



SARCCUP

SARCCUP Project Updates

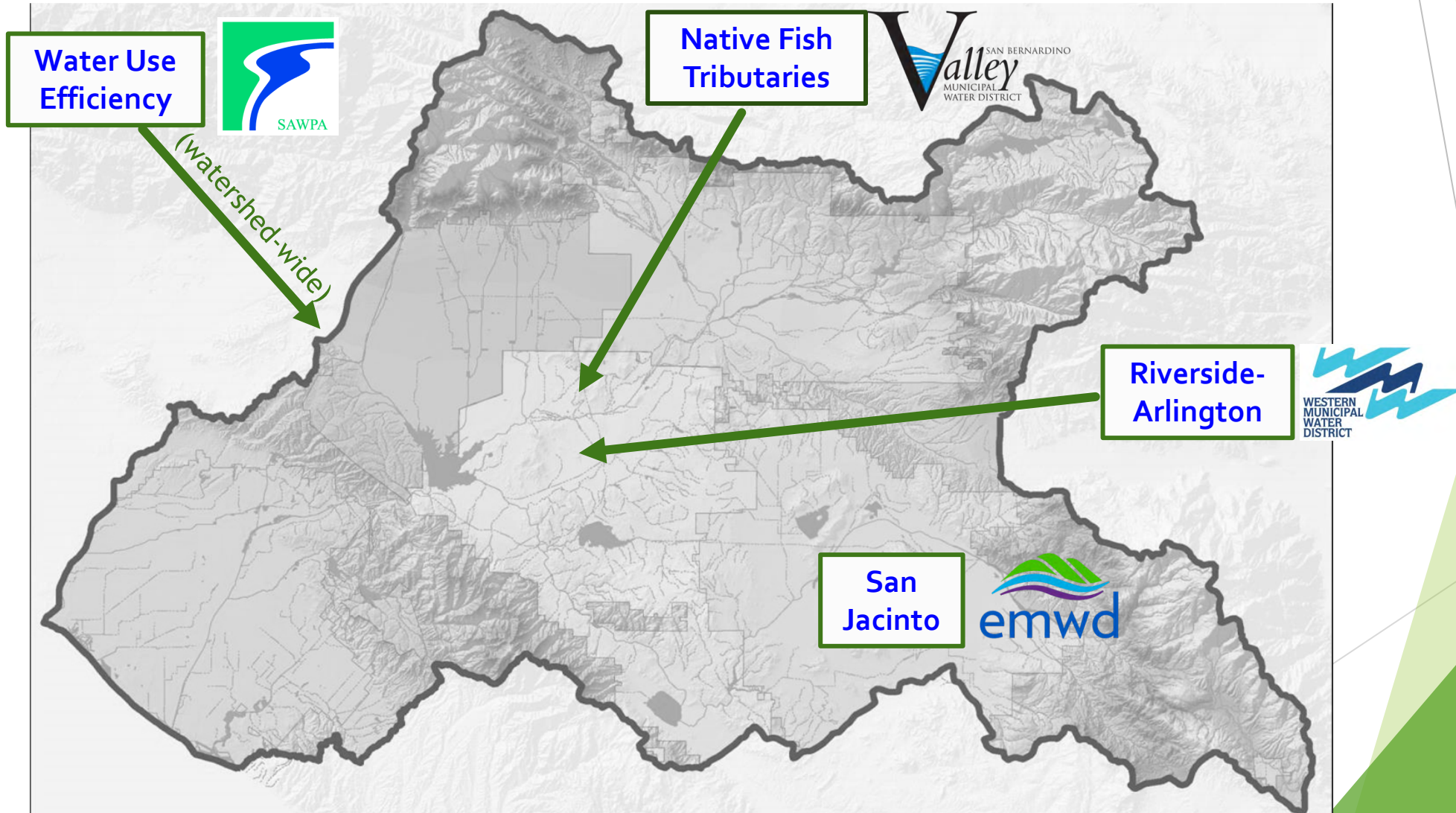
SAWPA Member Agencies & SAWPA

PA 23 Committee | February 2, 2021

Item No. 5.A.



SARCCUP Project Update Locations





EMWD Updates

San Jacinto Groundwater Basin Facilities

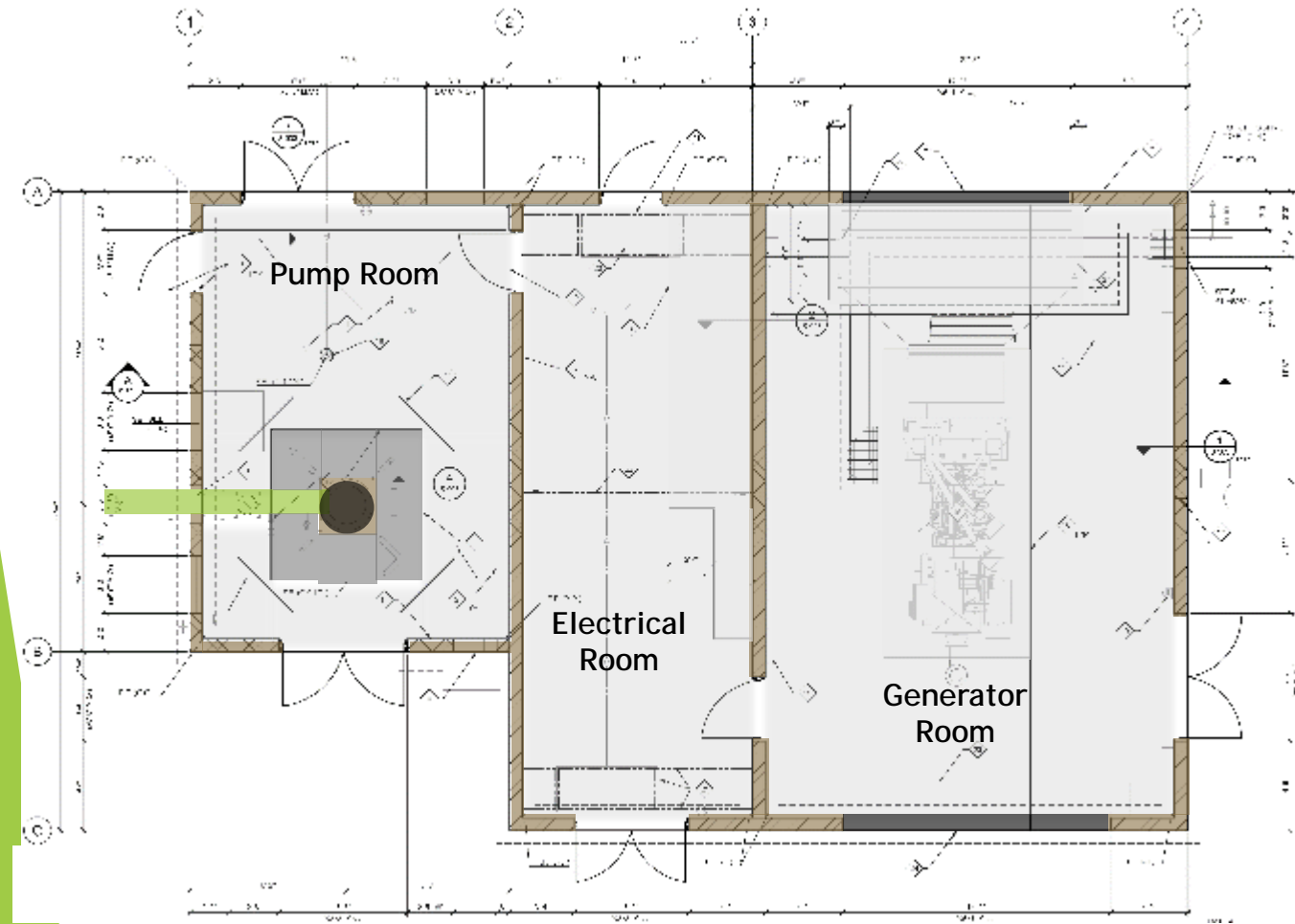
February 2021

Wells 201, 202, & 203 Phase 1B Conveyance Pipelines



- ▶ Board Approved Construction Award on December 2, 2020
- ▶ 1-year construction contract
- ▶ Pre-Construction Meeting held on December 10, 2020
- ▶ Advancing with preliminary submittals.

Wells 201, 202, 203, & 205 Equipping



- 100% Comments returned to Design Engineer
- Design Amendment for architectural color board and wall profile design
- Awaiting Encroachment Permit Approval - City of San Jacinto
- Temporary construction easements in process for shared walls on P/L
- Well 203 drainage easement in process
- Bid February 2021
- O&E April 2021
- Board May 2021

Mountain Avenue West - Construction Progress

- Drilling and development of all eight small monitoring wells and three large multiport monitoring wells is complete.
- Construction of well completion monuments is ongoing.
- Mechanical piping construction is ongoing.
- Soil cement placement on basin sides
- Driveways, perimeter fencing, and SCE enclosure construction



Raw Water Inlet Piping

Mountain Avenue West - Construction Progress

[Play video](#)

