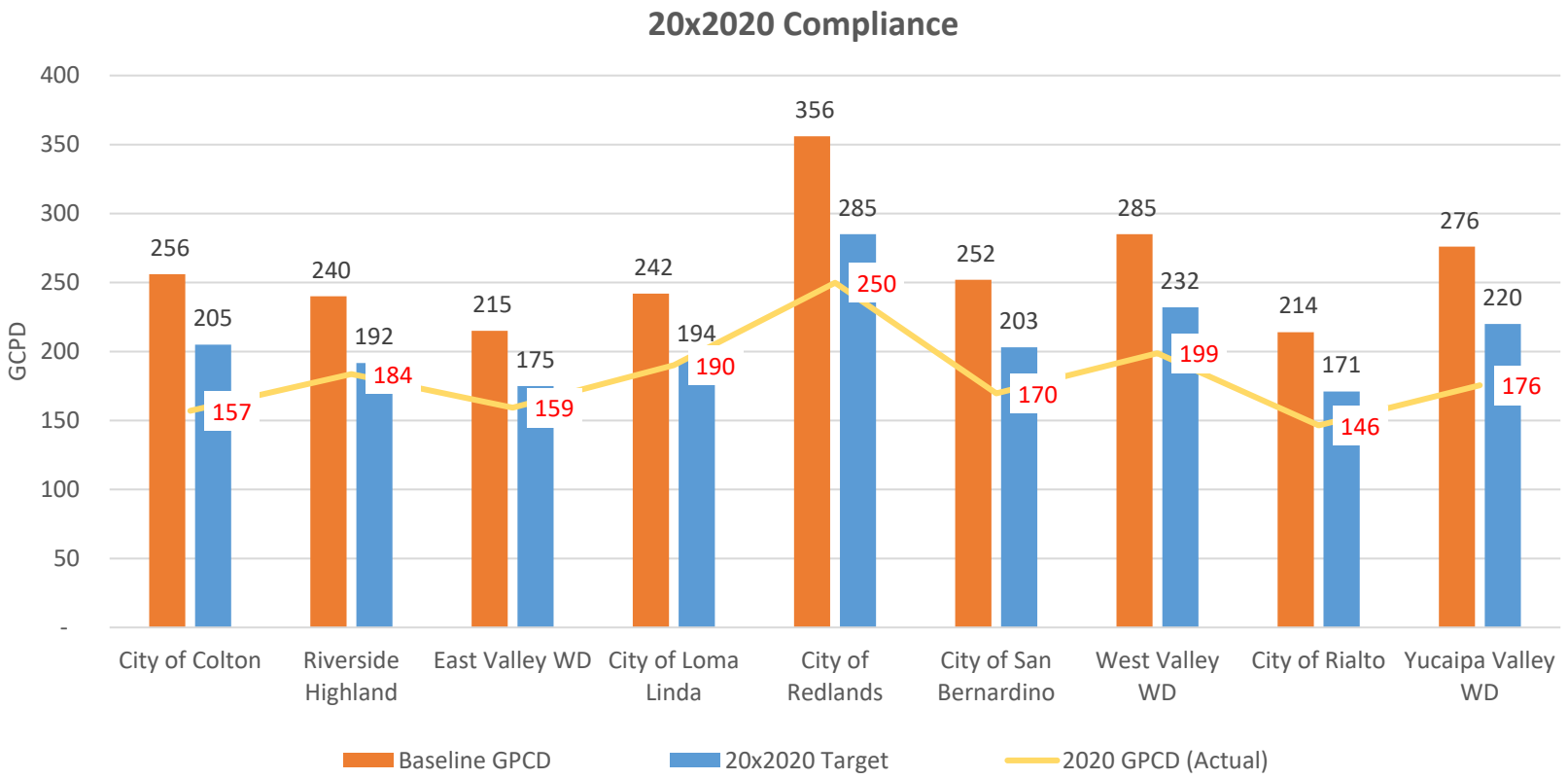
Reliable Water Supply – Dry Year



Reliable Water Supply – 30 Year Drought



Per Capita Use is Lower



- **Compliance (2020 Target):** Average GPCD reduced from a baseline of 260 in 2010 to 181 in 2020, beating the target by 28 gallons
- **Savings:** 7 billion gallons of water (21,759 AF) each year compared to baseline

IRUWMP Goals for Next 5 Years

Goal #1:
Improve Water Supply Reliability

Goal #2:
Balance Flood Management and Increase Stormwater Recharge

Goal #3:
Improve Water Quality

Goal #4:
Improve Habitat and Open Space

Goal #5:
Address Climate Change through Adaptation and Mitigation

Progress Over the Last 5 Years

SAN BERNARDINO Valley MUNICIPAL WATER DISTRICT

2018 REPORT CARD

GOAL #1
IMPROVE WATER SUPPLY RELIABILITY

OBJECTIVES	PROGRESS	COMPLETED PROJECTS/PROGRAMS
1a: Reduce demand 20% by 2020		• All retailers met 2020 targets by 2015
1b: Increase utilization of local supplies by 23,000 AFY		• Enhanced Recharge Project has increased the amount of stormwater recharged • YVWD's Wilson Creek Basin's recycled water recharge project has increased the amount of recycled water recharged
1c: Increase storage by 10,000 AF		• Enhanced Recharge 1B has increased the amount diverted from the SAR Diversion. • Approximately 78,000 AF of SWP water was recharged in 2019 which also increased groundwater storage. • SBVMWD plans to increase groundwater storage in the SBBby 64,000 AF under SARCCUP, though the program has not yet received approval by local water agencies.
1d: Prepare for disasters by implementing 2 new interties between water agencies		• Five new interties between water systems were constructed (between City of Colton and City of Rialto, City of Redlands and Western Heights Water District, City of Redlands and City of Loma Linda, BBLDWP and Big Bear City Community Services District, SBMWD and Devore Water Company) • SBMWD completed seismic upgrades for four steel reservoirs (College, Cajon, Ridgeline, and Terrace No. 2 Reservoirs) with an approximate total volume of 8.8 MG in 2020

CONTINUED ON NEXT PAGE...

