The Water-Energy Community Action Network (WECAN) Landscaping Project

Contractor Task Order for Turf Removal / Drought-Tolerant Landscaping Services

Rick Whetsel, Senior Watershed Manager

SAWPA Commission | July 19, 2022

Item No. 6.A.

Recommendation

Authorize the General Manager to execute the following:

1. General Services Agreement with EcoTech Services, Inc.; and,
2. Task Order No. ECOT397-04 with EcoTech Services, Inc. for an amount not to exceed $567,150, to oversee and implement the City of Riverside Eastside Climate Collaborative WECAN Turf Removal / Drought-Tolerant Landscaping Project.

Transformative Climate Communities Program: Eastside Climate Collaborative

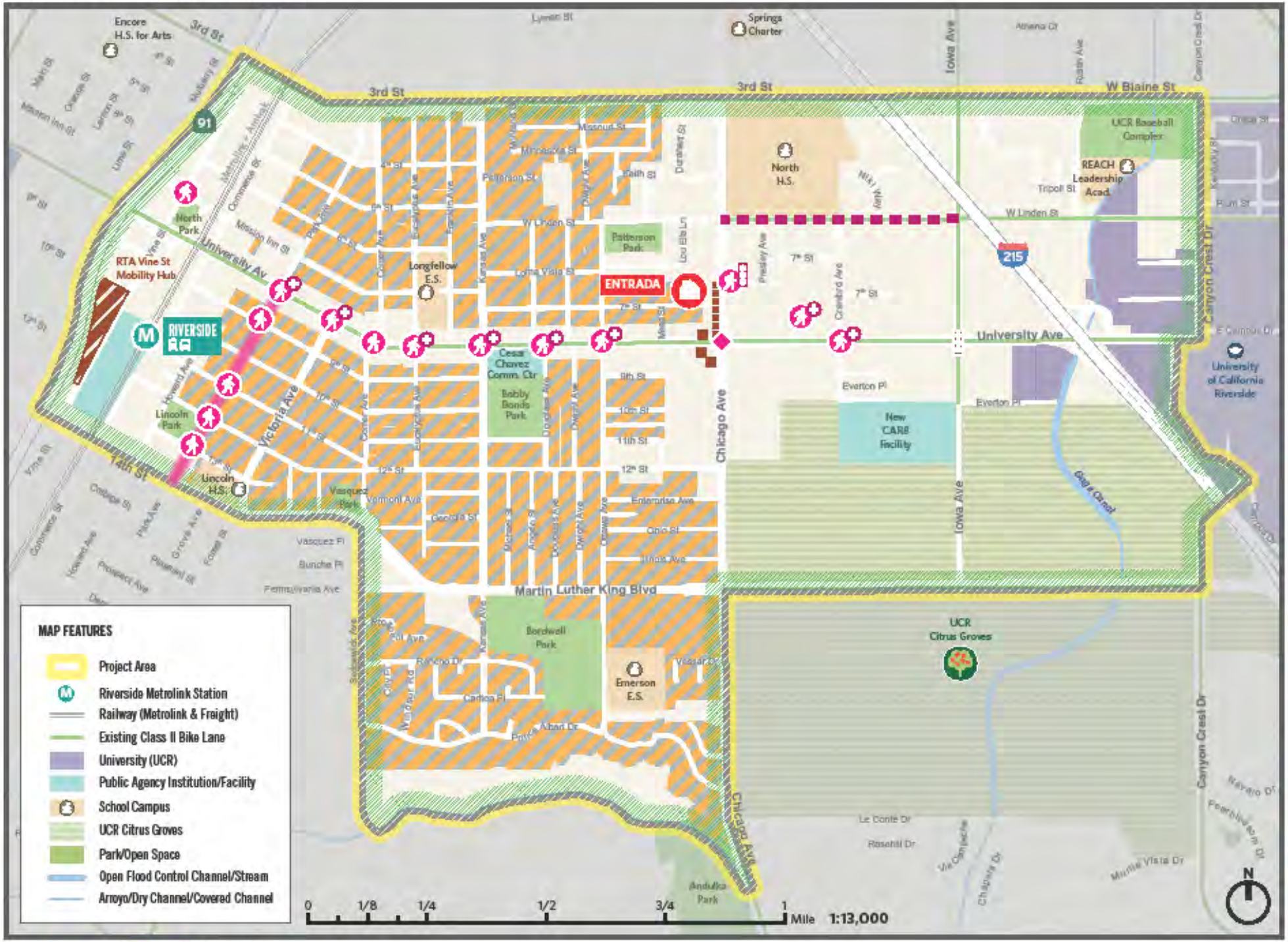
Urban Greening

Solar

Water Conservation

Transit Options

Housing: 7th and Chicago Entrada Project



TCC FUNDED PROJECTS (PROJECT WIDE)

Solar Installation & Energy Efficiency

Project 1 – Energy for All (GRID)
–All Single-family Parcels Eligible
–100 installations

Water Efficiency

Project 2 – Water-Energy Comm. Action Network (WECAN) (SAWPA)
–All Single-family Parcels Eligible
–100,000 sq ft of installations

Urban Greening and Green Infrastructure

Project 3 – Eastside Greening (Tree People)
(Project Area-wide) –1,000 street trees, 500 shade trees, 500 fruit trees

Transformative Plans *(Project-Area Wide)*

- **Community Engagement Plan (CEP)**
- **Displacement Avoidance Plan (DAP)**
- **Workforce Development Plan (WDP)**

AHSC LEVERAGE FUNDED PROJECTS

Affordable Housing/Sustainable Communities

Leverage Project 1 – Entrada Housing Project (WHDC)
65 units

Active Transportation & Mobility Enhancements

Leverage Project 2 – Ped & Bike Mobility Enhancements (Riverside PW)

- Improvements to Chicago/University Intersection *(inc. ped. timing improvements, scramble xwalk)*
- Park Ave People Street *Lighting, murals, parklets, curb ramps, sw repairs*
- Linden St Class IV Cool Pavement Protected Bike Lane
- Upgrade to High-Vis Continental Crosswalk
- Upgrade to High-Vis Continental Crosswalk and add Accessible Pedestrian Signal Buttons
- New Pedestrian Signal at Chicago & 7th St

Transit and Rail Access

Leverage Project 3 – Vine St Mobility Hub Expansion (RTA)
–paired with transit passes

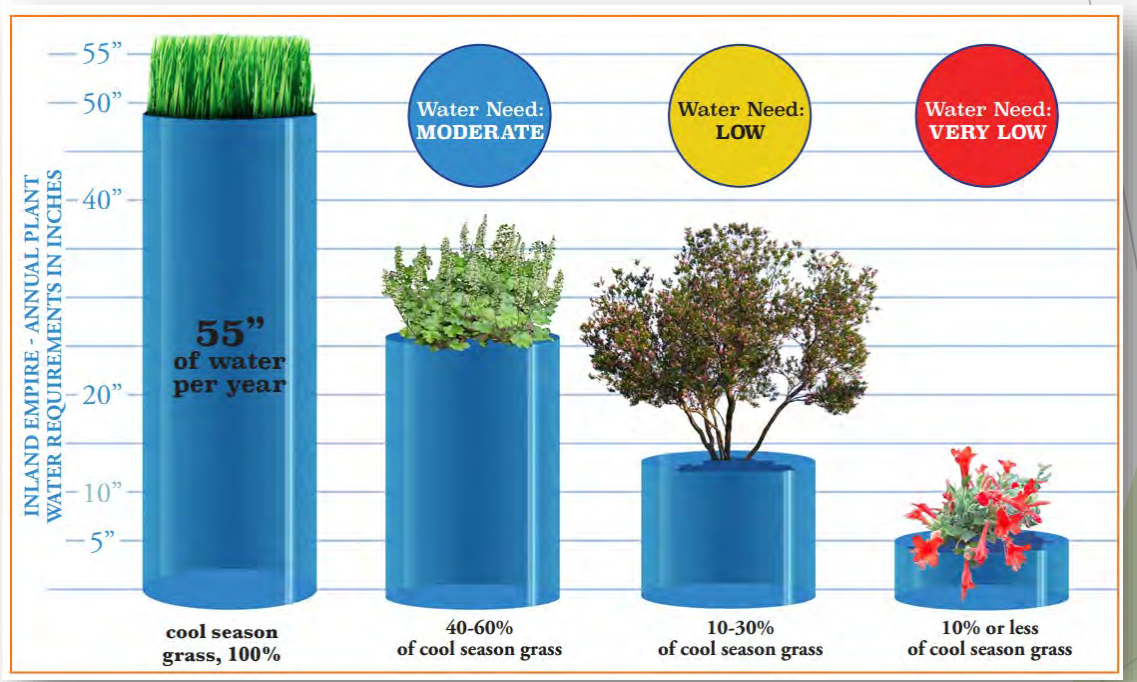
- **Entrada Solar Arcade**
- **Improved Bus Bays**
- **Advanced Signal Detection @ University/Iowa**

WE CAN Program

- Replace up to 100,000 square feet of turf grass with drought tolerant landscaping in Riverside's Eastside neighborhood
- Available to residential homeowners who meet income eligibility requirements
- No cost to homeowners
- Remove front yard turf-grass and install drought-tolerant landscaping

Strategic Goals Implemented Through WECAN

- **Conserve water** – help the community's groundwater basin withstand drought and reduce energy from pumping.
- **Reduce turf grass** – helps reduce outdoor water use in the community.
- **Install drought tolerant landscaping** – helps increase biodiversity.