Mountain Avenue West - Construction Progress



Aerial Site View

Mountain Avenue West - Construction Progress



Distribution Basin and Outlet Control Facilities

Monitoring Wells Installation



Drill Rig and Sound Walls



Monitoring Well MP-01

Monitoring Wells Installation



Shallow Monitoring Well



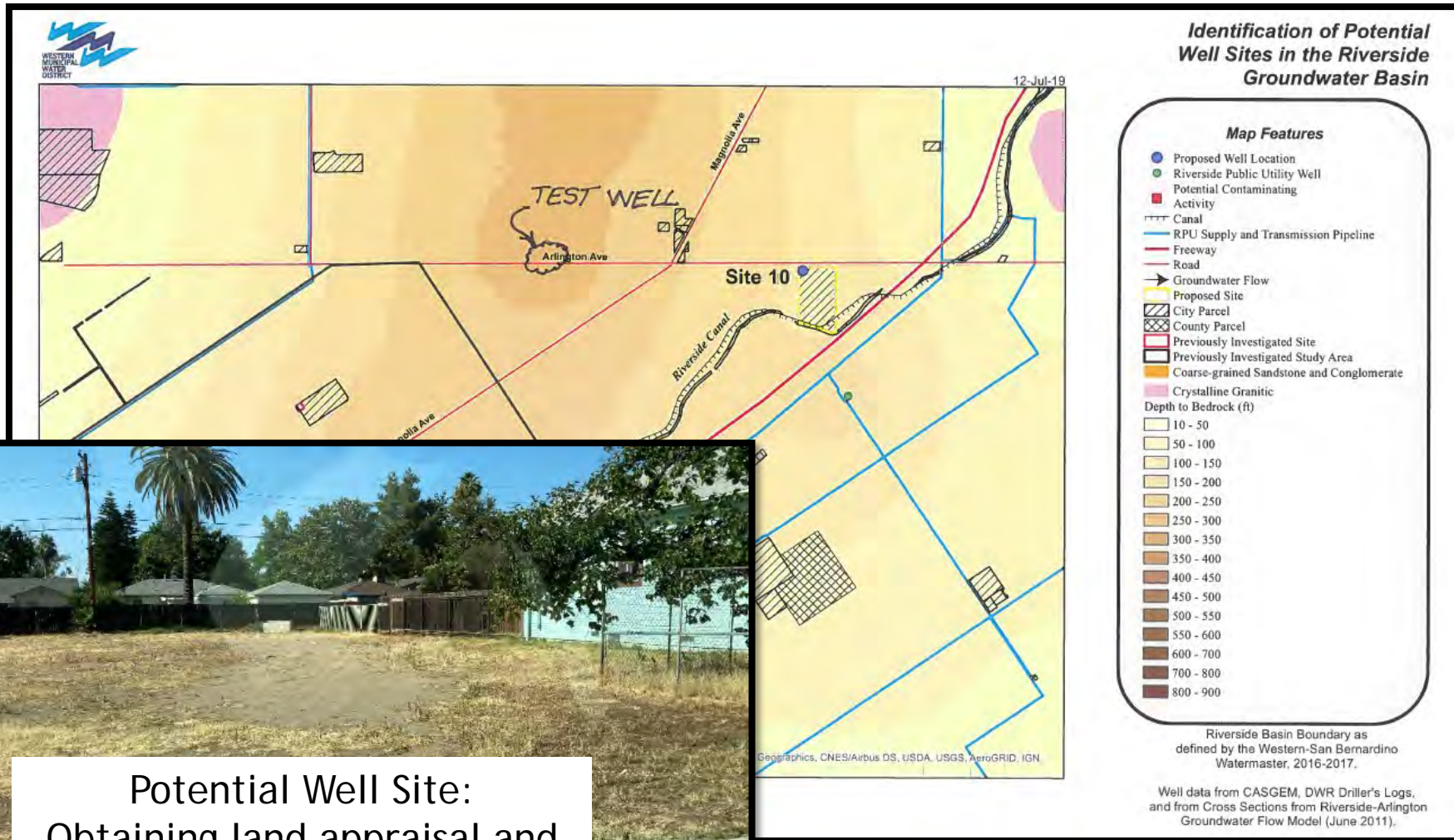
Monitoring Well MP-03

WMWD Updates



Sterling Pump Station, Cannon Pump Station and Riverside-Arlington Basin Well

Riverside-Arlington Basin Well

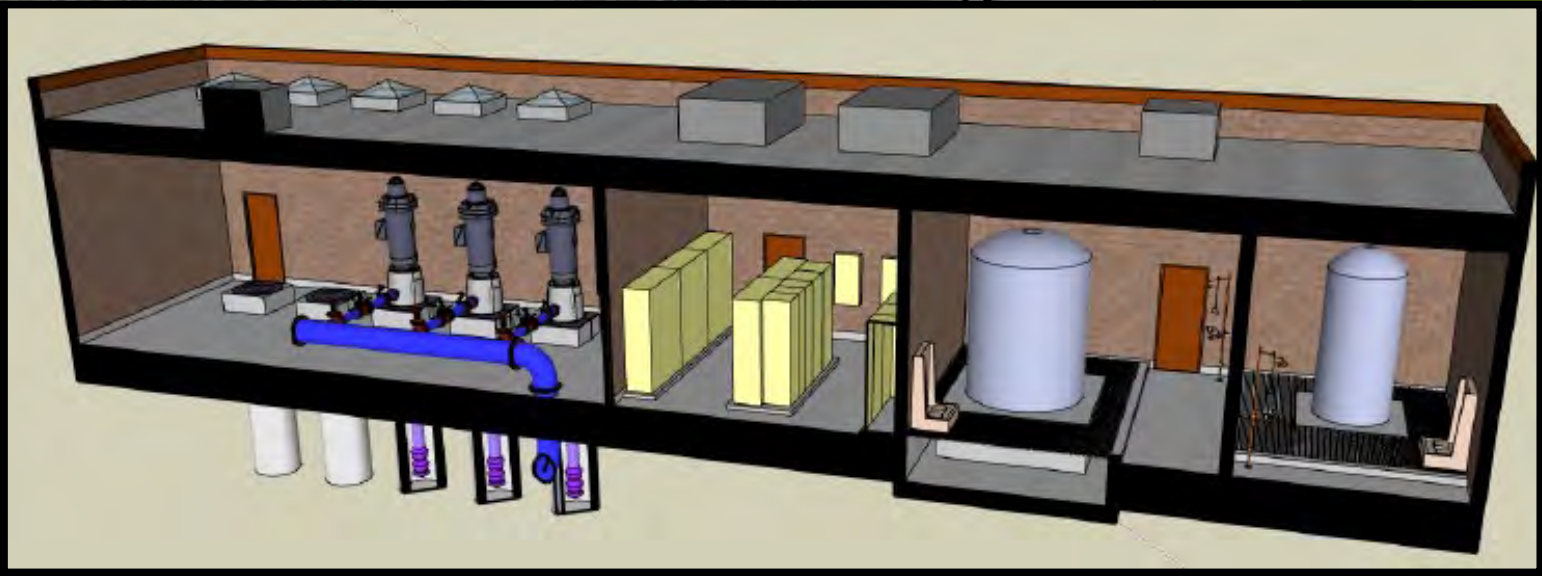


Potential Well Site:
Obtaining land appraisal and
drafting scope for test drilling

Cannon Campbell Pump Station



Design report submitted and under review



Sterling Pump Station



Startup and testing underway, along with repairs to faulty equipment



SBVMWD Updates

Native Fish Habitat Tributaries



Tributary Restoration Projects

▶ Phased Implementation

▶ Phase 1: Hidden Valley and Anza Creeks

- ▶ Working towards 90% Design Package
- ▶ Land Appraisals Underway
- ▶ Site Preparation Underway
- ▶ Seed Collection and Plant Propagation Underway
- ▶ Construction: Fall 2021 - Fall 2022
- ▶ Start Monitoring and Adaptive Management: Fall 2022

▶ Phase 2: Lower Hole and Old Ranch Creeks

- ▶ 30% Designs
- ▶ Construction: Fall 2022 - Fall 2023
- ▶ Start Monitoring and Adaptive Management: Fall 2023

- CEQA
 - Completed for all four restoration sites
- Permitting
 - Phase 1 Sites
 - LSAA (CDFW): Operation of Law (Op Law)
 - Section 401 Compliance (RWQCB)
 - Anza: Complete
 - Hidden Valley: In progress
 - CWA Section 404 Compliance (USACE)
 - Section 7 Federal ESA Consultation Initiated with USFWS
 - Phase 2 Sites
 - After Phase 1 Site permits are obtained

Tributary Restoration Projects



Anza Creek Site in need of restoration
(Nov 29, 2018)



Old Ranch Creek Site after recent fire
(Feb 2, 2020)



Plan Elements

- Project Boundary
- Constructed Channel
- Enhanced Channel
- Riparian Planting
- Selective Clearing and Planting
- Detail Diagram Location

Hidden Valley Creek Design Statistics

Constructed/Enhanced Channel (linear feet)	2,538 / 1,782
Cut/Fill (cubic yards)	20,421 / 1,915
Channel Pools	14
In-Stream Habitat Structures ¹	85
Floodplain Bench Creation (acres)	1.3
Riparian/Channel Bank Planting ² (acres)	6.3
Selective Clearing and Planting ² (acres)	15.4

¹ Habitat structures include 4000 x 2000 x 20, 4000 x 2000 x 30, 4000 x 2000 x 40, 4000 x 2000 x 50, 4000 x 2000 x 60, 4000 x 2000 x 70, 4000 x 2000 x 80, 4000 x 2000 x 90, 4000 x 2000 x 100, 4000 x 2000 x 120, 4000 x 2000 x 150, 4000 x 2000 x 200, 4000 x 2000 x 250, 4000 x 2000 x 300, 4000 x 2000 x 350, 4000 x 2000 x 400, 4000 x 2000 x 450, 4000 x 2000 x 500, 4000 x 2000 x 550, 4000 x 2000 x 600, 4000 x 2000 x 650, 4000 x 2000 x 700, 4000 x 2000 x 750, 4000 x 2000 x 800, 4000 x 2000 x 850, 4000 x 2000 x 900, 4000 x 2000 x 950, 4000 x 2000 x 1000, 4000 x 2000 x 1050, 4000 x 2000 x 1100, 4000 x 2000 x 1150, 4000 x 2000 x 1200, 4000 x 2000 x 1250, 4000 x 2000 x 1300, 4000 x 2000 x 1350, 4000 x 2000 x 1400, 4000 x 2000 x 1450, 4000 x 2000 x 1500, 4000 x 2000 x 1550, 4000 x 2000 x 1600, 4000 x 2000 x 1650, 4000 x 2000 x 1700, 4000 x 2000 x 1750, 4000 x 2000 x 1800, 4000 x 2000 x 1850, 4000 x 2000 x 1900, 4000 x 2000 x 1950, 4000 x 2000 x 2000.