= Objective met = Objective partially met = Objective not met

2018 REPORT CARD

GOAL #2
BALANCE FLOOD MANAGEMENT AND INCREASE STORMWATER RECHARGE

OBJECTIVES	PROGRESS	COMPLETED PROJECTS/PROGRAMS
2a: Utilize 500 acres of flood control retention/detention basins that are not currently used for recharge		• SBVWCD implemented the Plunge Creek Water Recharge and Habitat Improvement Project, which is 5.9 acres, to manage flows from water transmission canals • Two MOUs currently underway between SBVWCD and SBCFCD, and between SBVMWD and SBCFCD (expected early 2021)
2b: Reduce FEMA reported flood area		• Data is not currently available to show whether this objective has been met.
2c: Ensure equivalent implementation of flood projects in DAC areas and implement at least 1 flood control project in a DAC area		• The San Bernardino County Flood Control District completed 17 projects to improve flood control basins, flood control channels and flood walls/levees, some of which benefit DAC areas adjacent to channels

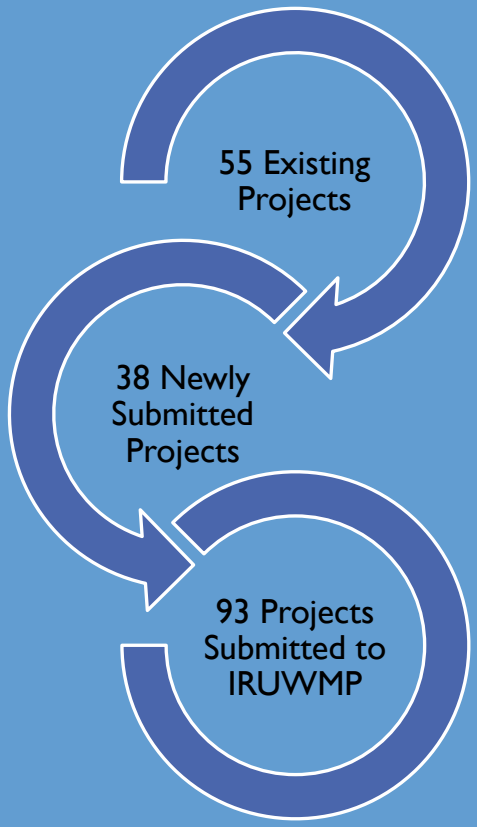
= Objective met = Objective partially met = Objective not met

EXAMPLE PROJECT

SBVWCD PLUNGE CREEK WATER RECHARGE AND HABITAT IMPROVEMENT PROJECT

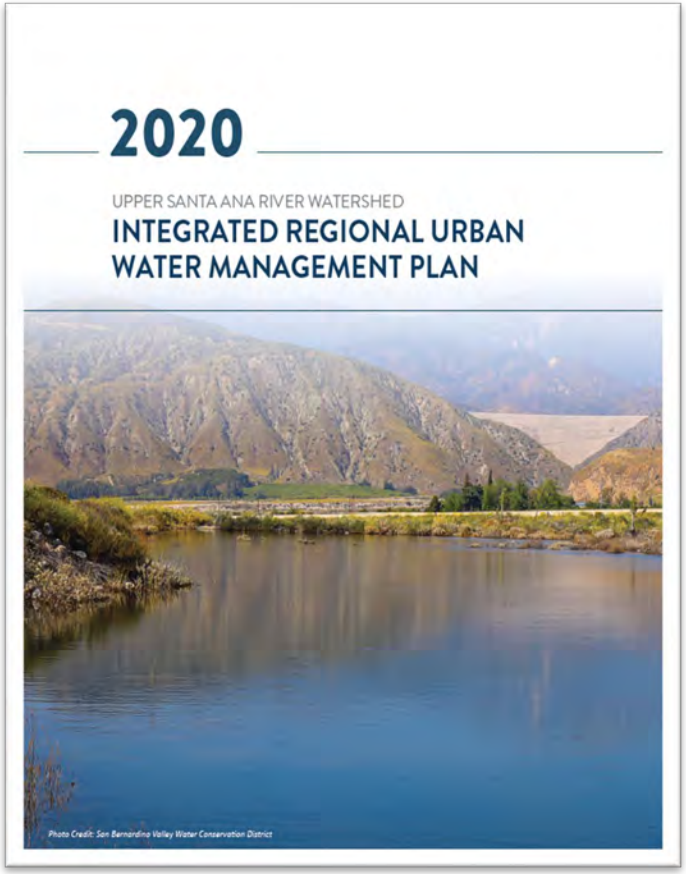
In August 2020, the SBVWCD completed the Plunge Creek Water Recharge and Habitat Improvement Project that returns a 2.5-mile stretch of Plunge Creek, south of Greenspot Road and east of Orange Street, back to its historic braided-streambed after decades of rerouting the creek's water flow created a swifter, narrower streambed. The project, completed with funds from the Safe Drinking Water, Water Quality and Supply, Flood Control and Coastal Protection Bond Act of 2006 (Proposition 84), improved alluvial habitat, created 3.25 of new wetlands, improves transmission of surface water through the channel, and recharges stormwater.