WECAN (Phase 3) Program Funding

- TCC Grant Award
  - $593,000
- Riverside Public Utilities
  - $100,000
- WECAN Program Funding
  - $693,000

CALIFORNIA STRATEGIC GROWTH COUNCIL

WATER | ENERGY | LIFE

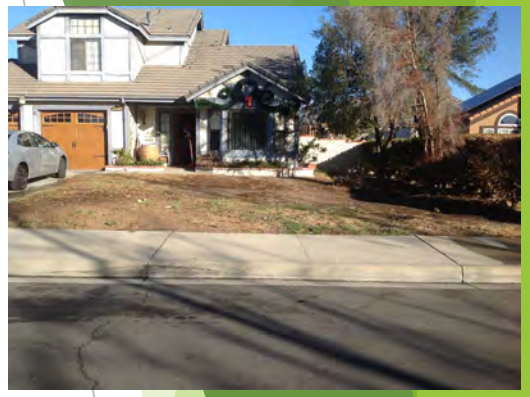
CITY OF RIVERSIDE PUBLIC UTILITIES

Procure Certified Professional Landscape Contractor

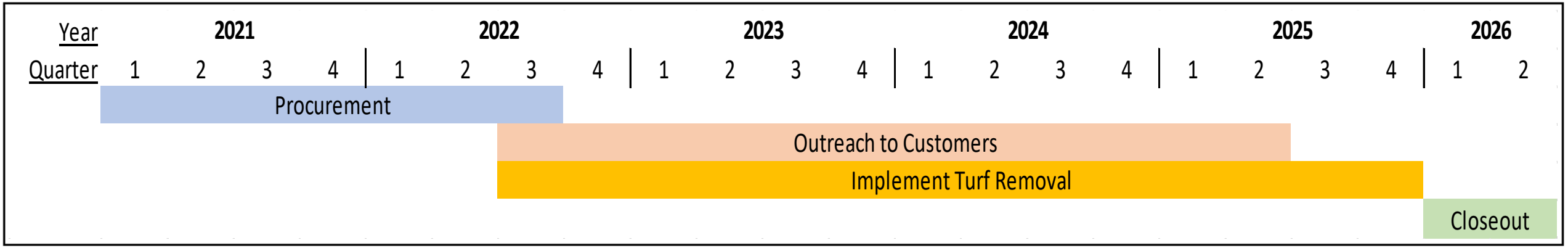
- Request for Proposals Issued December 2021
  - Posted to SAWPA website and directly issued by email to the following:
    - ONEPRO LANDSCAPE
    - BARRANCA LANDSCAPE
    - RESORT STYLES
    - TRULY GREEN DESIGNS INC
    - LANDSCAPE UNIQUE IRRIGATION SERVICES
  - Received single proposal from EcoTech Services Inc.
- EcoTech Proposal Review
  - Interviewed EcoTech staff.
  - Conducted follow-on phone interviews with SAWPA member agency and other agency staff .

Key WECAN Project Elements

- Key Project Elements
  - Provide all manpower, equipment, vehicles, and supplies.
  - High quality customer bilingual service.
  - Design templates for 500 to 1,500 square feet.
  - Inventory of plants, trees, shrubs, and landscaping materials.
  - Low water, climate appropriate plants, shrubs, and trees for the Inland Empire .
- Key Project Tasks
  - Assess current landscaping and automated irrigation system including photo documentation.
  - Implement Turf Removal and Installation of drought tolerant landscaping.
  - Project close-out assess completed landscaping and irrigation system and project walk-through with customers including photo documentation.
  - One month and three-month project site visits/surveys including photo documentation.



SAWPA WECAN Project Schedule



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Questions?

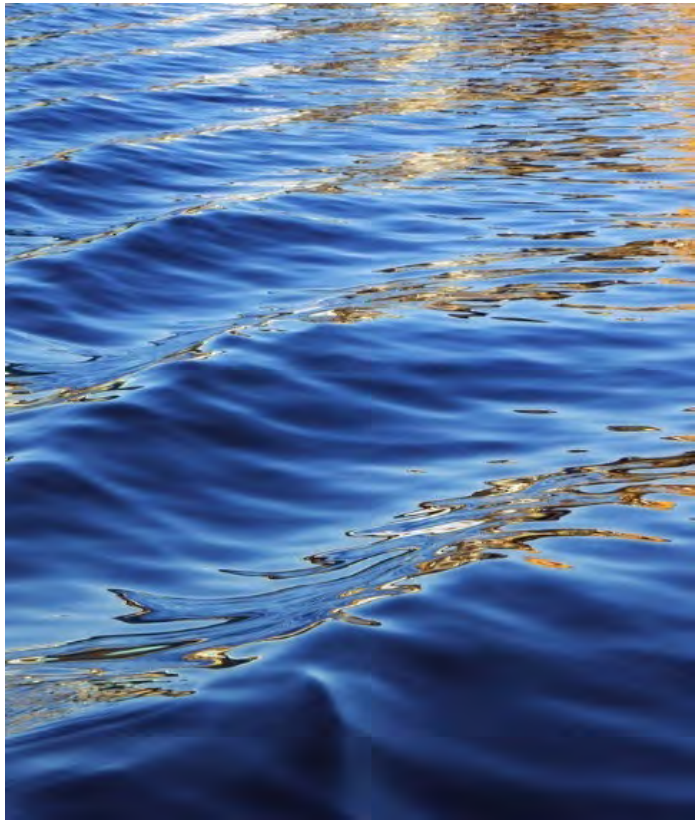
SAWPA

Water Energy
Community Action
Network

Santa Ana Weather Modification Pilot Program Operations Consultant

Mark Norton, Water Resources & Planning Mgr.
Santa Ana Watershed Project Authority

Item No. 6.B.



Recommendation

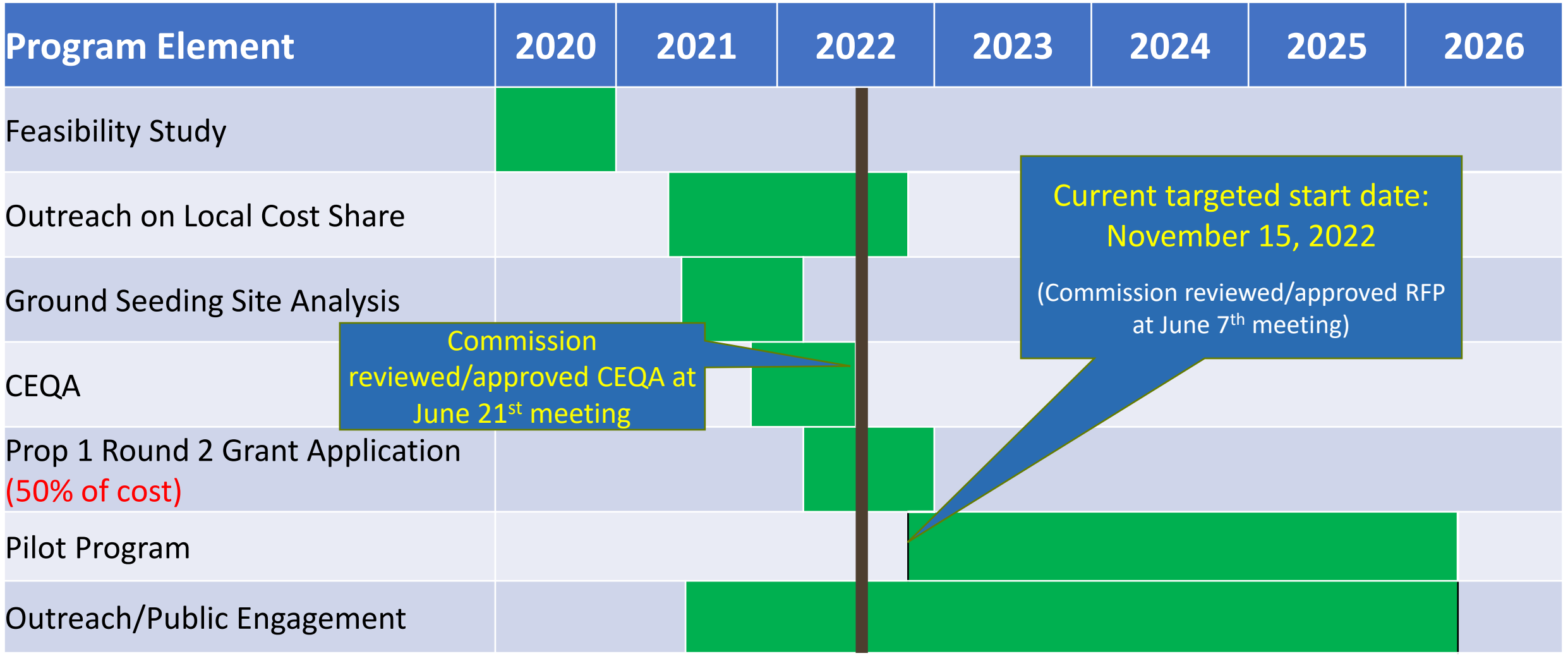
Staff recommends that the SAWPA Commission authorize the following:

1. Approve General Services Agreement and Task Order No. NAWC370-03 with North American Weather Consultants, Inc. (NAWC) for an amount not to exceed **$1,061,912** for the four-year Santa Ana River Watershed Weather Modification Pilot Project Operations services.

2. Approve funding for SAWPA's share of the 1st year of the weather modification pilot project, **$140,500**, by invoicing each SAWPA member agency**, $28,100 per agency**. This funding reflects SAWPA's share of the 1st year of NAWC costs, pilot validation consultant costs, and SAWPA administration costs and contingency.

3. Approve funding, **$201,500**, for 50% of the 1st year of the weather modification pilot project (covering NAWC, pilot validation, SAWPA administration, contingency costs) from the SAWPA Fund 100 General Fund reserves, per the Inter-Fund/Inter-Project Loan Policy. Those funds will be reimbursed by a future DWR IRWM Grant. (See attached Resolution No. 452).