² Riparian/channel bank planting occurs in areas where existing vegetation has been completely cleared. Selected clearing and planting activities include: selective clearing of native vegetation to improve bank erosion, stability. These areas will be treated for invasive species and then planted with native species.

Overview Plan Detail Diagrams



- Notes**
1. Existing wetland cells are no longer functional and cut off riparian habitat from Santa Ana River flood waters.
 2. Damaged berms from former wetland cells.
 3. Santa Ana River floodplain.

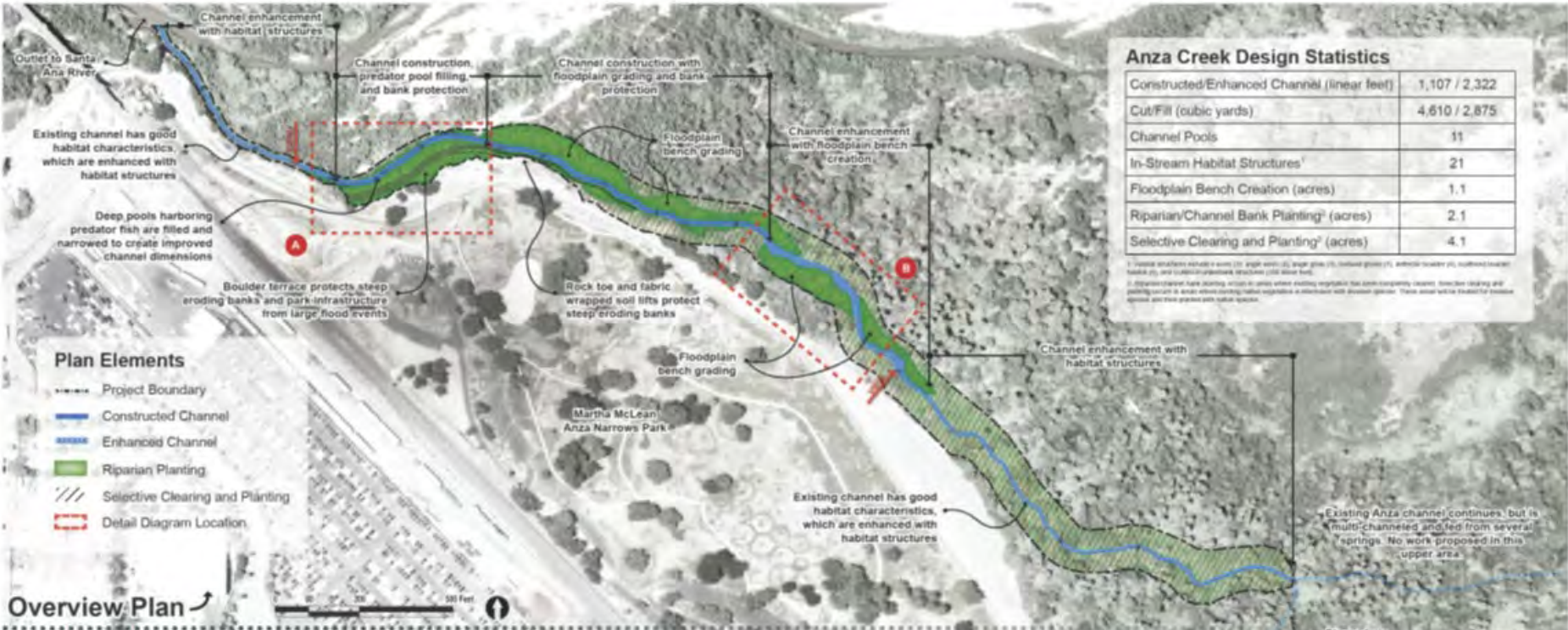
- Notes**
1. Channel outlet using berms to reduce impacts to existing vegetation.
 2. Berms regraded and planted to restore natural riparian habitat conditions.
 3. Channel outlet will include cutting to reduce impacts to vegetation in the Santa Ana River floodplain.
 4. Berms remain intact for use in the proposed Hidden Valley Wetland cells.
 5. Selective clearing of invasive species and planting native riparian species.

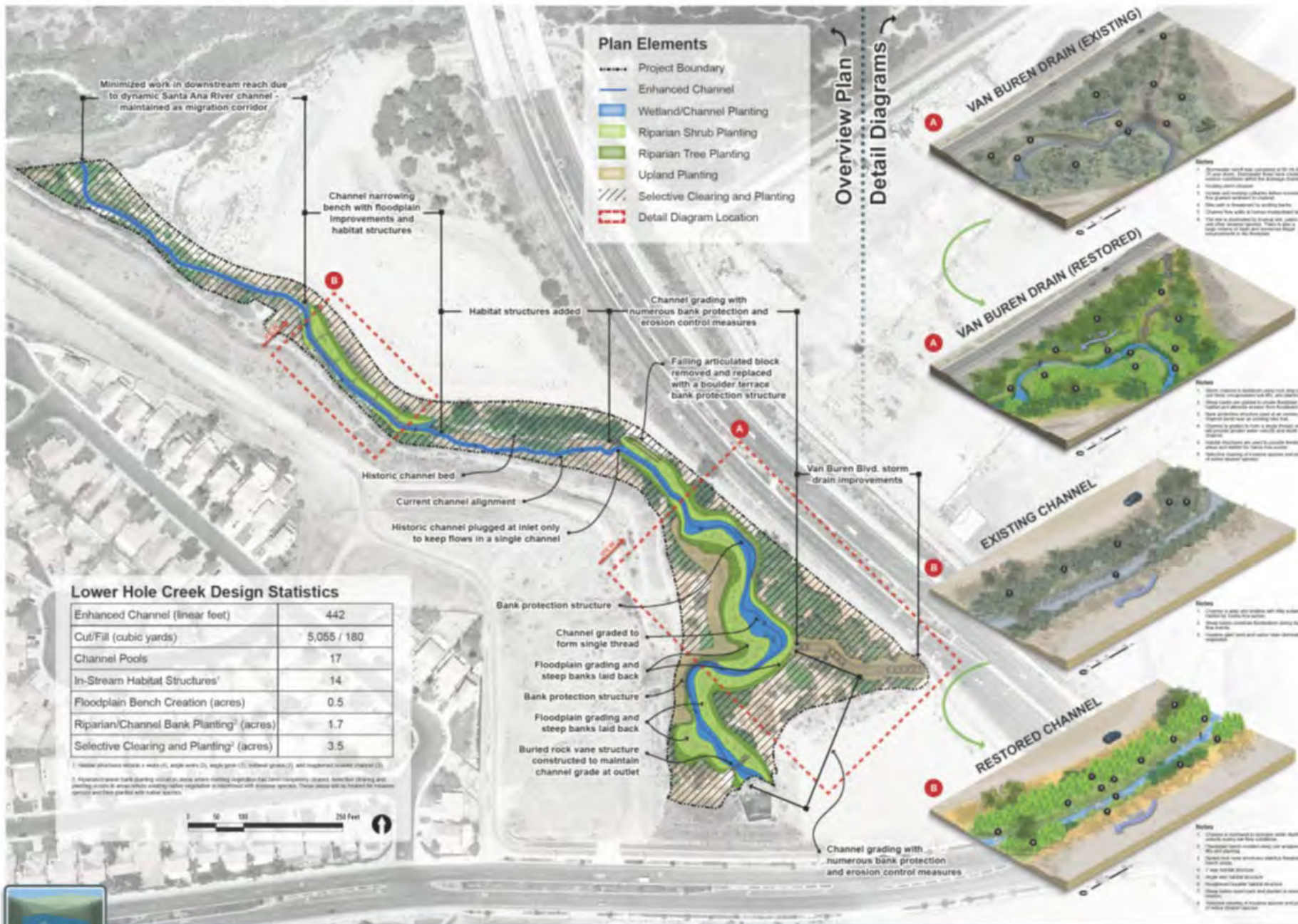
- Notes**
1. Culvert replacement to improve flow capacity.
 2. L-panels installed habitat structures with stream bankers to create habitat flow through the structure.
 3. Stream banker structures to provide habitat and substrate for steel growth.
 4. Floodplain creation area, which also allows for channel stability.
 5. Selective clearing of invasive species and planting of native riparian species.



Hidden Valley Creek Restoration

San Bernardino Valley Municipal Water District





- Plan Elements**
- Project Boundary
 - Enhanced Channel
 - Wetland/Channel Planting
 - Riparian Shrub Planting
 - Riparian Tree Planting
 - Upland Planting
 - /// Selective Clearing and Planting
 - Detail Diagram Location