Project Scoring Criteria



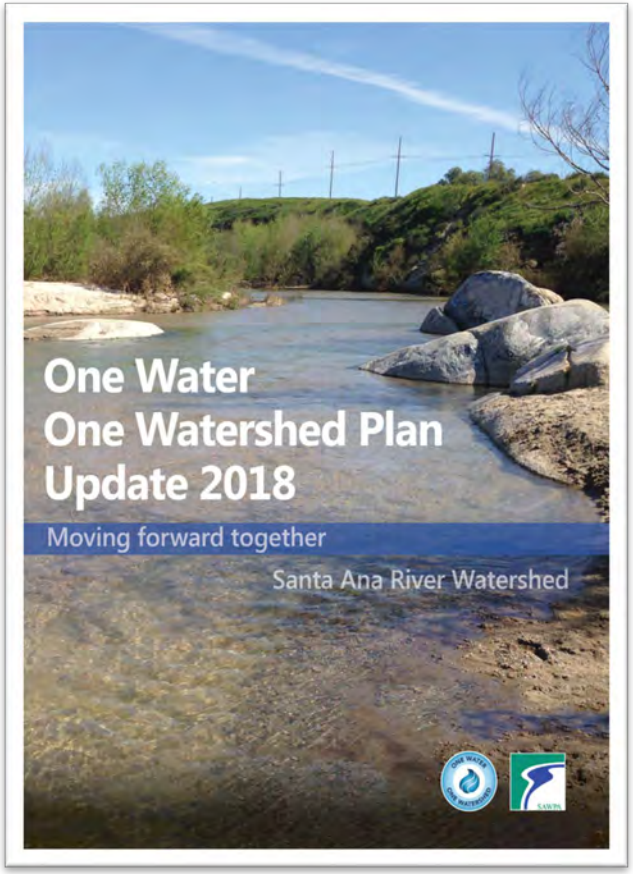
- Meets IRUWMP Objectives
- Technical Feasibility
- Regional/Multiple Agencies
- Current Project Status
- Project Costs and Financing
- Economic Feasibility
- Agency Adopted IRUWMP
- Consider Environmental Justice
- Adapts to the Effects of Climate Change
- Reduces Greenhouse Gas Emissions
- Reduced Reliance on Delta (New Local Supply)

IRUWMP relationship with OWOW



IRUWMP Regional:
- Water Supply & Demands
- Supply Reliability
- Water Conservation
- Recycled Water
- Water Shortage Contingency Plan
- Multi-Benefit Projects
- USARW Specific Goals and Objectives

OWOW Watershed Wide:
- OWOW project scoring, ranking and funding of Proposition 1 IRWM grant funds
- Watershed Task Forces/Roundtables
- Water Use Efficiently Programs
- Watershed Sustainability (IEBL)
- Disadvantaged Communities Involvement Program



IRUWMP Takeaways

1. Continued water supply reliability during drought periods through a diverse water supply portfolio consisting of both local and imported supplies
2. Ongoing management of the Region's water resources, including new opportunities for conjunctive management of groundwater and surface water resources and recharge of groundwater basins
3. Advancing the understanding of the Region's water resources, including focused regional studies, planning and modeling, to ensure the sustainable use of our water resources
4. IRUWMP and OWOW Plans provide collaborative, innovative, and coordinated development of water management strategies and multi-benefit watershed projects

Questions

2020 IRUWMP: https://www.sbvmwd.com/reports/reports/-folder-1120

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Proposition 1 Round 2 Integrated Regional Water Management Grant Competition Process

Ian Achimore, Senior Watershed Manager

OWOW Steering Committee | September 23, 2021

Item No. 4.B.

Purpose of Presentation

- Update on Communication Plan implementation for the OWOW process,
- Present feedback from OWOW stakeholders regarding the OWOW process, and
- Present updates to the OWOW rating and ranking criteria.

Rating and Ranking Criteria Changes for Consideration

- Benefit area clarification for inland water bodies to include a ten-mile buffer area,
- A replacement of Round 1's two competition pools of large and small projects, to two new pools for general implementation and disadvantaged community (DAC) projects,
  - The DAC benefit pool will also allow for single benefit and single jurisdictional projects to request grant funding. This update will require an update to OWOW Steering Committee's Proposition 1 IRWM Implementation Grant – OWOW Program Policy.
- Ranking formula updates including:
  - Combining of benefit categories and rounding of weighting factors,
  - Adding extra percentage point categories.

Recommendation

Adoption of the updated OWOW rating and ranking criteria and modifications to the Proposition 1 IRWM Implementation Grant – OWOW Program Policy subject to major revisions as a result of the scheduled October, 2021 Department of Water Resources draft Proposition 1 Round 2 Proposal Solicitation Package (PSP) release.

Disclaimer About the Recommendation

- If the draft PSP is released in October, 2021 (as currently stated by DWR staff) and has minimal changes that impact the OWOW rating and ranking criteria updates, the OWOW Call for Projects would last from November 2021 to February 2022.
- If DWR makes major policy changes in the draft PSP, the call for projects would be delayed in order to gather further input from stakeholders and bring an updated recommendation of the OWOW rating and ranking criteria to the Steering Committee at a future meeting.

Background on Key Points Covered in Today's Workshop

California Integrated Regional Water Management (IRWM) Program

- There are 12 IRWM Funding Areas,
  - 48 sub-areas within those 12 are called “regions”.
- The Santa Ana River Watershed is covered under the One Water One Watershed (OWOW) IRWM Program.
  - The watershed is a funding area and region.
  - SAWPA facilitates the IRWM planning and grant funding process through the OWOW Program.
  - The IRWM governing body includes the OWOW Steering Committee and SAWPA Commission.

IRWM Funding Areas

Prop 1IRWM Project Requirements

All overall IRWM Round 1 and 2 project proposals must:

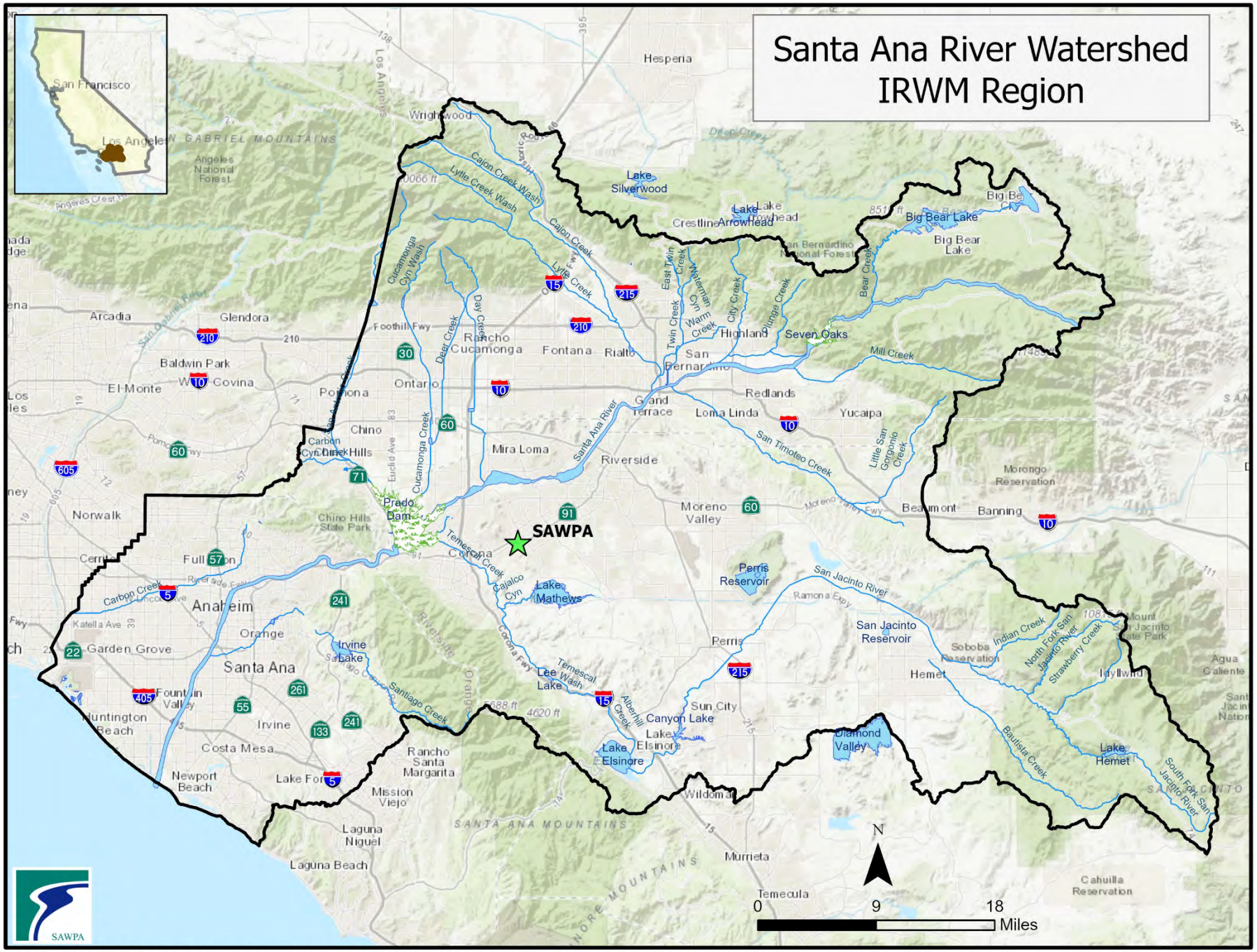
- Respond to climate change, and
- Contribute to regional water self-reliance.

All individual projects must:

- Be "implementation" projects (may have small component for related education efforts),
- Have an expected useful life of 15 years (except for pilot projects), and
- Have CEQA/permits acquired within 18 months after execution of grant agreement with Department of Water Resources (DWR).

Adjacent IRWM Funding Areas

Also Known as “Santa Ana IRWM Region” (or Santa Ana River Watershed)



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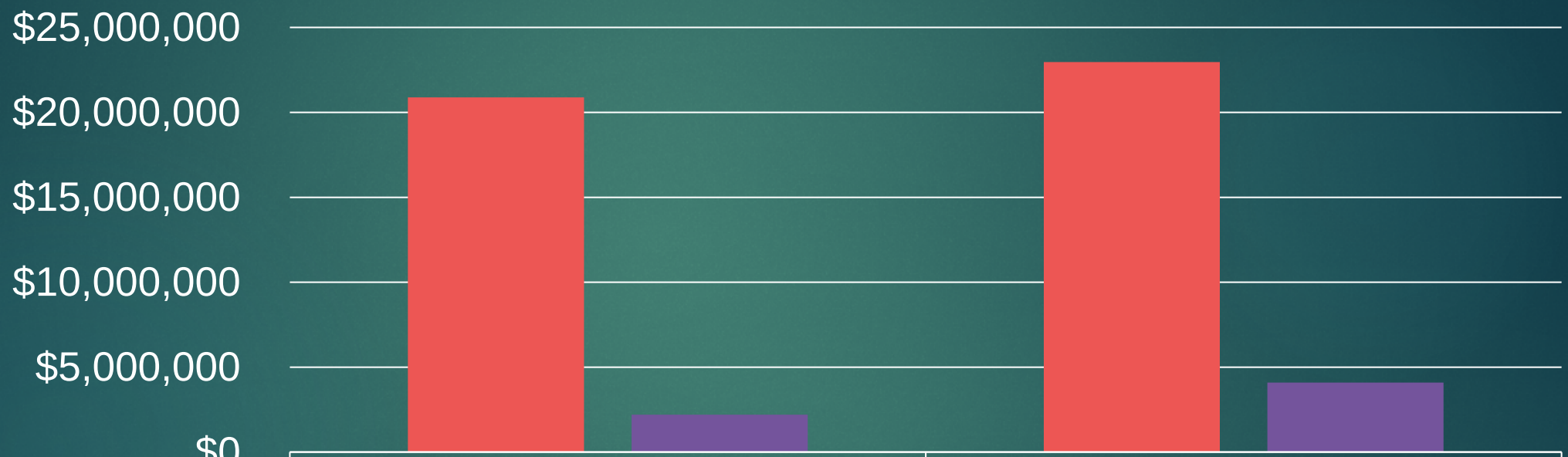
Prop 1 IRWM Implementation Grant Funding for Watershed



	Round 1	Round 2
General	$20,886,428	$22,963,572
DAC Implementation*	$2,205,000	$4,095,000
Total	$23,091,428	$27,058,572

Grand Total = $50,150,000

*Disadvantaged Community

Example Projects for General Implementation Category

- *Integrated Regional Water Management* - what does it mean?
  - The first word “integrated” = multiple benefits
  - The second word “regional” = multiple partners, covers a larger area