Santa Ana River Weather Modification Pilot Program

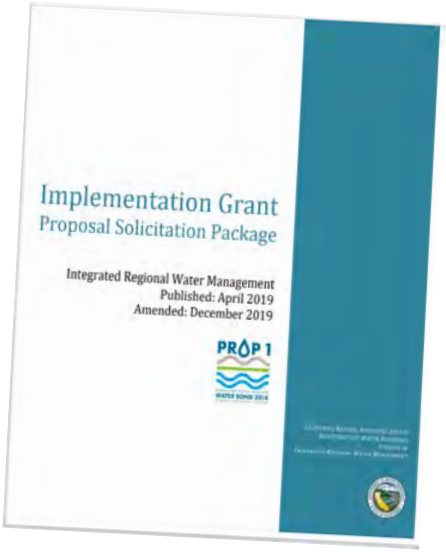


Proposition 1 Round 2 IRWM Implementation Grant Application - Status

- Prepared project grant application for OWOW Call for Projects for Prop 1 Round 2 IRWM grant funding
- Next Steps:
  1. Submitted Weather Modification Pilot Project grant application on May 31, 2022
  2. Continue seeking local cost share commitments from agencies in the watershed through August 2022
  3. Support grant application through OWOW Prop 1 Round 2 IRWM grant stakeholder budgeting and ranking process with presentations and justification of benefits as needed

PROP 1

GOVERNOR GAVIN NEWSOM
WATER BOND 2014
RELIABILITY | RESTORATION | RESILIENCE



Local Water Agency Funding Support

Agency Name	Total Commitment	Annual Payment	1st Year Payment
Chino Basin Water Conservation District	$20,000	$5000/yr	$5000
San Gorgonio Pass Water Agency	$20,000	Single payment	$20,000
Big Bear Lake Dept of Water & Power	$12,000	$3000/yr	$3000
Big Bear City Community Services District	$12,000	$3000/yr	$3000
Lake Elsinore & San Jacinto Watersheds Authority	$10,000	Single payment	$10,000
City of Santa Ana	$10,000	Single payment	$10,000
San Antonio Water Company	$ 5000	Single payment	$5000
City of Corona	$ 5000	Single payment	$5000
	$94,000		$61,000

Pilot Program 4-Year Budget Estimate

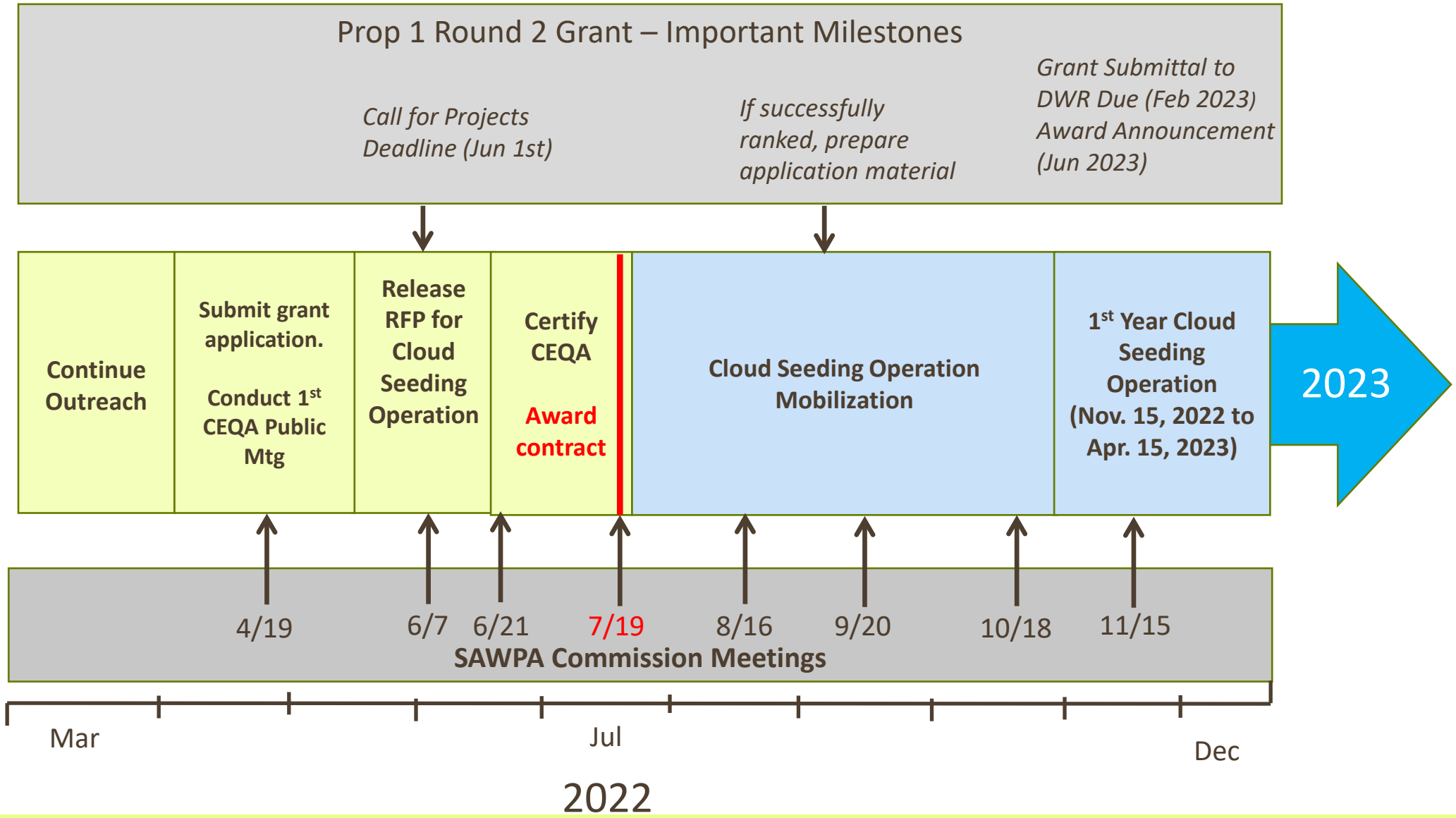
Updated 7-11-22

Year	Task	Consultant/Staff Lead	Estimated Cost
1st	Ground Seeding set up & operation	NAWC	$297,690
	Validation	Desert Research Institute	$50,000
	Project Adm/Mgt	SAWPA Staff	$50,000
		1st Year Subtotal w/contingency	$403,000
2nd	Ground Seeding site operation	NAWC	$249,873
	Validation	Desert Research Institute	$35,000
	Stormwater Capture Analysis	West Yost/Geoscience	$120,000
	Project Adm/Mgt	SAWPA Staff	$30,000
		2nd Year Subtotal w/contingency	$466,000
3rd	Ground Seeding sites & operation	NAWC	$255,043
	Validation	Desert Research Institute	$35,000
	Project Adm/Mgt	SAWPA Staff	$30,000
		3rd Year Subtotal w/contingency	$339,000
4th	Ground Seeding sites & operation	NAWC	$259,306
	Validation	Desert Research Institute	$35,000
	Project Adm/Mgt	SAWPA Staff	$40,000
		4th Year Subtotal w/contingency	$362,000
		Total	$1,570,000

Pilot Project Costs & Funding Shares

Year	Estimated Annual Cost (inclusive of 1. Operations, 2. Validation, 3. Surface Water Analysis, and 4. SAWPA Admin)	50% DWR Grant (and use of SAWPA Fund 100 General Fund)	Local Water Agency Share (for 50% Local Cost Share)	Total for SAWPA Member Agencies (for 50% Local Cost Share)	Cost per SAWPA Member Agency (for 50% Local Cost Share)
1st	$403,000	$201,500	$61,000	$140,500	$28,100
2nd	$466,000	$233,000	$11,000	$222,000	$44,400
3rd	$339,000	$169,500	$11,000	$158,500	$31,700
4th	$362,000	$181,000	$11,000	$170,000	$34,000
Total	$1,570,000	$785,000	$94,000	$691,000	

Proposed Pilot Program Implementation with Nov. 2022 Start



Operations Scope of Work

- Task 1 – Project Management and Administration
- Task 2 – Program Personnel
- Task 3 – Installation
- Task 4 – Land Lease/Operation Agreements
- Task 5 – Operations
- Task 6 – Equipment Maintenance
- Task 7 – Reporting & Invoicing
- Task 8 – Schedule

Duration: Four years over annual winter periods (Nov. 15 – Apr. 15)

Firms Contacted with RFP

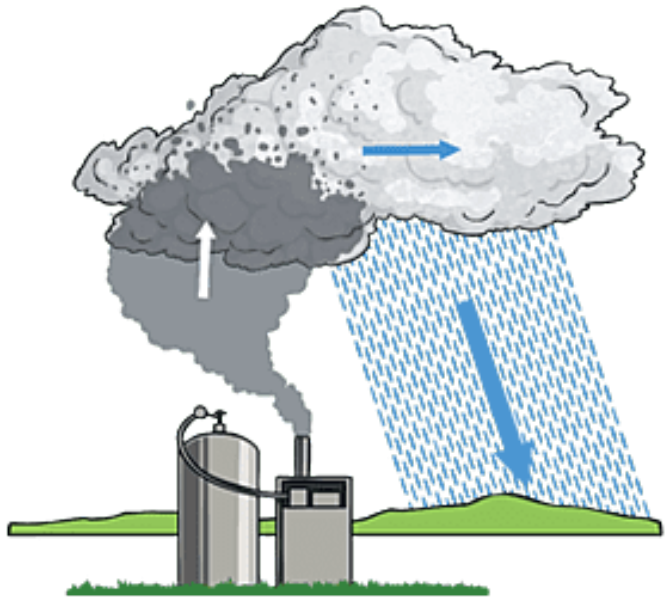
- North American Weather Consultants, Orem, UT – Garrett Cammans
- Weather Modification International, Fargo ND – Bruce Boe
- Western Weather Consultants, Durango, CO – Eric Hjermstad
- Seeding Operations and Atmospheric Research, Wichita Falls, TX – Gary Walker
- RHS Consulting, Reno, NV – Richard Stone

Proposals were to submitted to SAWPA on July 1, 2022

Operations Consultant Recommendation

- One proposal was received in response to the RFP:
  - North American Weather Consultants (NAWC), Sandy, UT
    $1,061,912
- Upon review of the proposal and an interview with the NAWC, an updated proposal was deemed responsive to the project needs
- A General Services Agreement and Task Order is included in the agenda packet

North American Weather Consultants



1st Year Funding of Pilot Operations

- 1st Year Pilot Costs were not included in Adopted SAWPA FY 22-23 Budget
- 1st Year Operations costs (including operations, validation, and SAWPA Admin costs) are estimated to be **$403,000**
- 50% of pilot is anticipated to be funded by DWR Grant, **$201,500** for 1st Year.
- In anticipation of grant funding, SAWPA will provide funding from the SAWPA Fund 100 General Fund Reserves, per the Inter-Fund/Inter-Project Loan Policy ($201,500)
- 50% of Pilot Operations local share proposed to be funded by SAWPA member agencies **($28,100** per SAWPA member agency, **$140,500** total) and local water agencies **($61,000** of $94,000 committed), combined reflecting the **$201,500** local cost share for 1st year.

Recommendation

Staff recommends that the SAWPA Commission authorize the following:

1. Approve General Services Agreement and Task Order No. NAWC370-03 with North American Weather Consultants, Inc. (NAWC) for an amount not to exceed **$1,061,912** for the four-year Santa Ana River Watershed Weather Modification Pilot Project Operations services.