Overview Plan
Detail Diagrams

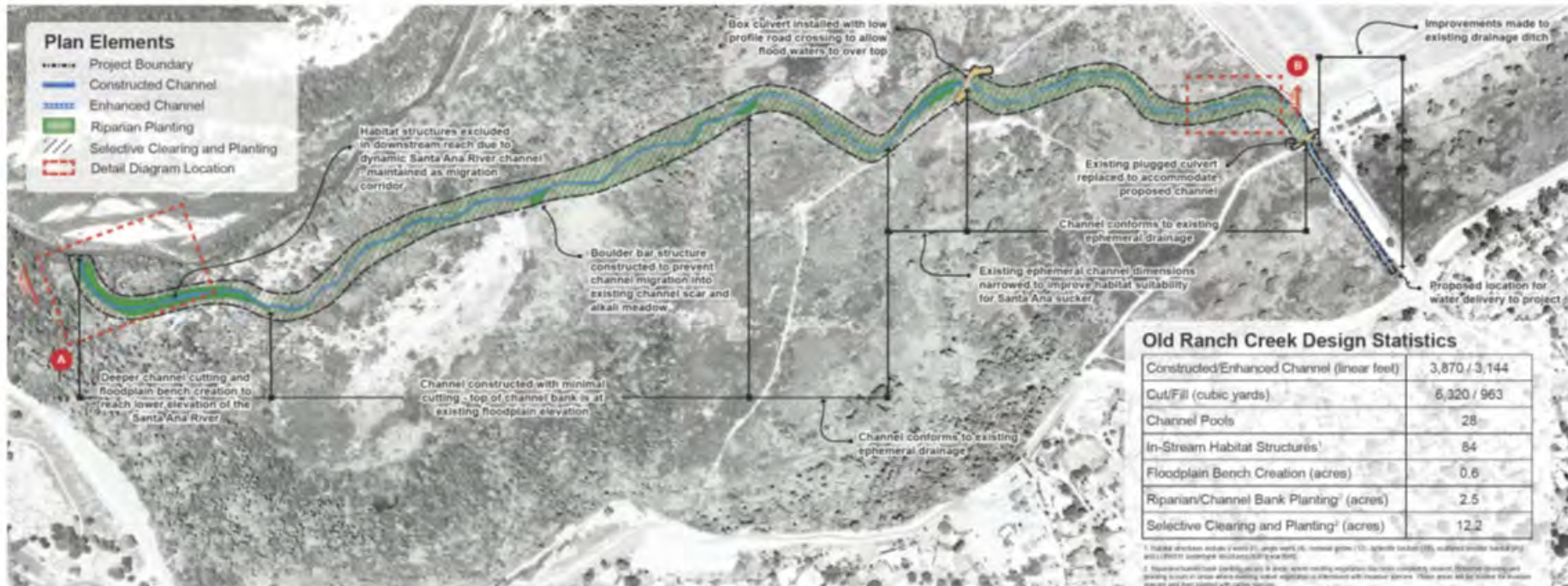
Lower Hole Creek Design Statistics

Enhanced Channel (linear feet)	442
Cut/Fill (cubic yards)	5,055 / 180
Channel Pools	17
In-Stream Habitat Structures ¹	14
Floodplain Bench Creation (acres)	0.5
Riparian/Channel Bank Planting ² (acres)	1.7
Selective Clearing and Planting ² (acres)	3.5

¹ Habitat structures include: weirs (1), single weirs (2), single gate (3), boulder gates (4), and megalithic weirs (5).
² Riparian bank planting includes: shrub areas, shrub vegetation that have long-term, diverse, herbaceous (6) and planting in areas which existing native vegetation is dominated with grasses species. These areas will be treated for erosion control and then planted with native species.



Lower Hole Creek Restoration
San Bernardino Valley Municipal Water District

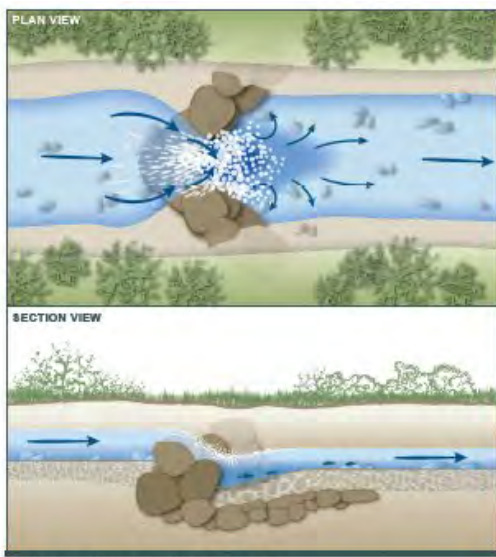


Overview Plan

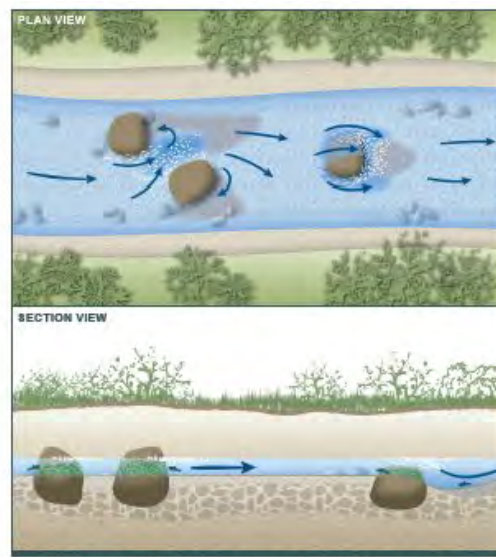
Detail Diagrams



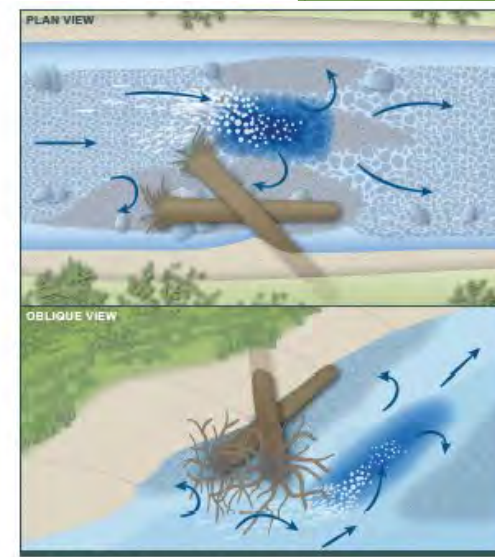
Old Ranch Creek Restoration
San Bernardino Valley Municipal Water District



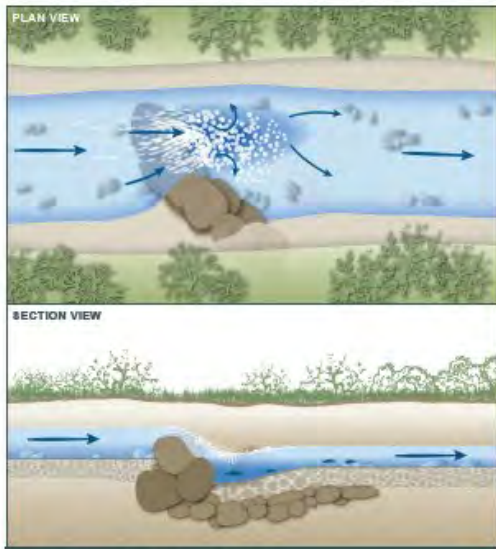
CENTER WEIR PLUNGE POOL



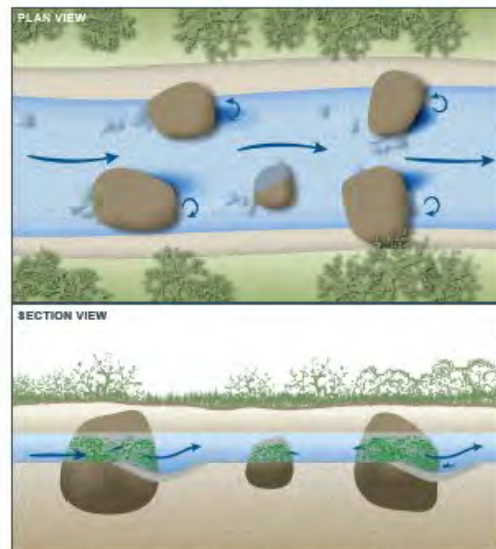
BOULDER-ROUGHENED RIFFLE/RUN HABITAT



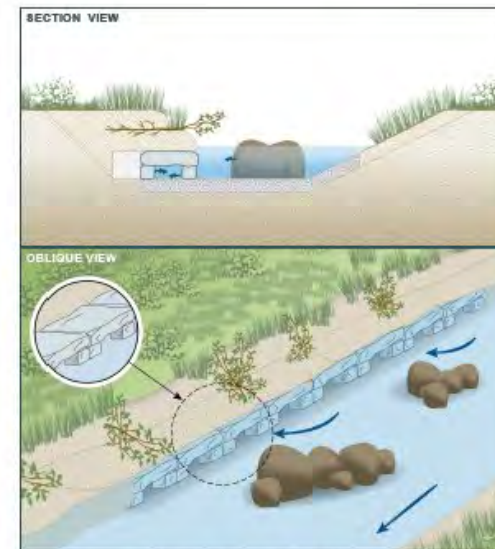
ROOT WAD GROIN SCOUR POOL



ANGLE WEIR PLUNGE POOL



SCATTERED BOULDERS IN SLACKWATER POOLS



LUNKER UNDERBANK HABITAT STRUCTURE



SAWPA Updates



Water Use Efficiency Budget Assistance Task

Purpose of Task

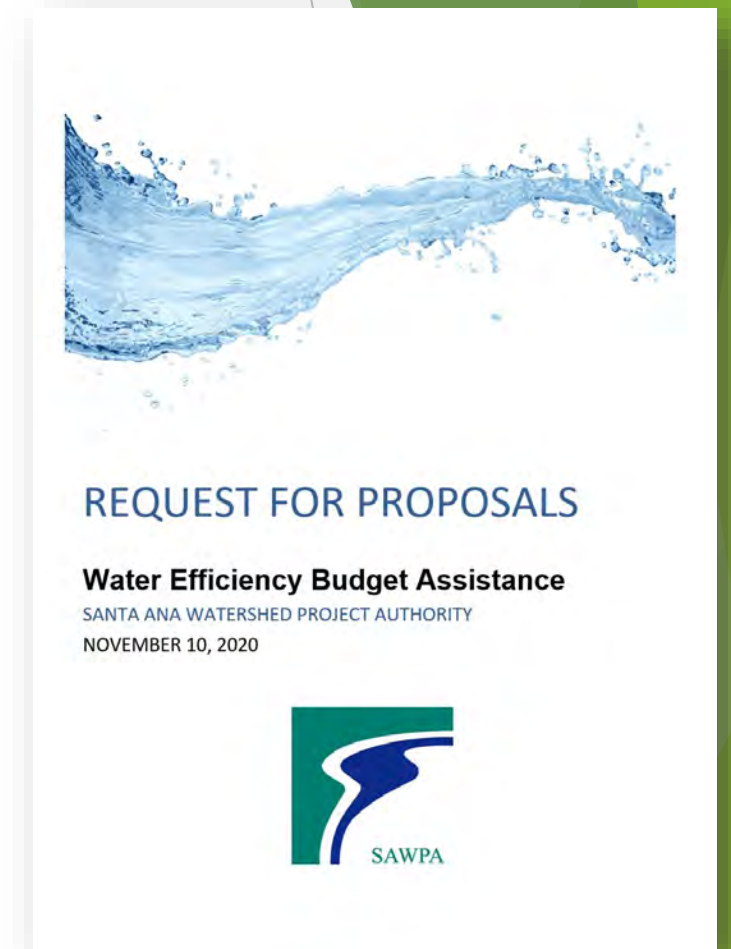
1. Help 5 to 10 retail agencies comply with State regulations that require water agencies to adhere to agency-wide water budgets (Senate Bill 606 and Assembly Bill 1668);
2. Provide 5 to 10 retail agencies with budgets to prepare them to eventually study/adopt conservation-based rates; and
3. Provide 5 to 10 retail agencies with information to target other water use efficiency programs to inefficient water users.