Staff proposing a separate competition pool for DAC single benefit and jurisdictional projects

DAC and EDA Definitions

Disadvantaged Community (DAC)

- From Prop 1 “Disadvantaged community” means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

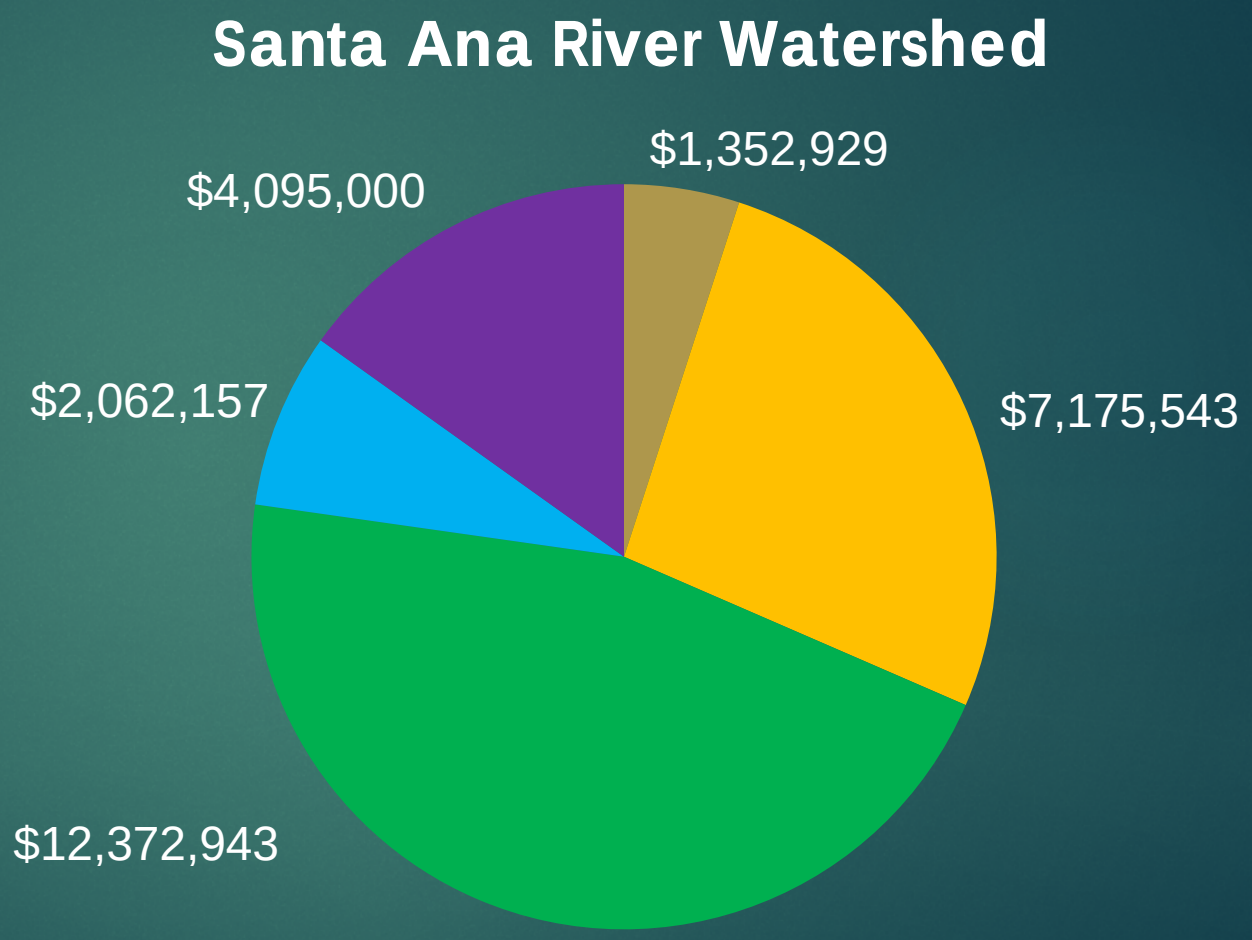
Economically Distressed Area (EDA)

- The EDA definition attempts to capture disadvantaged communities that have a state median household income between 80 and 85 percent of the statewide annual MHI.
- While EDA definition is similar to the DAC definition in utilizing state MHI as a determining factor, the EDA definition also includes other factors such as financial hardship, unemployment and population density.

Prop 1 Round 2 Amounts by Category

Categories created by Agreement executed with North Orange County IRWM Group in 2019:

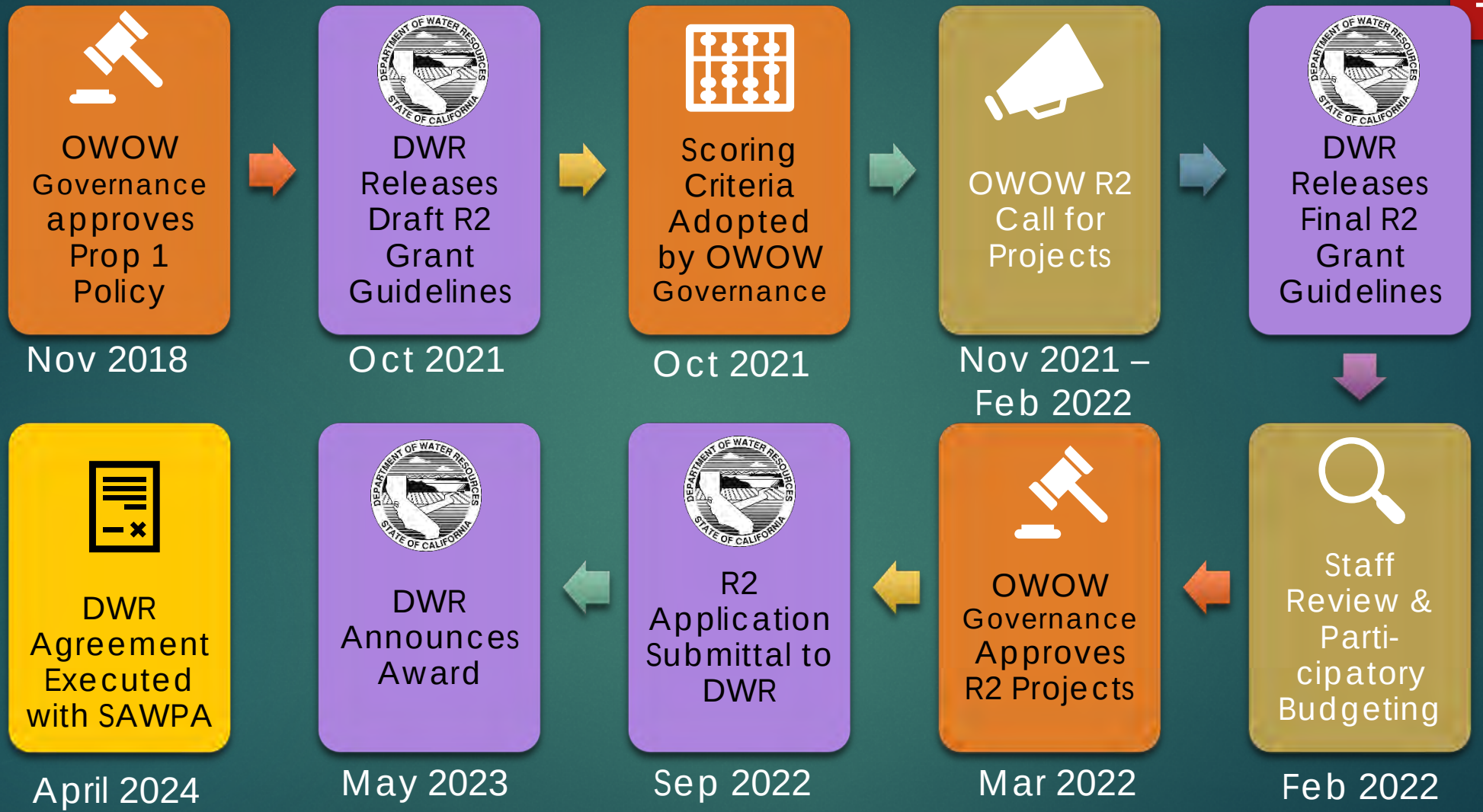
- Grant Admin
- North Orange County*
- Upper Watershed
- Watershed Wide
- DAC Implementation



Total = $27,058,572

*Includes $989,072 carry over from Round 1

High-Level Draft* Round 2 (R2) Schedule



*Schedule assumes DWR will release draft Proposal Solicitation Package (PSP) by October 2021, and all other Round 2 deadlines will reflect the same timing of the Round 1 schedule of events.

Prop 1 Policy Approved by OWOW Governance

- Has high level policy language that states what a project proponent must demonstrate about their project, including:
  - It will be completed with active participation of multiple agencies and/or NGOs or other stakeholders,
  - It produces a net benefit to the Watershed and has no unreasonable negative impacts on others, and
  - Is a sustainable and resilient to changing conditions in the watershed.
- Edits to policy, included in agenda packet, are related to single jurisdiction and single benefit projects.

Communication Plan Implementation

Focus of Next Couple Slides

Communication Plan Implementation

Entity from Communication Plan	Status*
Council of governments (COGs)	Presentations to COGs
Flood control districts	Coordinated
SAWPA member agencies and large to mid-sized retail water agencies	Coordinated
Small water agencies (mutual water companies, investor-owned, etc.)	Two Workshops Held
Tribes	Two Workshops Held
Non-governmental organizations	Coordinated
Disadvantaged communities	Continuing Coordination
Resource conservation districts	Coordinated
Forest related groups (National Forests, fire safe councils, Cal-Fire)	Coordinated

*As of September 9, 2021

OWOW Rating and Ranking Criteria

Focus of Next Couple Slides

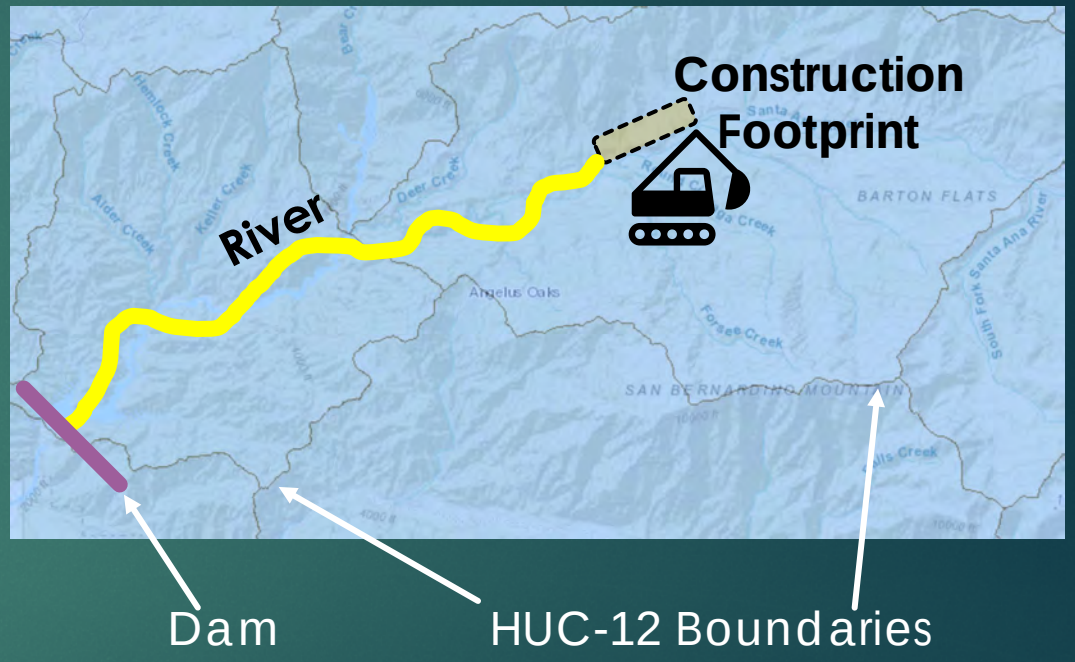
Feedback To Date from OWOW Stakeholders and Governance

- SAWPA to perform outreach to possible grant applicants,
- Enlarge inland water body benefit area,
- Strong support for water supply reliability weight remaining as highest weight,
- Questions about DAC cost share waiver, and
- Request for assistance for non-governmental organizations (NGOs).