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Inland Empire Resource Conservation District Task Order Approval

Ian Achimore | Senior Watershed Manager

July 19, 2022| Commission Meeting

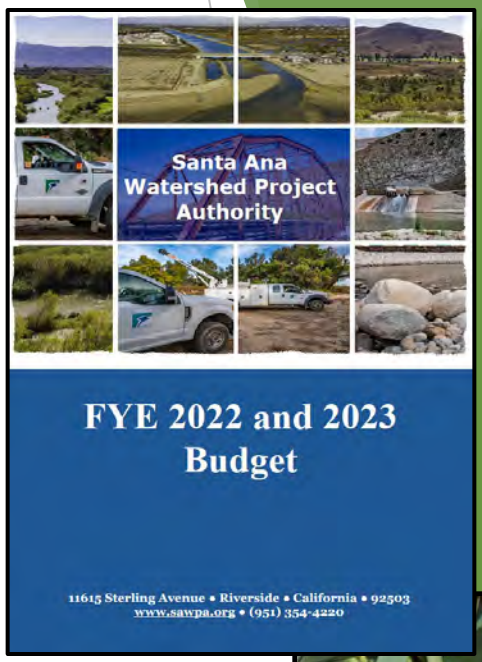
Item 6.C.

Santa Ana River Mitigation Bank

SAWPA

Quick Stats on the Arundo Roundtable

- Arundo Management & Habitat Restoration Fund (Fund) in SAWPA Budget,
- Fund in Budget gains revenue from Santa Ana River Mitigation Bank credit sales, and
- Per SAWPA Resolution No. 427, use of the Fund (like a task order) needs to be approved by Commission.

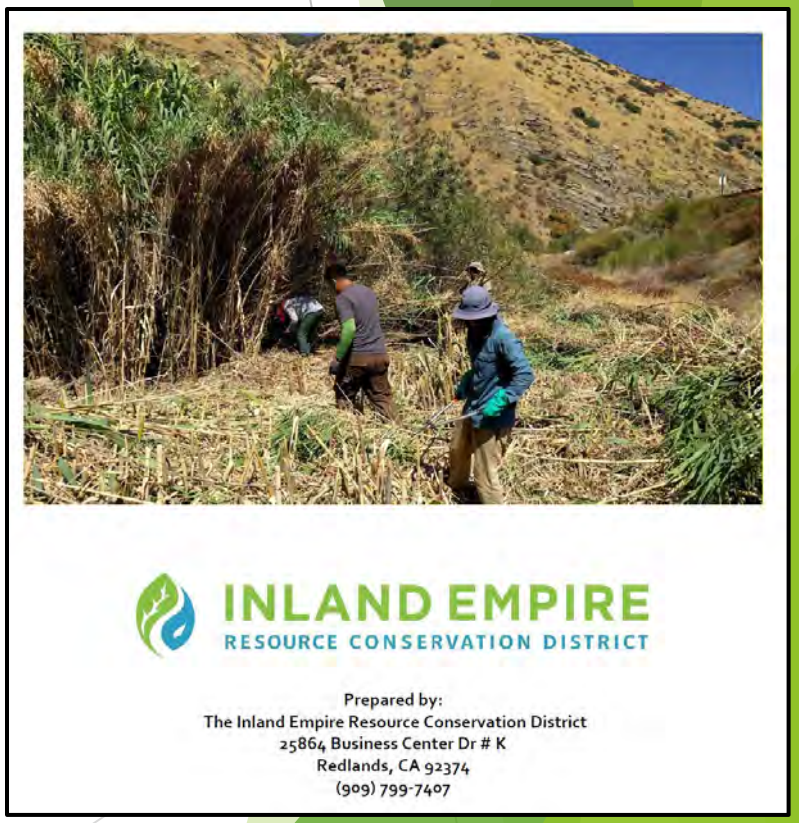


What is Arundo donax?

- Invasive Plant (High Rating),
- Noxious Weed,
- Uses approx. 528 gallons of water per meter annually,
- Growth rate is **1.5 to 4 inches per day** under optimal conditions,
- Highly combustible,
- Survives fire and thrives,
- Causes flooding by altering flow regimes, and
- No known habitat benefit.

About Inland Empire Resource Conservation District (IERCD)

- One of four RCDs in the Santa Ana River Watershed (SARW),
  - Their service area covers the upper SARW,
- SAWPA and IERCD first started coordinating about upper watershed issues as both agencies attend SARW Weed Management Area meetings,
- Similar projects IERCD has implemented include:
  - Mill Creek Spanish Broom Control Project, and
  - Cajon Pass Invasive Species Control Project.
- IERCD has a detailed invasive species removal plan for their team of field technicians.



Why Headwaters Are An Important Focus-Area for Arundo Removal

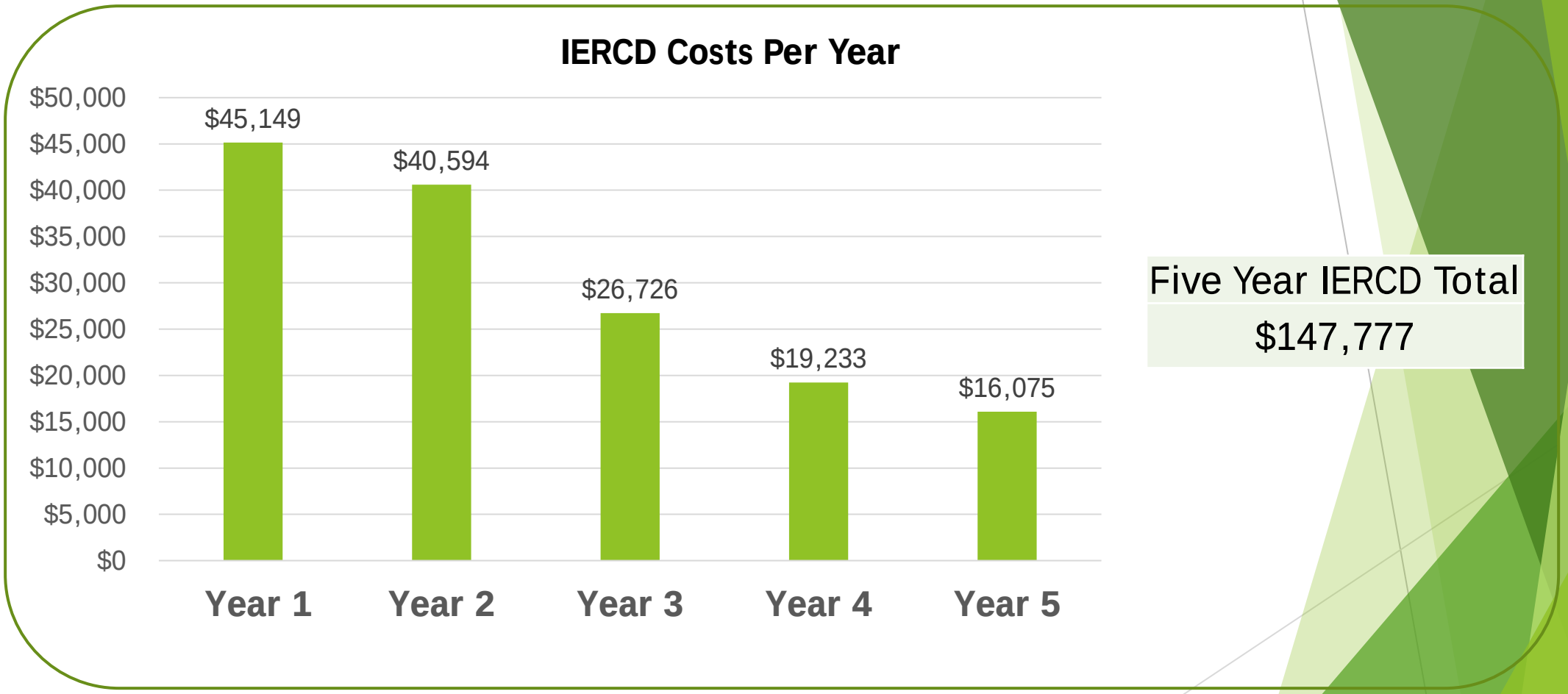
- Arundo seedlings can wash down waterways during rain events,
- Starting at top of watershed and working down is economical.

- Five-Year total project costs is $147,777,
  - Two years of parcel owner outreach and initial treatment with hand-held equipment, and
  - Three years of follow up treatment with EPA-approved herbicides (Glyphosate and Imazapyr).

Task Order and General Services Agreement

- Task Order included in packet reflects the same scope/schedule as covered in the June 7, 2022 Commission meeting, and
- IERCD had change to the standard General Services Agreement whereby the term “Consultant” is changed to “Partner.”
  - Due to concerns of being viewed as a “contractor”, they prefer the term “Partner” when executing contracts with water agencies.
  - SAWPA’s legal counsel does not have concerns with the change in this wording.