SARCCUP
Water Budget
Assistance
Task



Latest Progress

- ▶ November 2020: Request for Proposals (RFP) for consultant contract,
- ▶ January 2021: Negotiating with consultant,
- ▶ February 2021: Recommended consultant contract to PA 22 Committee,
- ▶ February/March 2021: Begin formal recruiting of up to 10 retail water agencies.

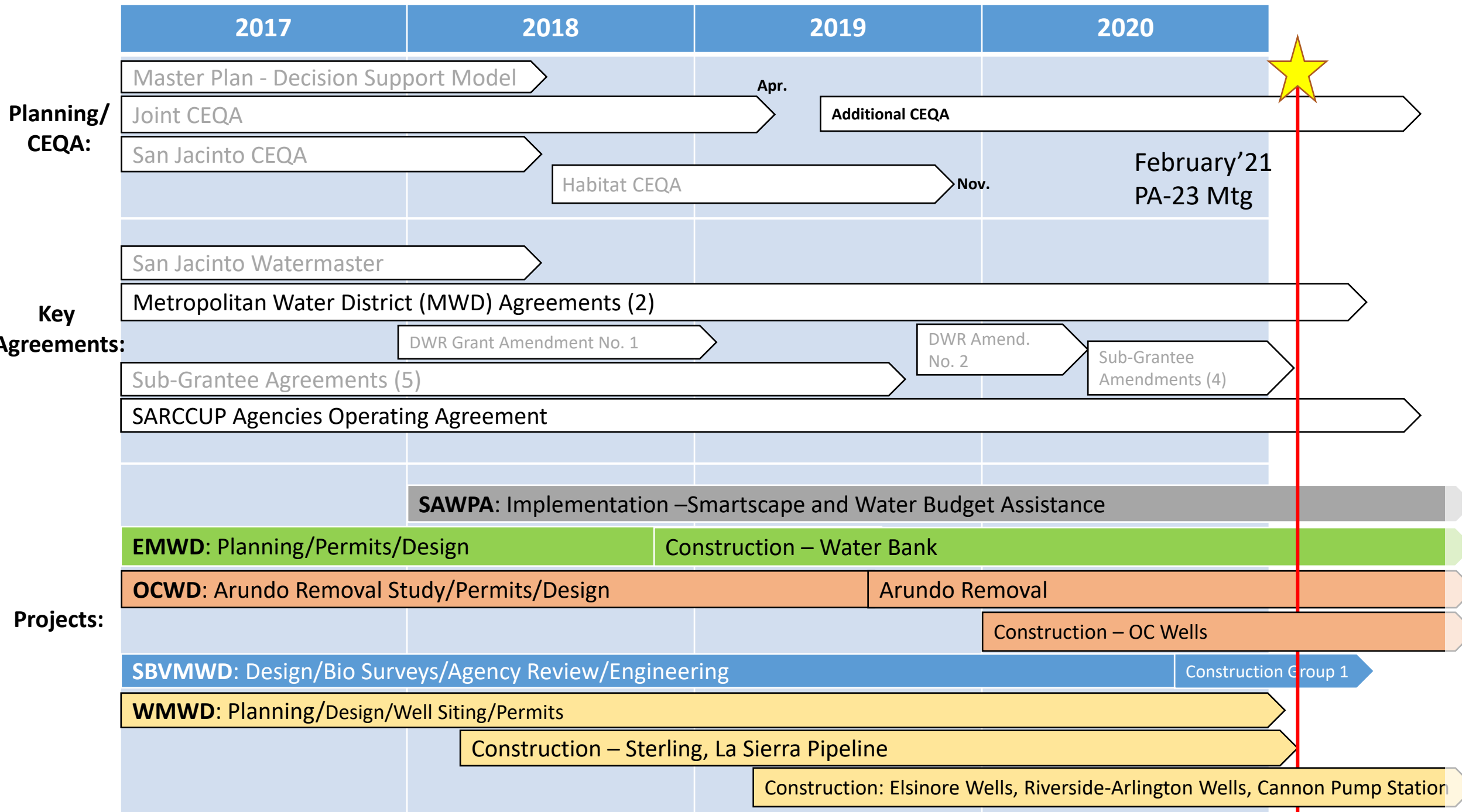


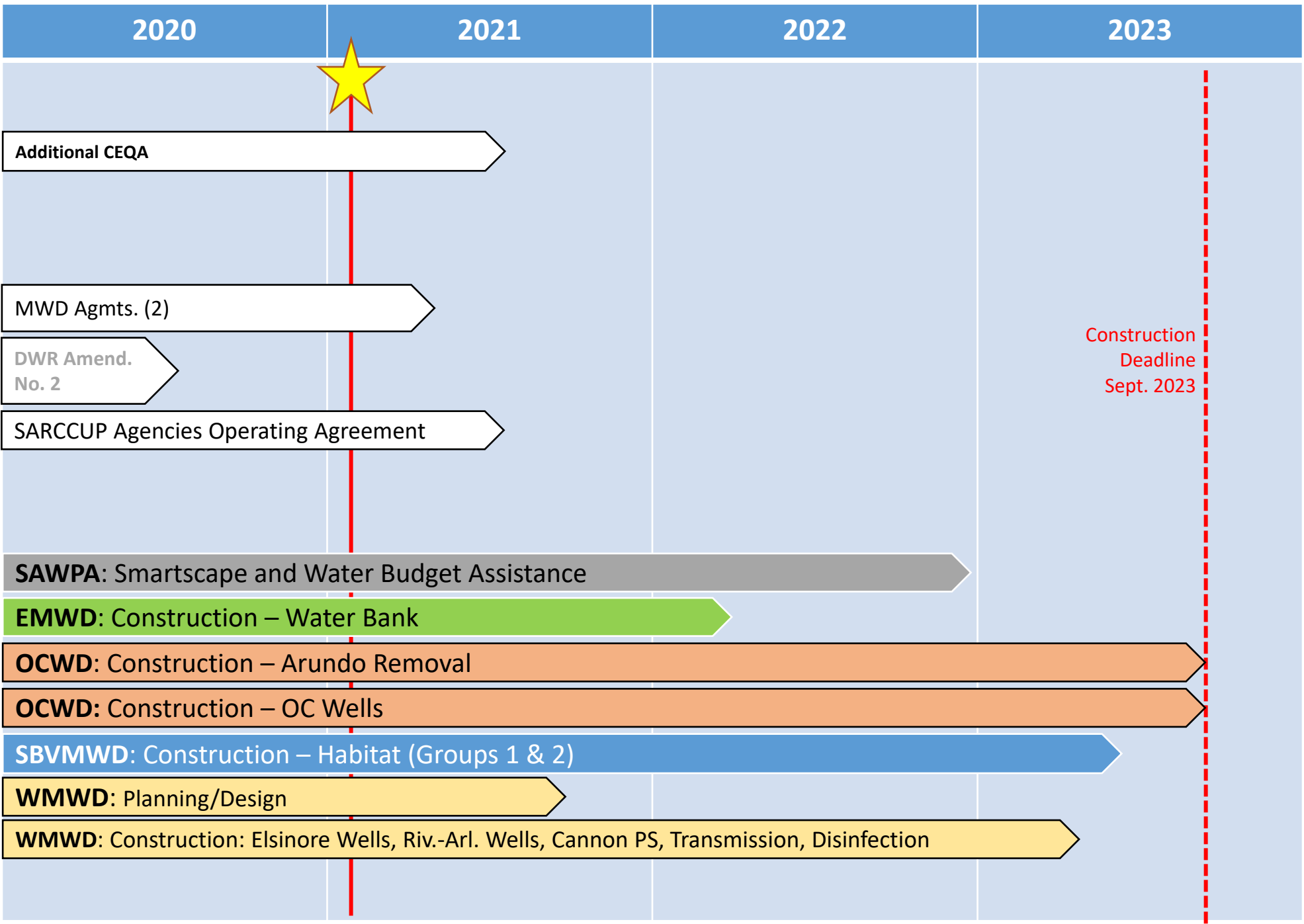


SARCCUP Schedule

Brian Dietrick, Woodard & Curran
PA 23 Committee | February 2, 2021
Item No. 5.B.