Benefit Area **Change**

- Benefit Area limits include the following (listed by project benefit type):
  - **Ecosystem Projects:** US Geological Survey designated HUC-12* level watersheds,
  - **Surface Water Quality and Groundwater Quality:** HUC-12s and DWR-118 Groundwater Basins,
  - **Coastal water quality/recreation:** 10-mile buffer areas, and
  - **Inland water body open to public:** 10-mile buffer areas.
    - Was previously 1/2-mile buffer area, and
    - Found literature on water quality and recreation that uses 10-mile benefit area.

Benefit Area Limit Example



*HUC = Hydraulic Unit Code (more info: https://water.usgs.gov/GIS/huc.html)

Prop 1 *Round 1* OWOW Ranking Process

- Two competition pools – 1) Large Projects and 2) Small Projects (based on grant requested $500k threshold)
  - Disadvantaged Community and General Implementation competed together.
  - Upper Watershed and Watershed-wide competed together.
- DAC, General Implementation, Upper Watershed and Watershed Wide were awarded funding based on high score projects and funding formula.

Ranking formula used:

$$\sum_{\text{12 categories}} \left[\left(\frac{x\ benefit}{X\ Benefit} \times 20 \right) \times \text{WF*} \right]$$

#	Benefit Classes	WF*
1	Water supply reliability, efficiency	9.2
2	Groundwater recharge and management	8.9
3	Reclaim water, treat and convey	8.5
4	Multipurpose flood & Stormwater	8.4
5	Watershed / ecosystem / wetland	7.7
6	Benefits to members of DACs	7.7
7	Benefits large area of watershed	7.6
8	Drinking water treatment, distribution	7.4
9	Contains public education component	7.4
10	Non-point source pollution, reduce, etc.	7.1
11	Fisheries restoration / protection	6.9
12	Removal invasive non-native species	6.3

*Weighting Factor

Competition Pool Draft Update for Round 2

Round 1:

Small Project Large Project

Round 2 DRAFT:

DAC General Implementation

Note: Small/Large Project cutoff was $500k grant request.

Recommended Round 2 Competition Pools (Not including North OC)

Competition Pools	Grant Amount
DAC	$4,095,000
General Implementation	$14,435,100
Upper Watershed*	$12,372,9423
Watershed Wide*	$2,062,157
DAC and General Total	**$18,530,100**

*Not a competition pool, funding gets distributed after projects are submitted and highest scoring projects are determined.

Recommendation for General Implementation

Round 1:

#	Benefit Category	WF*
1	Water supply reliability, efficiency	9.2
2	Groundwater recharge and management	8.9
3	Reclaim water, treat and convey	8.5
4	Multipurpose flood & Stormwater	8.4
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11	Fisheries restoration / protection	6.9
12	Removal invasive non-native species	6.3

*WF = Weighting Factor

Update for Round 2:

#	Benefit Category	WF*
1	Water Supply	9
2	Water Quality Improvement	8
3	Stormwater Protection	8
4	Habitat Improvement	7
5	Percentage of DAC/EDA Area	6
6	Climate Change Adaptation/Mitigation	7

#	Extra %s	+%
1	Tribal Lead	10%
2	Regional	15%
3	New and Innovative	5%
4	Non-Governmental Org. Partner	5%

Recommendation for DAC

Round 1:

#	Benefit Category	WF*
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2	Groundwater recharge and management	8.9
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*WF = Weighting Factor

Update for Round 2:

#	Benefit Category	WF*
1	Water Supply	9
2	Water Quality Improvement	8
3	Stormwater Protection	8

#	Extra %s	+%
1	Tribal Lead	10%
2	Non-Governmental Organization Partner or Lead	5% (or 10%)

Comparison Between Ranking Formulas

Round 1:

$$\left(\sum_{12\ \text{categories}} \left[\left(\frac{x\ benefit}{X\ Benefit} \times 20 \right) \times \text{WF} \right] \right)$$

WF = Weighting Factor
NGO = Non-Governmental Organization

Round 2*:

$$\left(\sum_{6\ \text{categories}} \left(\frac{x\ benefit}{X\ Benefit} \times \text{WF} \right) \right)$$

If Tribe Lead

x 10% of ∑ in ( )

+

If Regional

x 15% of ∑ in ( )

+

If New and Innovative

x 5% of ∑ in ( )

+

If NGO Partner

x 5% of ∑ in ( )

*DAC competition pool has just 3 categories and the Tribal/NGO extra %. DAC also has 10% extra for an NGO that is the project lead (and not just a partner).

Detailed General Implementation Categories

Benefit Category	Weight	Category Information	Unit
Water Supply	9	Amount of water supply provided through innovation and optimization. *Can be recycled water.*	Acre Feet
Water Quality Improvement	8	Amount of water quality improved for people or the environment. *Can be wastewater.*	Million Gallons Per Day
Stormwater Protection	8	Amount of acres protected from flooding	Acres
Habitat Improvement	7	Amount of preserved or enhanced natural habitat	Acres
Percentage of DAC/EDA Area	6	Share of Benefit Area that is DAC/EDA (from +0% to 100%)	Percentage
Climate Change Adaptation/Mitigation	7	Amount of greenhouse gases removed/avoided from project implementation	Tons of CO2
Tribal Benefit	NA - Extra 10%	Lead applicant is federally recognized Indian Tribe or CA State Indian Tribe listed on the Native American Heritage Commission's CA Tribal Consultation List	Yes/No
Regional Benefit	NA - Extra 15%	Benefit area covers at least approximately 75% of IRWM Funding Area, including adjacent IRWM Regions	Yes/No
New and Innovative Decision Support Tools	NA - Extra 5%	Project employs new or innovative technology or practices, or is a pilot project.	Yes/No
NGO Partner	NA – Extra 5%	NGO partner provides labor, land value, and/or resources, toward implementation of the project. If NGO is the lead (and not just a partner), project is also eligible for this 5%.	Yes/No