Task Order Budget

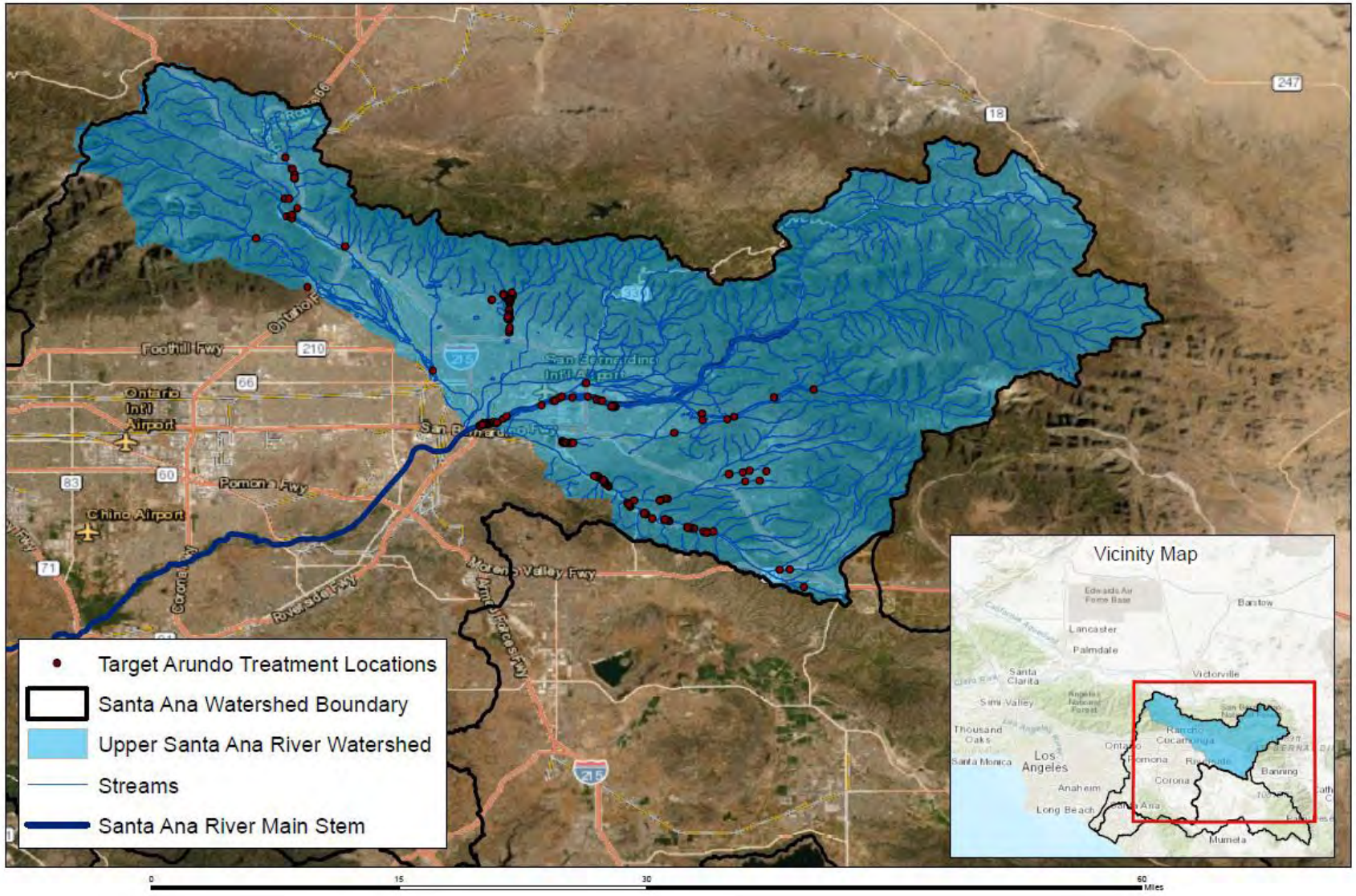


Five Year IERCD Total
$147,777

Note: It is estimated that will cost approximately $15,000 per year for SAWPA staff to administer this Project.

Map of Project Sites in Task Order

(Same as Shown June 7, 2022)

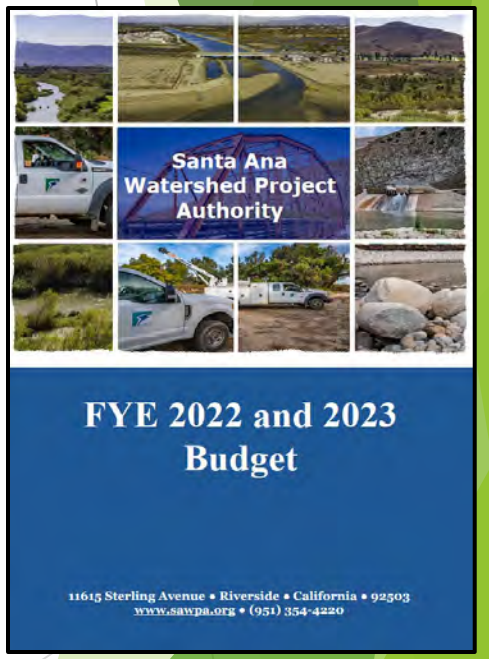


Project Sites in Task Order (Also same as June 7)

Project Site	Project Site Size (Acres)
Cajon Creek	1,285
Coopers Creek	108
Live Oak Canyon	44
Lytle Creek	6,398
Mill Creek	6
Morey Arroyo	13
Noble Creek	244
Palm Canyon	33
San Timoteo Canyon	511
Santa Ana River Main Stem	1,217
The Zanja	42
Waterman Canyon and East Twin Creek	206
Yucaipa Waterways	61
TOTAL	**10,168**

Important Considerations for Working in the Headwaters

- SAWPA is not required to remove Arundo donax in these portions of the watershed (i.e. this is not "mitigation" for another project or activity),
- Approximately $864,000 in funding is available in SAWPA's Arundo Fund budget for this work,
- Some of the other downstream Arundo "hot spots" in the watershed are being treated by other entities, and
- IERCD and SAWPA coordinate with these entities through various methods such as Weed Management Area meetings.



Recommendation

Approval of Task Order IERCD387-01 and the associated General Services Agreement with IERCD in the amount of $147,777.07 for the Arundo Donax Removal in the Santa Ana River Basin Headwaters Project.

Santa Ana River Watershed Stormwater Assessment Opportunity

Jeff Mosher, General Manager

Ian Achimore, Senior Watershed Manager

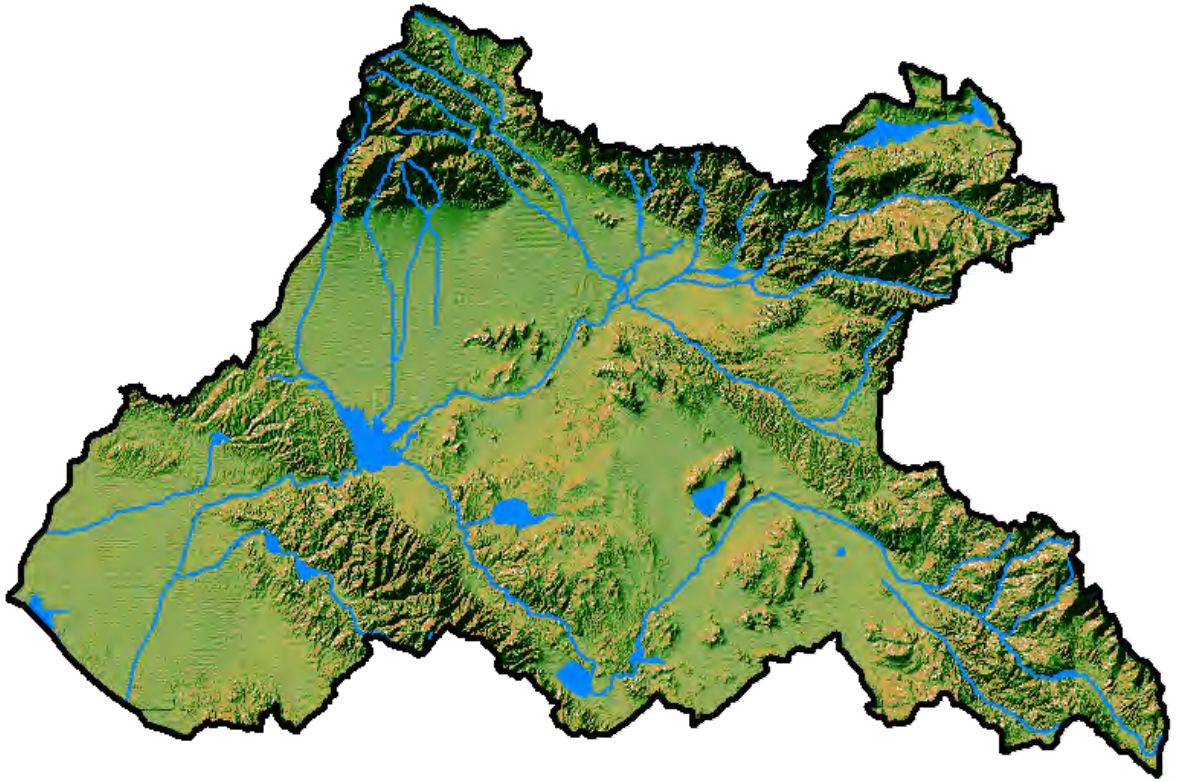
SAWPA Commission| July 19, 2022

Item No. 6.D.

SAWPA

Recommendation

- Provide feedback regarding the potential for a “Santa Ana River Stormwater Capture and Use Assessment” under a grant from the Bureau of Reclamation



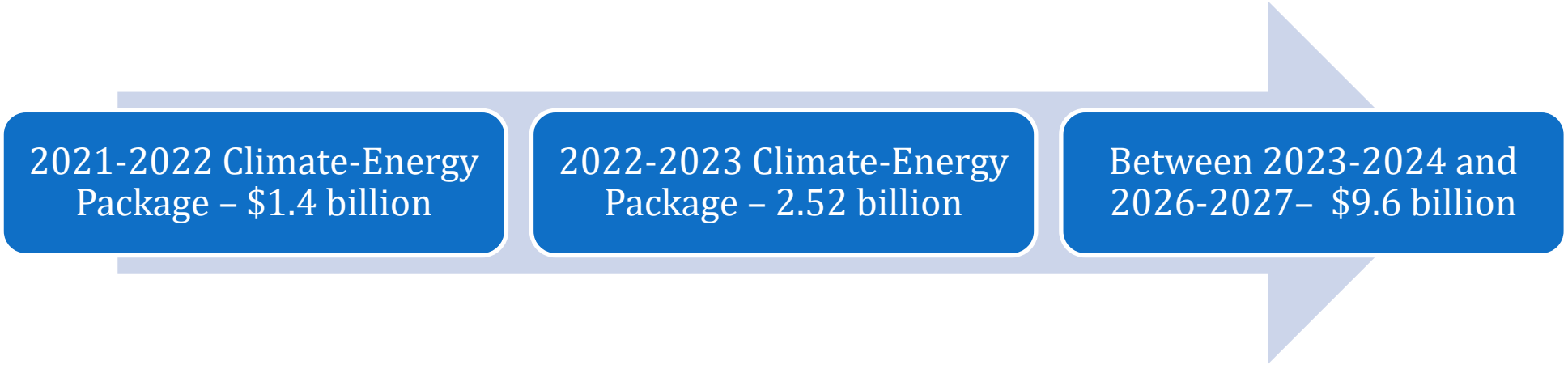
SAWPA's Role in the Watershed

- Watershed planning
  - Regional and integrated projects
  - OWOW

- IRWM
  - SAWPA is lead Agency for Santa Ana River Watershed
  - Prop 50, 84, and 1: $203 million in grant funding
  - Roundtable of Regions
  - SAWPA is viewed as a leader in the state
  - However, the future of IRWM is uncertain

What will be the future funding programs?

- What are the future grant programs?