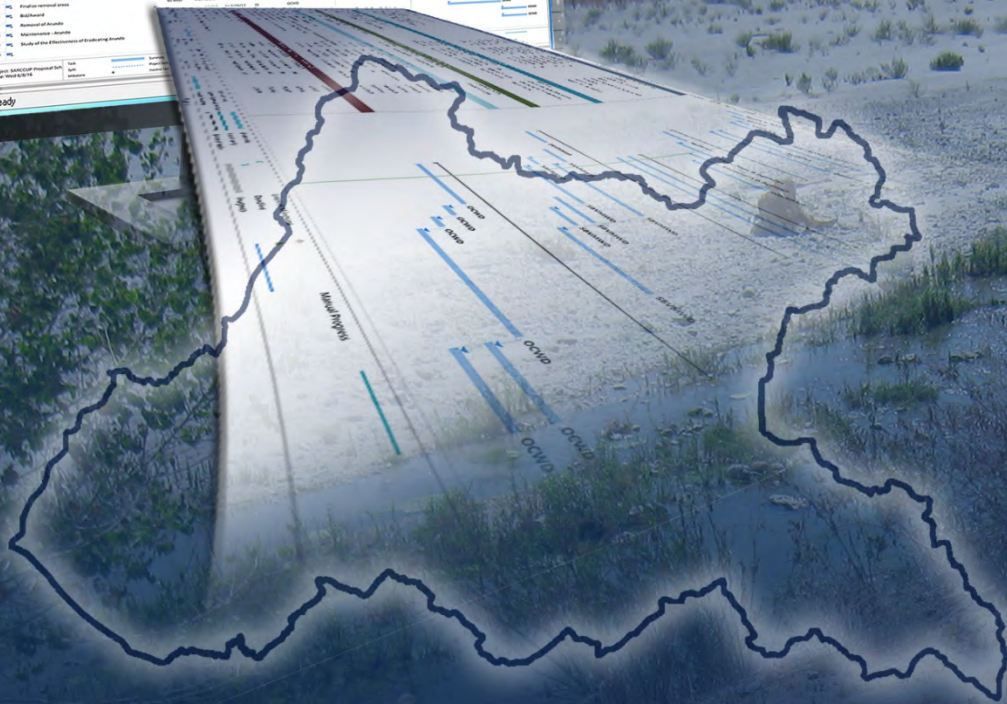
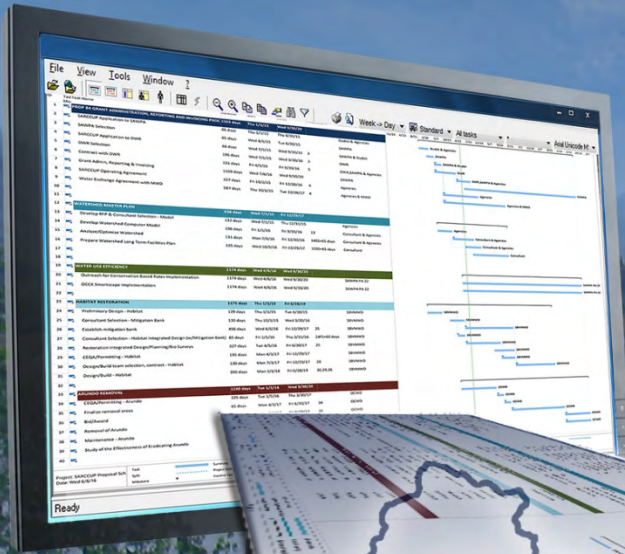


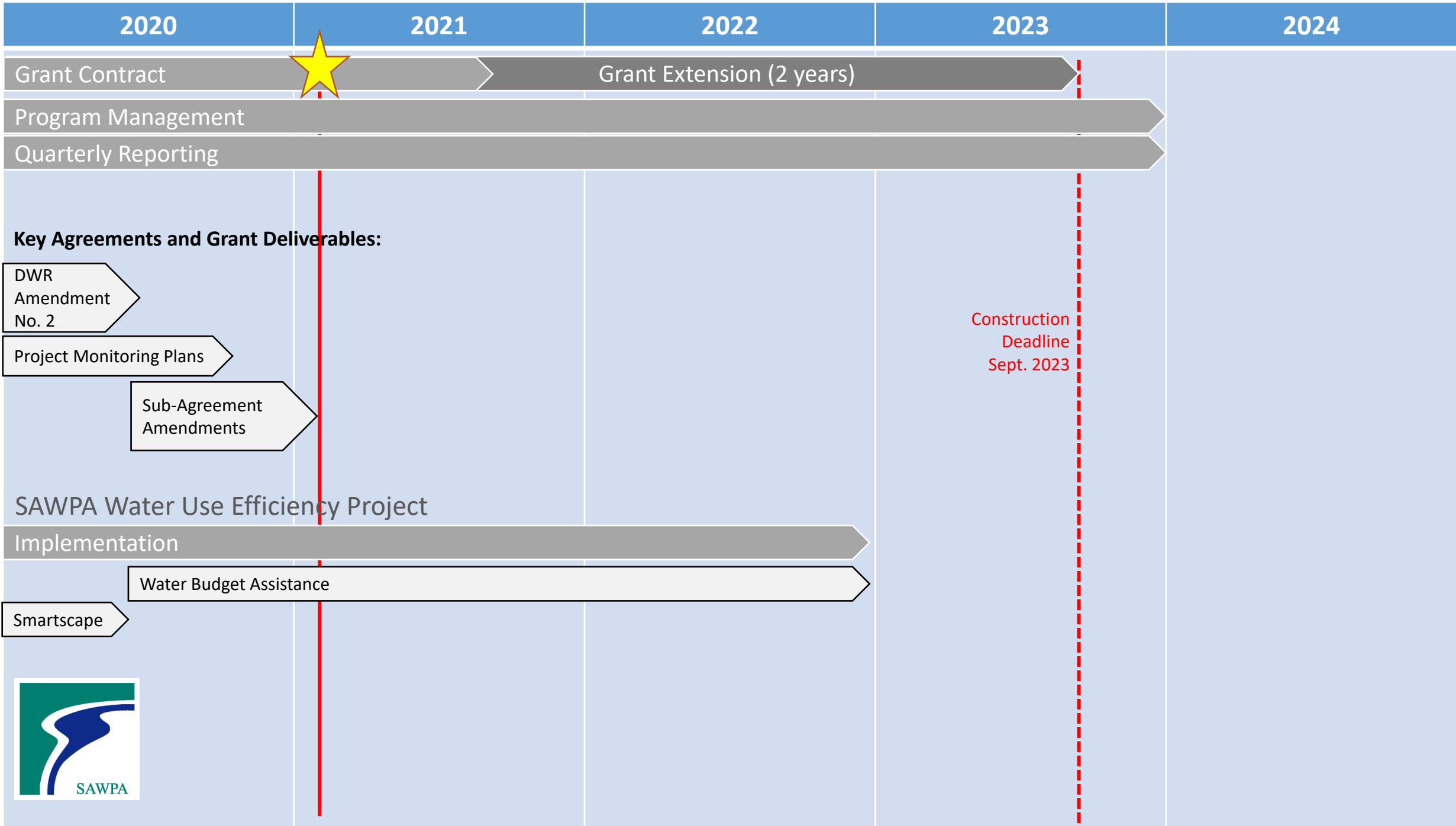




Construction
Deadline
Sept. 2023

2020-2023 Agency Slides





DWR Amendment No. 2

Project Monitoring Plans

Sub-Agreement Amendments

Construction Deadline Sept. 2023

SAWPA Water Use Efficiency Project

Implementation

Water Budget Assistance

Smartscape



2020	2021	2022	2023	2024
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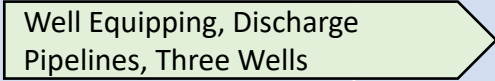
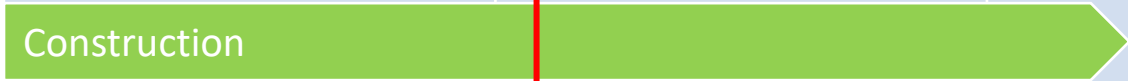