Detailed DAC Categories

Benefit Category*	Weight	Category Information	Unit
Water Supply	9	Amount of water supply provided	Acre Feet
Water Quality Improvement	8	Amount of water quality improved	Million Gallons Per Day
Stormwater Protection	8	Amount of acres protected from flooding	Acres
Tribal Benefit	NA – Extra 10%	Lead applicant is federally recognized Indian Tribe or CA State Indian Tribe listed on the Native American Heritage Commission's CA Tribal Consultation List	Yes/No
NGO Partner (or Lead)	NA – Extra 5% (or 10%)	NGO partner provides work, land value, and/or resources toward implementation of the project. If NGO is the lead, project receives 10% total	Yes/No

*No DAC-related weight; instead DAC tract will have a DAC-related gate whereby at least 75% of the benefit area must be DAC.

OWOW Grant Application Process

After Ranking Process ➡ OWOW Participatory Budgeting Process

- After rankings, OWOW workshops were part of the “Participatory Budgeting” the OWOW Stakeholders and Governance Approved
  - Developed with the goals of **transparency**, objectivity, and deliberation.
- Purpose was to receive input on the projects proposed in the OWOW process
  - Is the project eligible for OWOW/Prop 1?
  - Are the benefits claimed realistic?
  - Is watershed improved without unreasonable expense/detriment to others?
  - Includes active participation of multiple agencies?

After Participatory Budgeting ➡ Grant Funding Allocation Process

- In Prop 1 Round 1, OWOW allocated funding to those top projects based on those top projects share of the sum of the weighted scores, and
- Any State priority projects near threshold were included.

Project ID	Weighted Score
1	699.90
2	643.89
3	526.26
4	424.44
5	401.53
6	298.39
7	246.87
8	244.25
9	170.26
10	143.83
11	101.49
12	93.87

Top project threshold.

Grant Allocation Formula for Round 2*

Before Running Formula Each Project is "Capped" at Their Grant Request

$$\left(\frac{x\ Weighted\ Score\ of\ Your\ Top\ Project}{X\ Total\ Weighted\ Score\ of\ Top\ Projects} \times \text{Grant Available} \right) + \left(\text{Add More Grant To Your Project Via Formula in first ( )} \right)$$

Additional Stages of Allocation Formula Done if There is Left-Over Grant Due to Project Request "Caps"

*Same formula used in last Prop 1 round.

How the Allocation Process Works for Upper and Watershed Wide

- "Watershed-Wide" Definition: *benefit both the upper and the lower watersheds in the Santa Ana Funding Area and selected by the process in the OWOW Plan* (From the 2019 SAWPA-OC Cooperative Agreement).
- If selected projects that benefit both the upper and the lower watersheds in the Santa Ana Funding Area do not expend any portion of the 10% allocation, any unexpended funds shall be allocated as follows:
  - 34% of any unexpended funds will be allocated to projects selected through the OC Plan ...., and
  - 66% to projects selected through the OWOW for the upper watershed (area in San Bernardino County or Riverside County).

Scenarios with High Scoring Watershed-Wide Projects

- Upfront Rule - OWOW seeks to fund top scoring projects first (i.e. we run the scoring formula first and then assess upper watershed vs. watershed-wide funding).
- Several scenarios can happen after that:
  - Two watershed-wide projects that score high, *but* request less than $2.06M.
  - Two watershed-wide projects score high, *but* request more than $2.06M.
- If the same project was awarded in the North OC IRWM process and the OWOW process, the total awarded amount from both processes would not exceed the project's grant request.

Competition Pools*	Grant
DAC	$4,095,000
General	$14,435,100
Upper Watershed**	$12,372,9423
Watershed Wide**	$2,062,157
DAC and General Total	**$18,530,100**

*Does not include North OC.
**Not a competition pool, funding gets distributed after projects are submitted and highest scoring projects are determined.

Summary of Changes for Consideration

- Benefit area clarification for inland water bodies to include a ten-mile buffer area,
- A replacement of Round 1's two competition pools of large and small projects, to two new pools for general implementation and disadvantaged community (DAC) projects,
  - The DAC benefit pool will also allow for single benefit and single jurisdictional projects to request grant funding. This update will require an update to OWOW Steering Committee's Proposition 1 IRWM Implementation Grant – OWOW Program Policy.
- Ranking formula updates including:
  - Combining of benefit categories and rounding of weighting factors,
  - Adding extra percentage point categories.

Questions and Feedback

Round 1:

#	Benefit Category	WF*
1	Water supply reliability, efficiency	9.2
2	Groundwater recharge	8.9
3	Reclaim water, treat and convey	8.5
4	Multipurpose flood & Stormwater	8.4
5	Watershed / ecosystem / wetland	7.7
6	Benefits to members of DACs	7.7
7	Benefits large area of watershed	7.6
8	Drinking water treatment, distribution	7.4
9	Contains public education component	7.4
10	Non-point source pollution, reduce, etc.	7.1
11	Fisheries restoration / protection	6.9
12	Removal invasive non-native species	6.3

Round 2 General:

#	Benefit Category	WF*
1	Water Supply	9
2	Water Quality Improvement	8
3	Stormwater Protection	8
4	Habitat Improvement	7
5	% of DAC/EDA Area	6
6	Climate Change	7

Round 2 DAC:

#	Benefit Category	WF*
1	Water Supply	9
2	Water Quality Improvement	8
3	Stormwater Protection	8

*WF = Weighting Factor

Recommendation

Adoption of the updated OWOW rating and ranking criteria and modifications to the Proposition 1 IRWM Implementation Grant – OWOW Program Policy subject to major revisions as a result of the scheduled October, 2021 Department of Water Resources draft Proposition 1 Round 2 Proposal Solicitation Package release.