- Selected Priorities
  - Drought and water resilience*
  - Wildfire and forest resiliency*
  - Extreme heat*
  - Nature-based solutions*
  - Climate resiliency*
  - Underrepresented communities*

* Potentially stormwater capture related

Current Legislation

- AB 1640 (Ward) – Office of Planning and Research (OPR): **regional climate network**
  - Integrated Climate Adaptation and Resilience Program (ICARP)
  - Coordinate regional/local efforts with climate adaptation strategies
  - Authorize the formation of **regional climate networks**
  - **Apply for and receive grants and administering grants to eligible entities**
  - Prioritizes the most vulnerable communities
  - ACWA supports
- SB 852 (Dodd) – **Climate Resilience Districts Act**
  - Authorize local governments to form districts to fund projects designed and implemented to address climate change mitigation, adaptation, or resilience
  - Projects address: **sea level rise; extreme heat; extreme cold, rain, or snow; the risk of wildfire; drought; and/or, the risk of flooding**
  - Priorities for **natural infrastructure** and addresses the needs of **under-resourced communities**

Where will the grants come from?

- California Strategic Growth Council
- Current Funding Programs:
  - Transformative Climate Community (TCC)
    - Riverside TCC grant supports WE CAN
  - Regional Climate Collaboratives

CALIFORNIA STRATEGIC GROWTH COUNCIL

California Water Plan Update 2023

California Water Plan Update 2023

Advancing Themes of the Water Resilience Portfolio
Through State Agency Alignment AND Enhanced Watershed-scale Networks

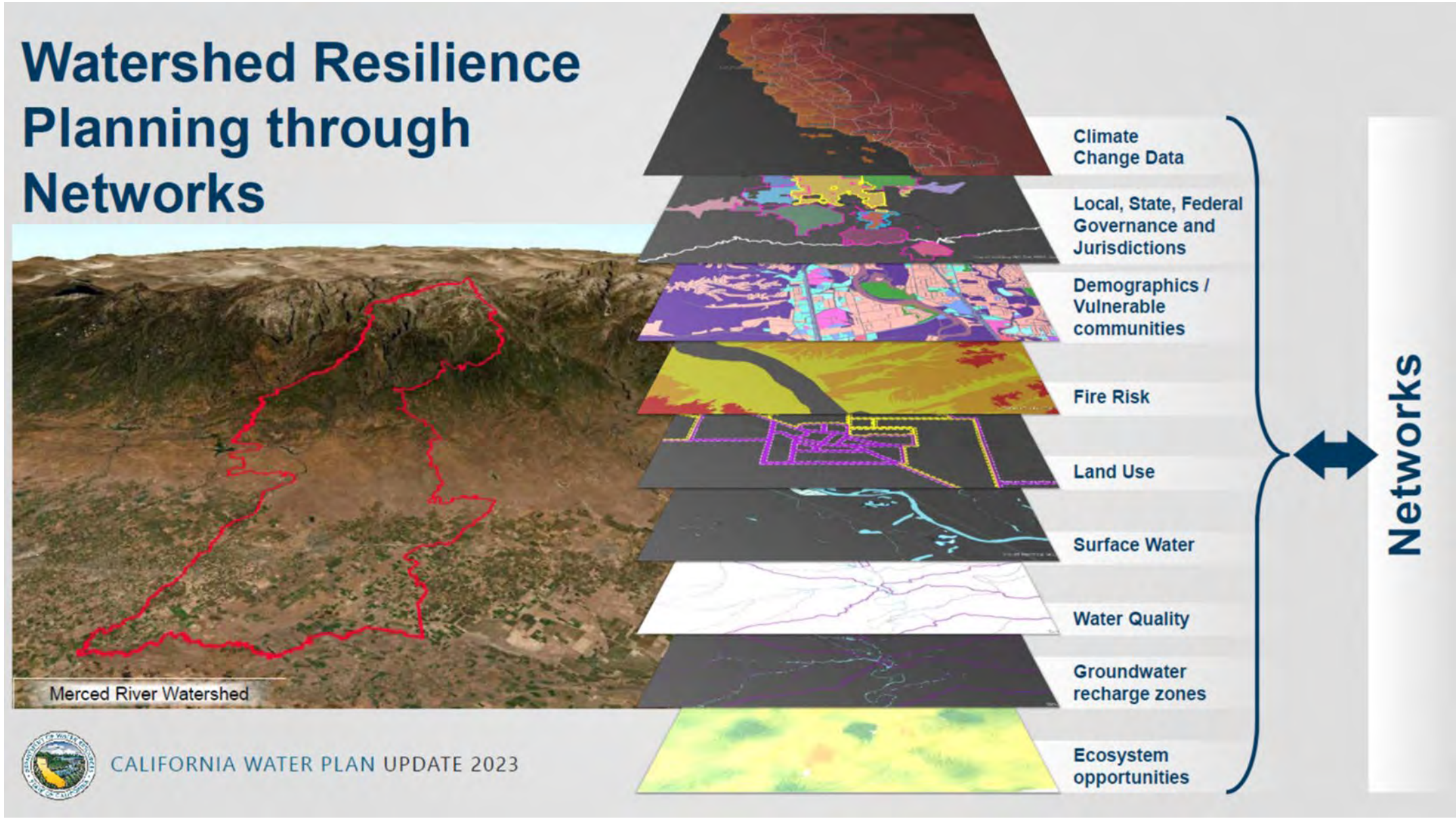
Climate Change Science

Watershed Resilience

Equity in Water Management

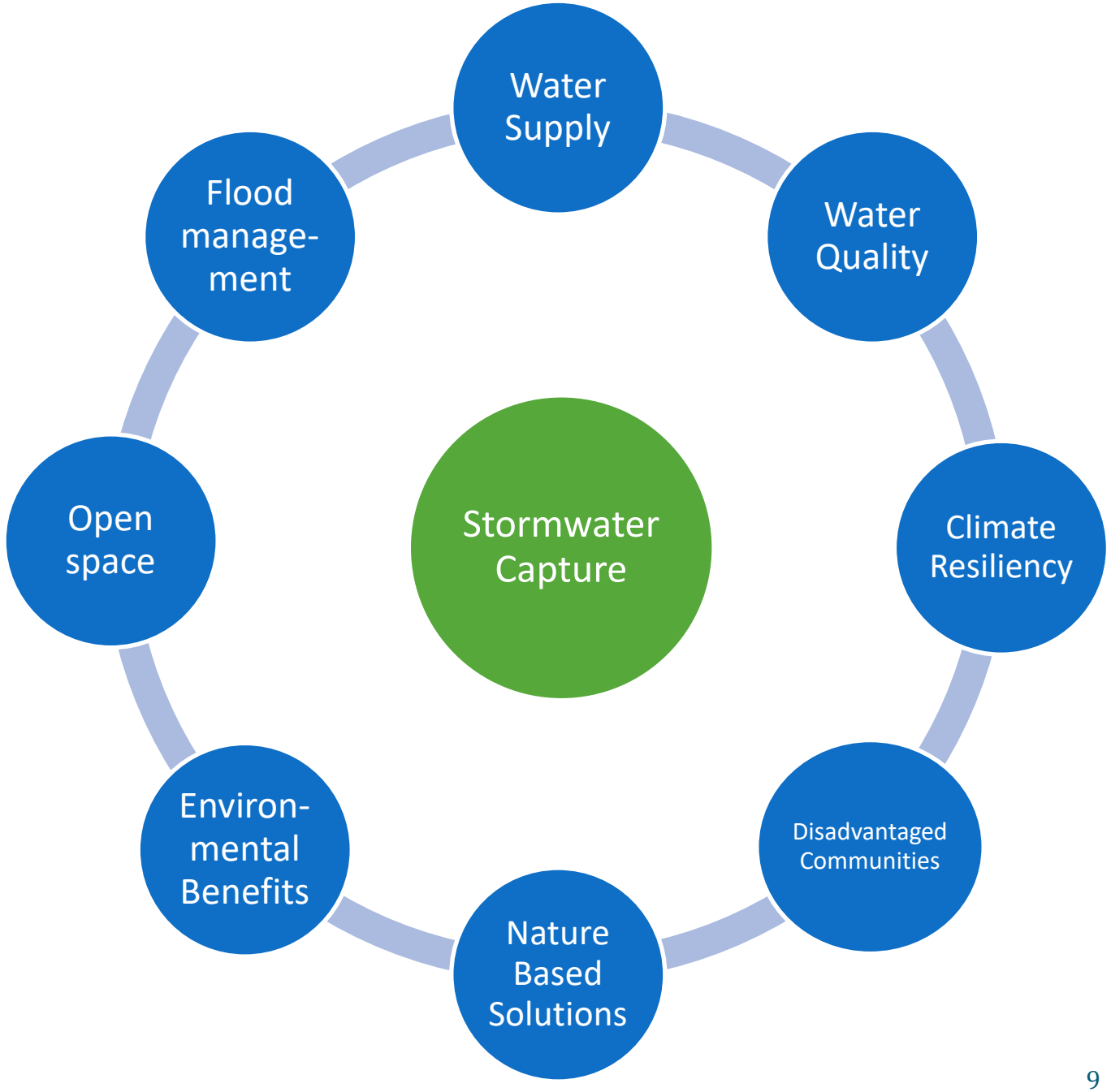
CALIFORNIA WATER PLAN UPDATE 2023

The Future of Watershed Planning?