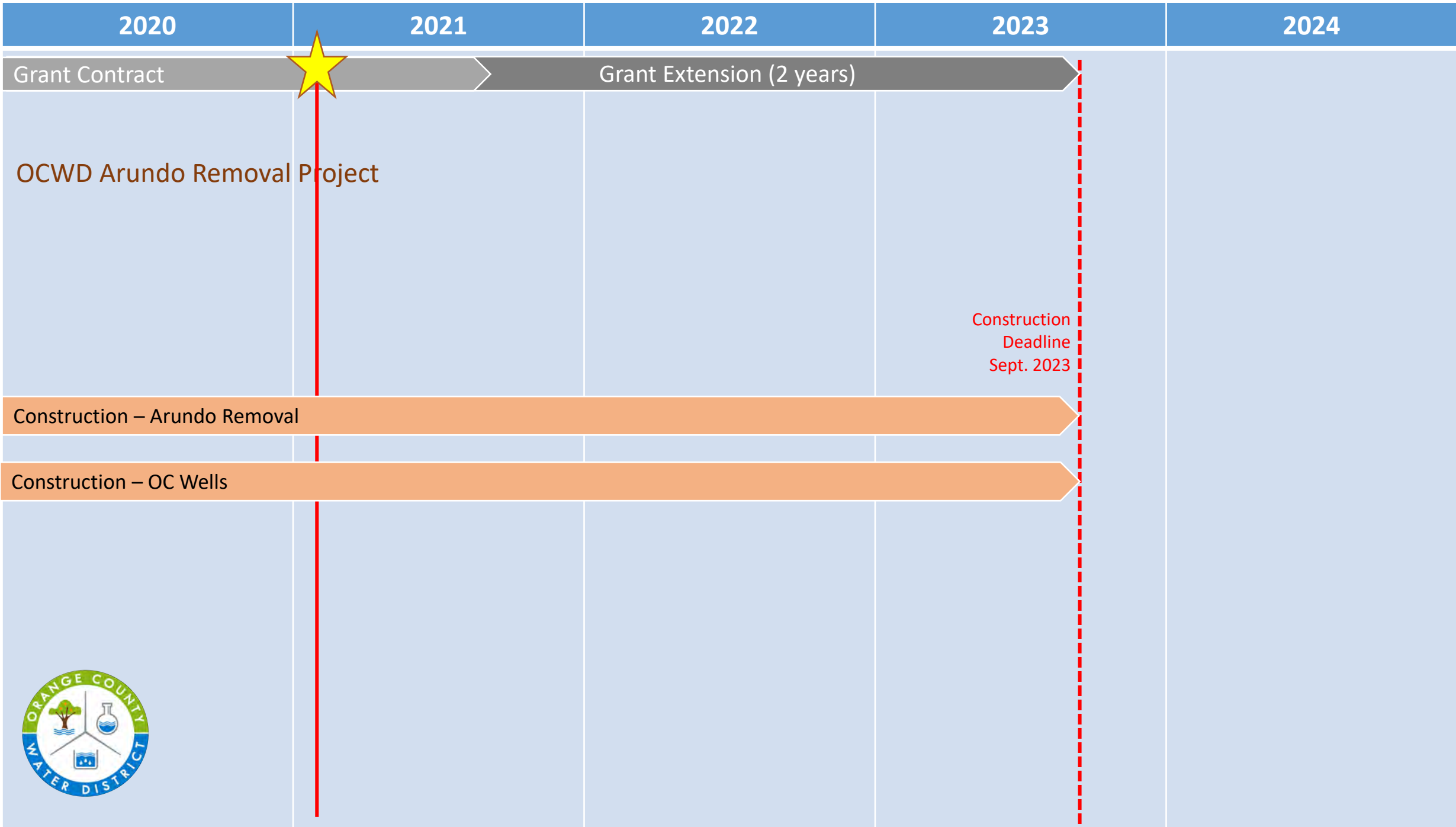
EMWD Conjunctive Use Project

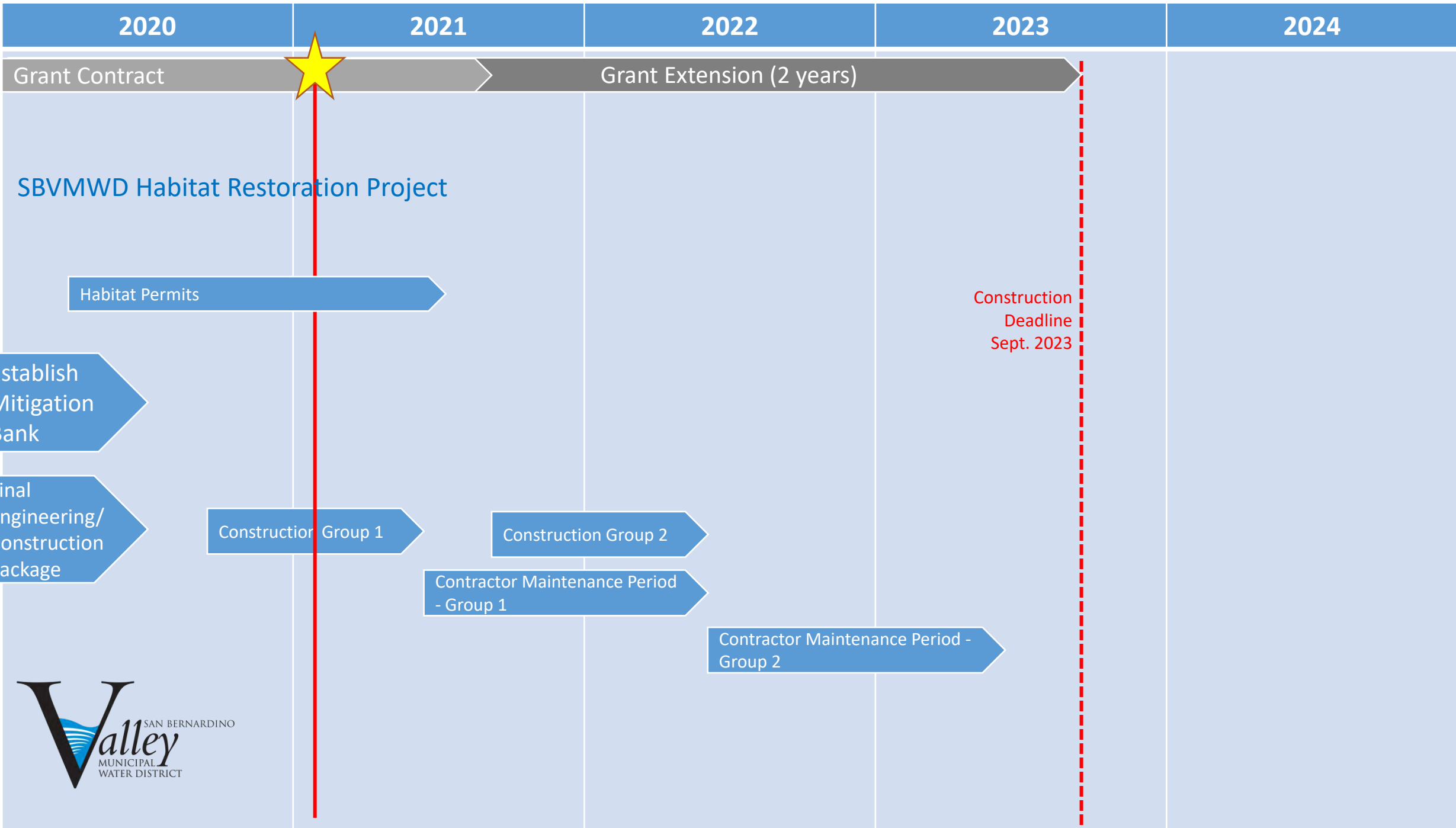


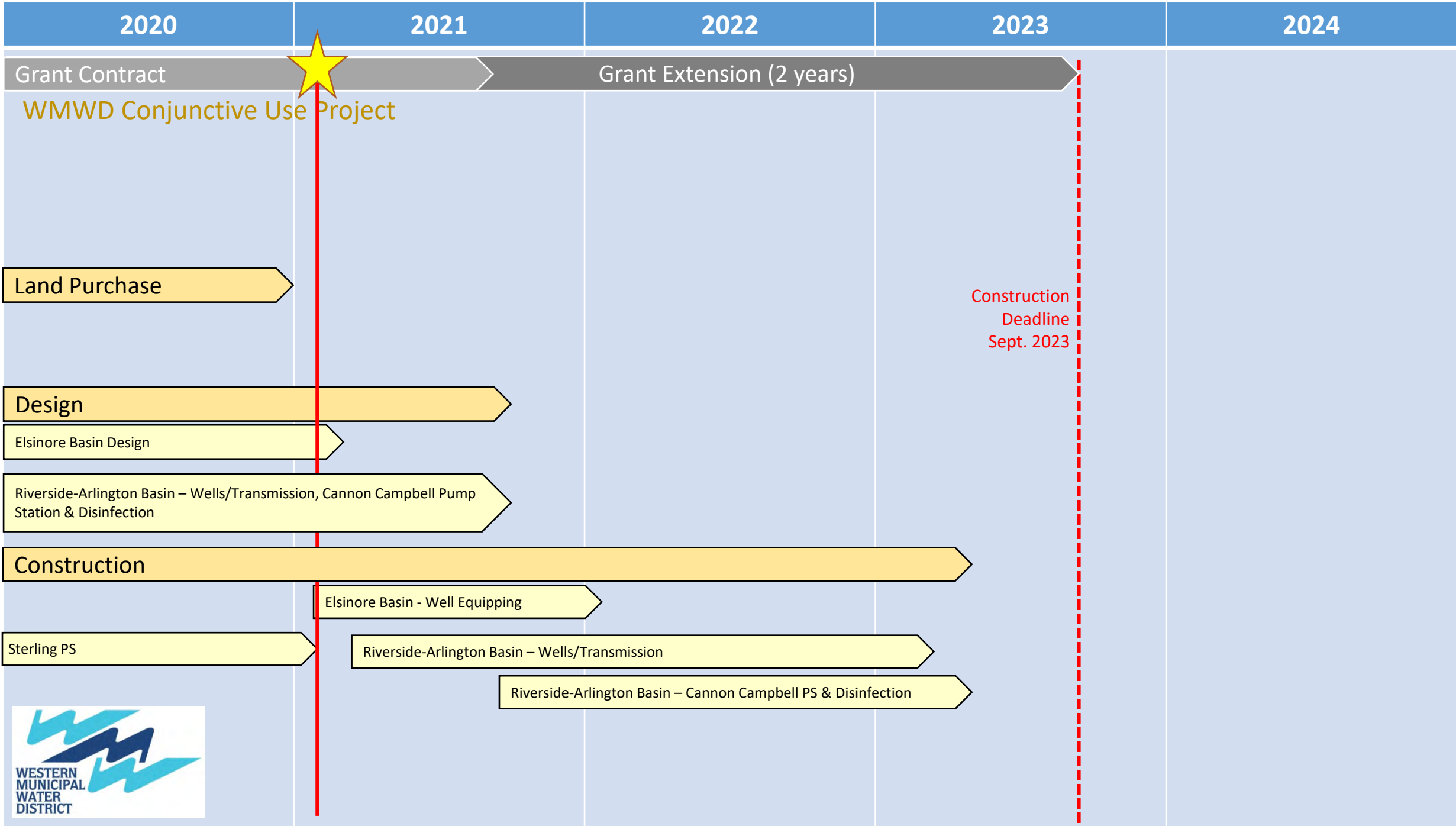
EMWD Conjunctive Use Project

Construction
Deadline
Sept. 2023











SARCCUP Grant Payment Updates

Mark Norton, Water Resources and
Planning Manager

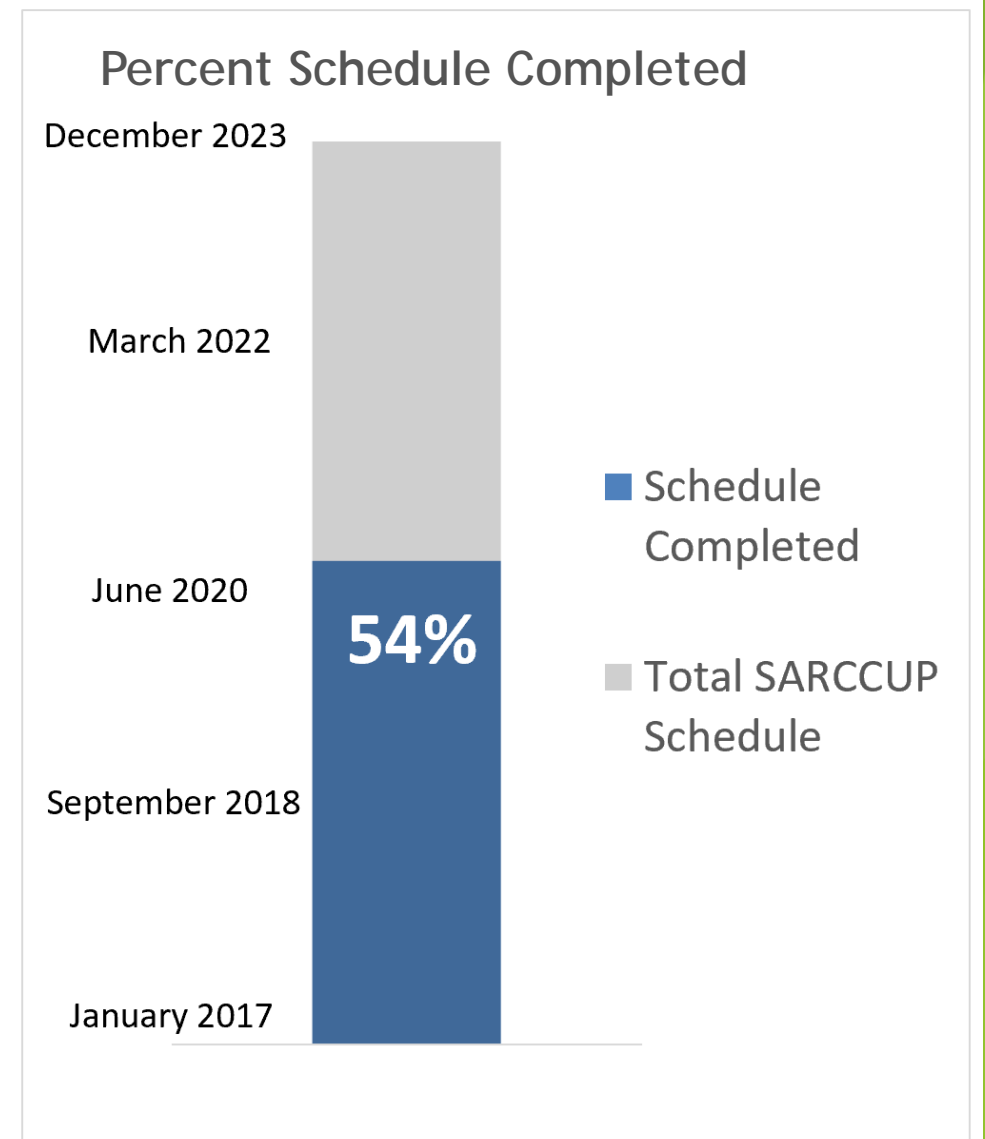
PA 23 Committee | February 2, 2021

Item No. 5.C.

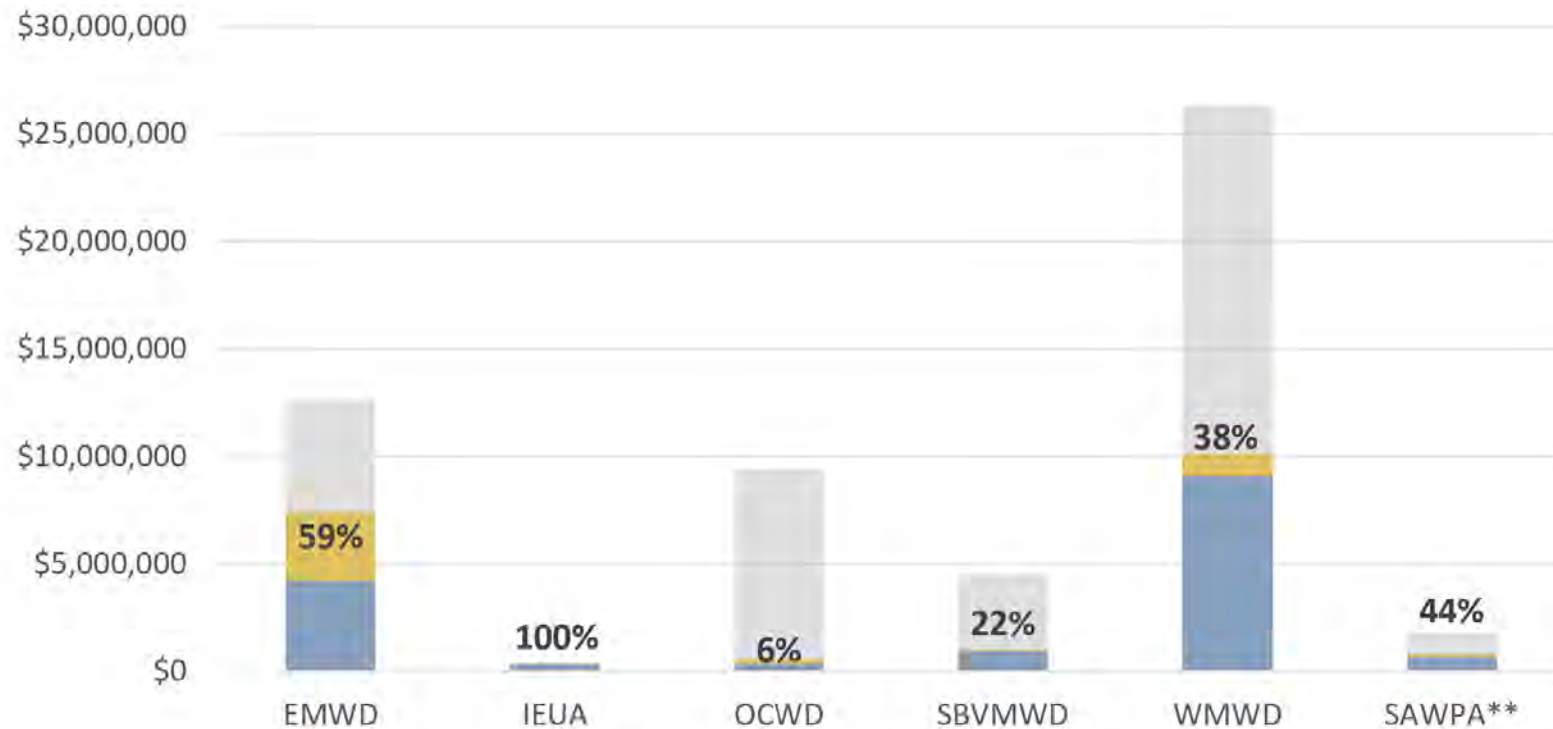


Background on Grant

- ▶ Department of Water Resources adopted grant agreement amendment No. 2 with SAWPA on May 29, 2020.
 - ▶ PA 23 Committee adopted grant amounts (as shown on next slides) at the April 2 and October 1, 2019 Committee meetings, which were incorporated into the amendment with DWR.
- ▶ Amounts shown in this presentation reflect invoices submitted through **September 30, 2020** (latest invoices received at time of publishing this agenda packet).
- ▶ As of September 30, 2020, the amount of grant invoiced is 37% of the total \$55M grant.



Grant Payment Status By SARCCUP Agency (Percent of Total Grant Invoiced Shown)



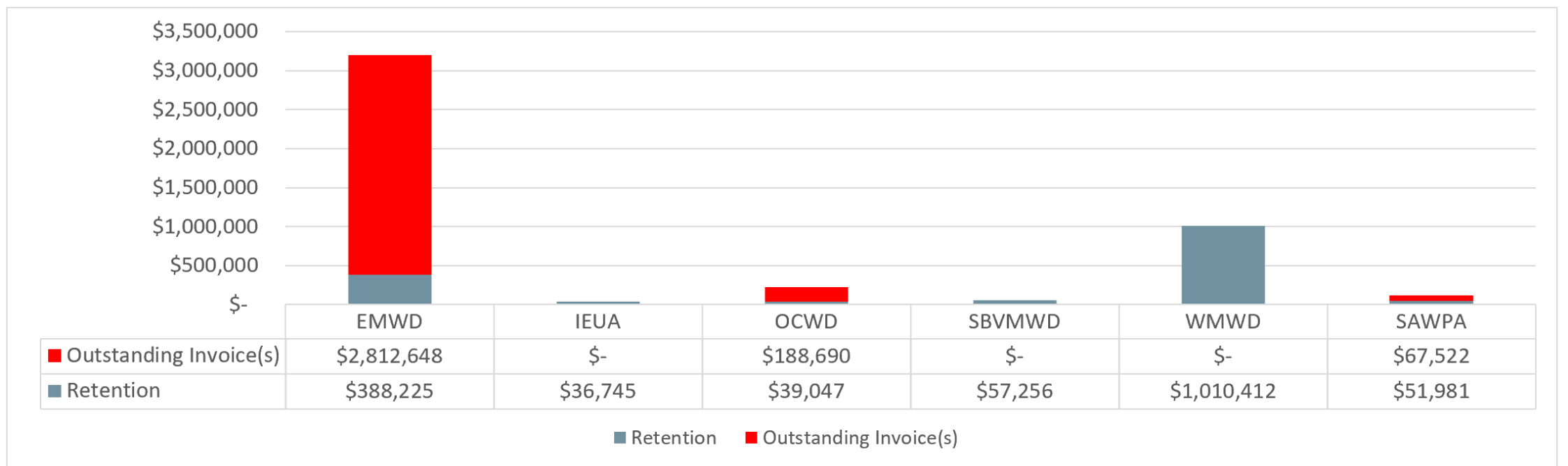
Notes:

*Payment outstanding due to 10% retention withheld on each grant amount included in invoice, or lag in payment from last quarter's invoice.

**Includes funding for Woodard & Curran and Water Use Efficiency Tasks.

	EMWD	IEUA	OCWD	SBVMWD	WMWD	SAWPA**
Grant Paid	\$4,226,531	\$330,706	\$351,425	\$942,516	\$9,101,422	\$667,747
Total Outstanding Grant Payments*	\$3,200,872	\$36,745	\$227,738	\$57,256	\$1,010,412	\$119,503
Total Grant (DWR Amendment No. 2)	\$12,621,835	\$367,968	\$9,368,344	\$4,565,932	\$26,283,723	\$1,792,199

More Detail on Outstanding Grant Payments (Through September 30, 2020)



Notes:

- Retention will be withheld by DWR until complete invoicing of overall SARCCUP Project (scheduled for December 2023).
- Last paid invoice from DWR was for reimbursing expenses incurred by SARCCUP agencies through December 31, 2019.