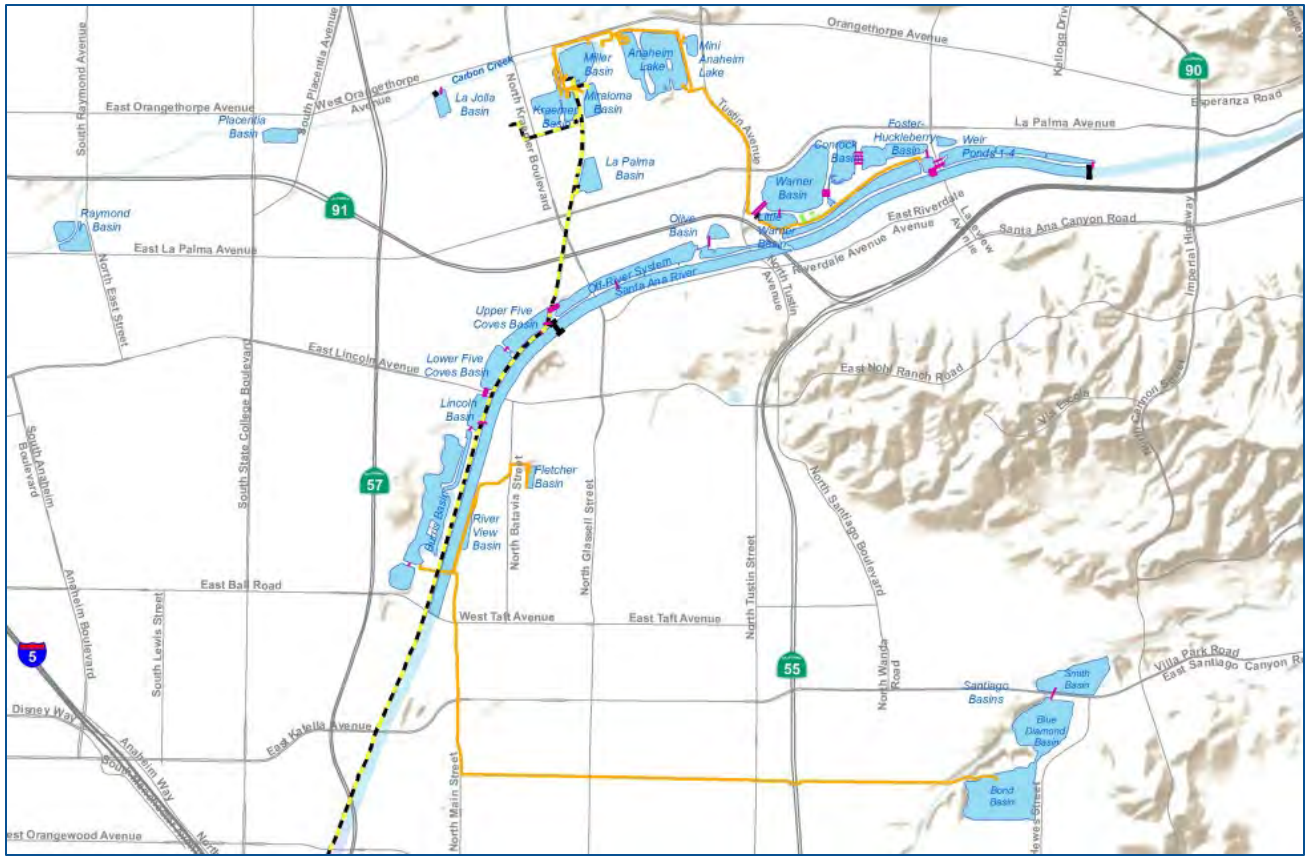


Why stormwater capture?

- Multiple opportunities
- Considerations:
  - Centralized vs. decentralized
  - Integrated or networked systems
  - Multi-benefit projects
  - Other drivers (stormwater permits, compliance, etc.)
  - State priorities
  - Future grant opportunities



Centralized Stormwater Capture



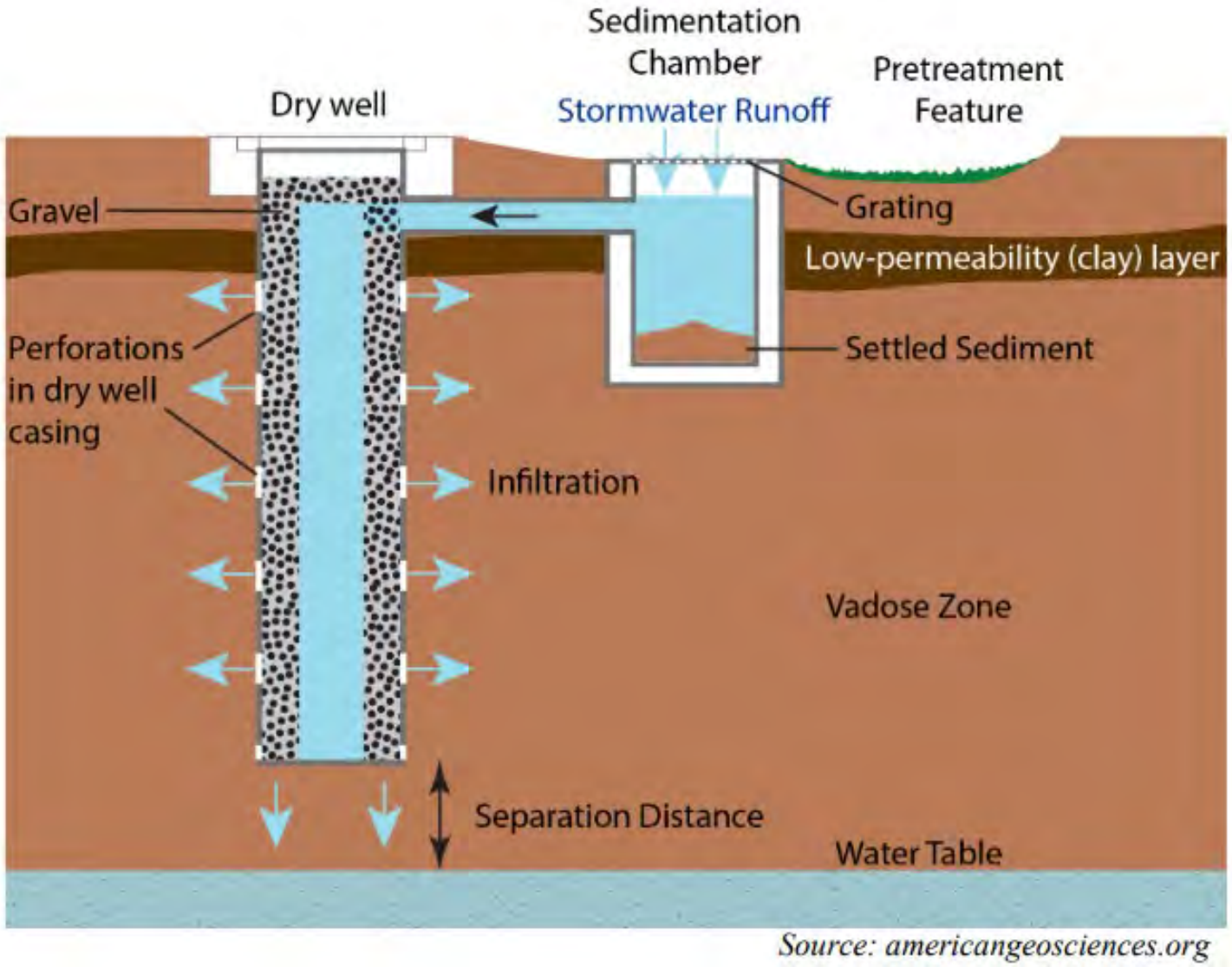
OCWD's Network of Recharge Basins

SBVWCD Recharge Facilities

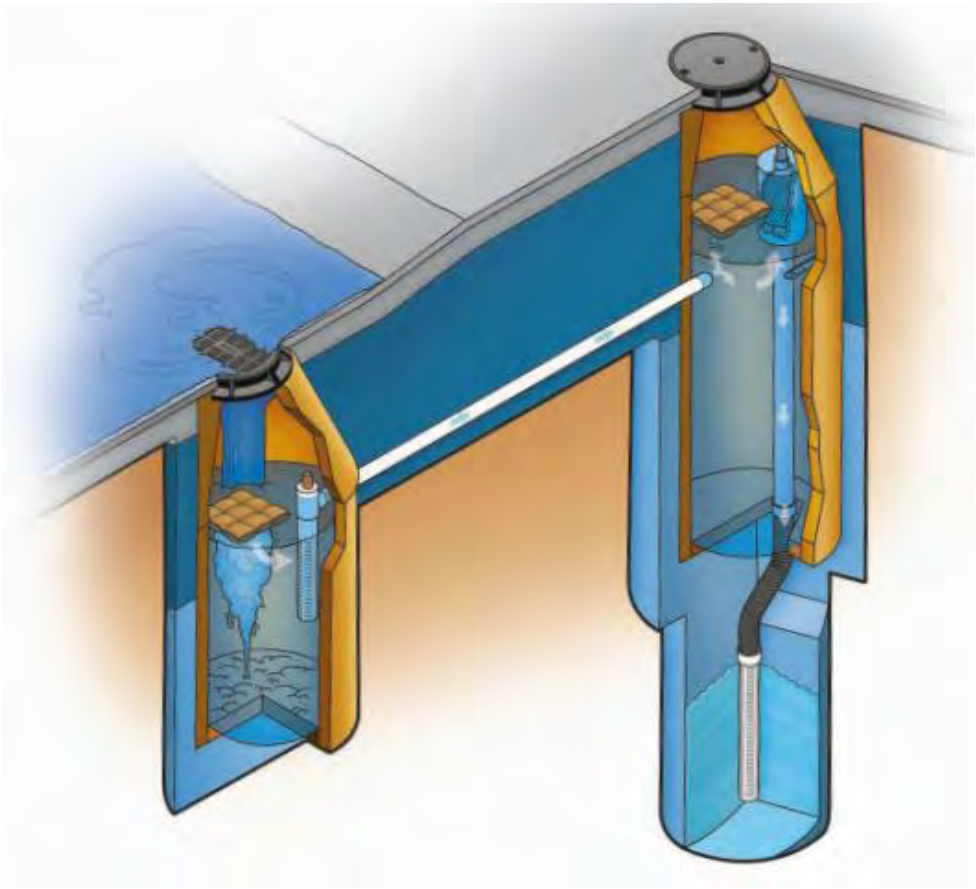
CBWCD Percolation Basin

Example of Infiltration Project

Example: Drywell System for stormwater capture

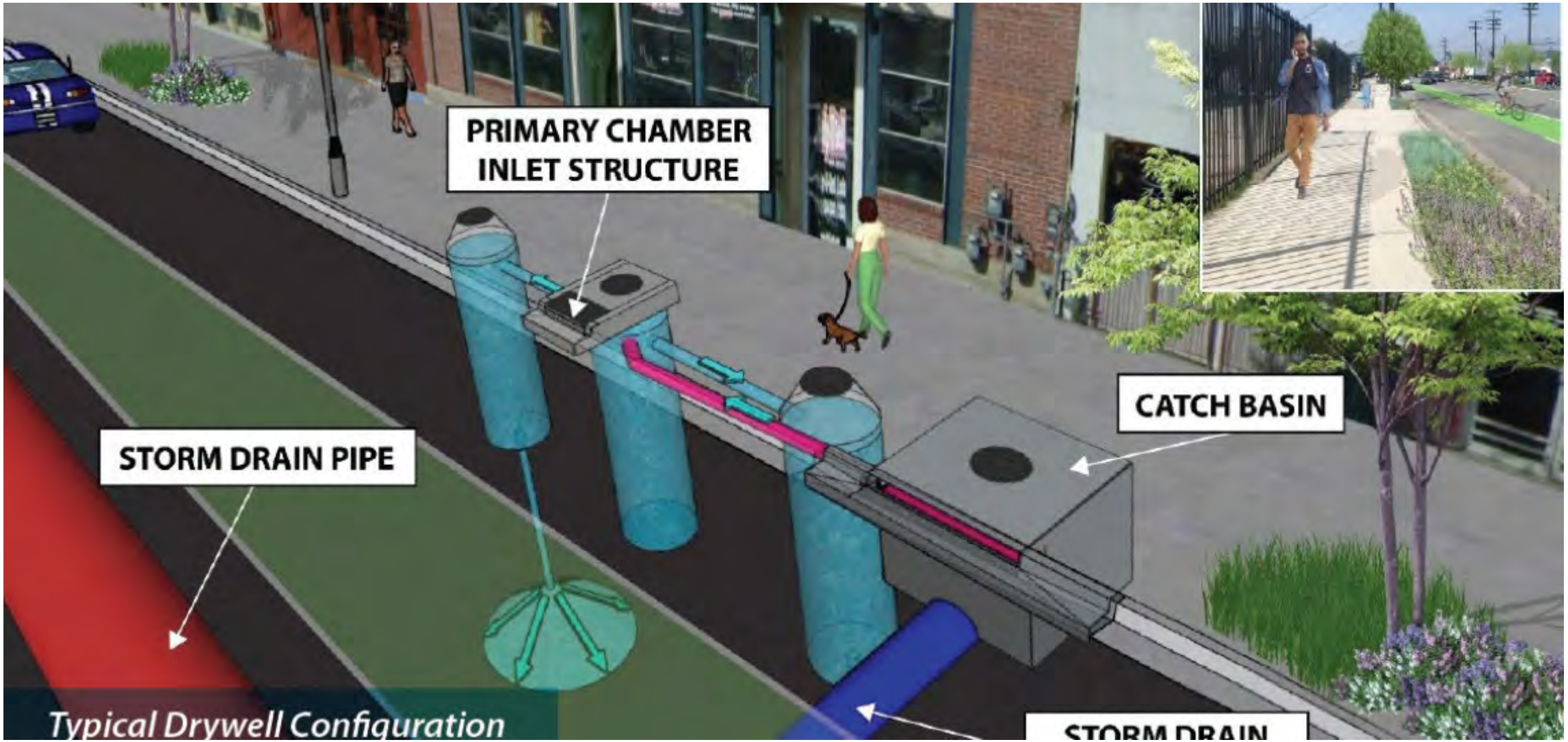


Source: americangeosciences.org

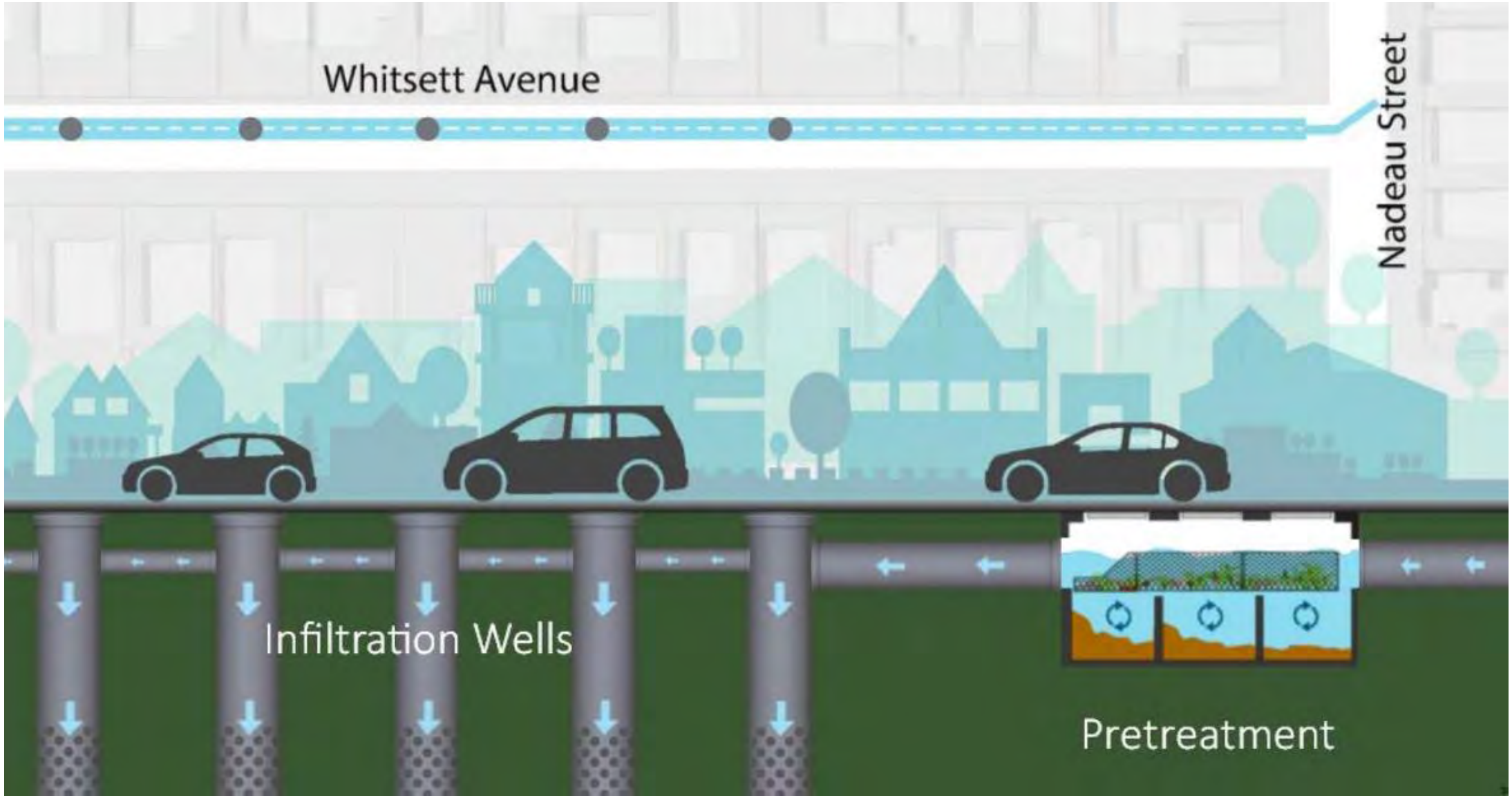


Source: MaxWell® Plus by Torrent Resources

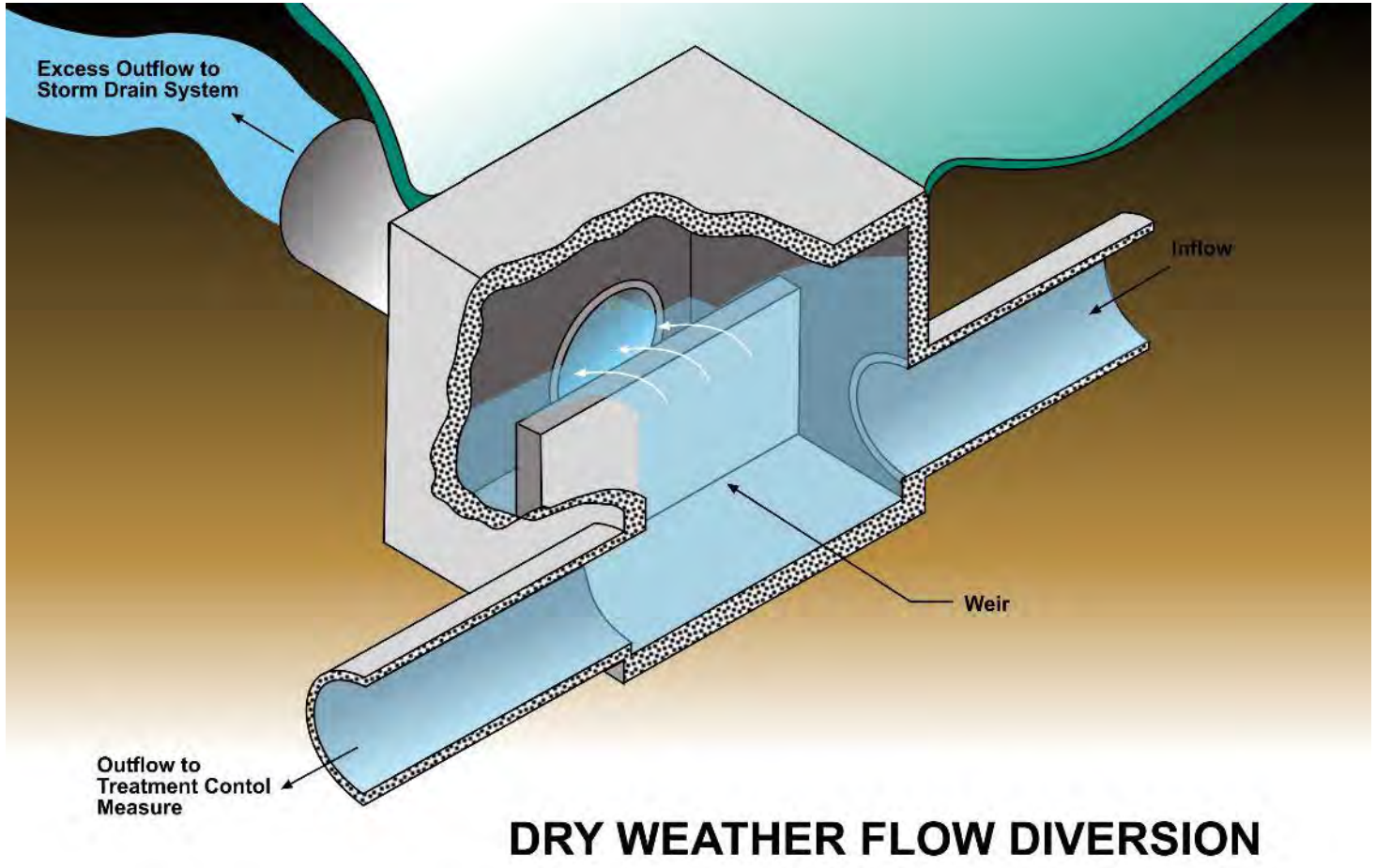
Drywell in a “green” street…



Example of Infiltration in a Street



Example: Dry Weather Flow Diversion to POTWs (for recycled water)



Source: Ken Eulie Graphics

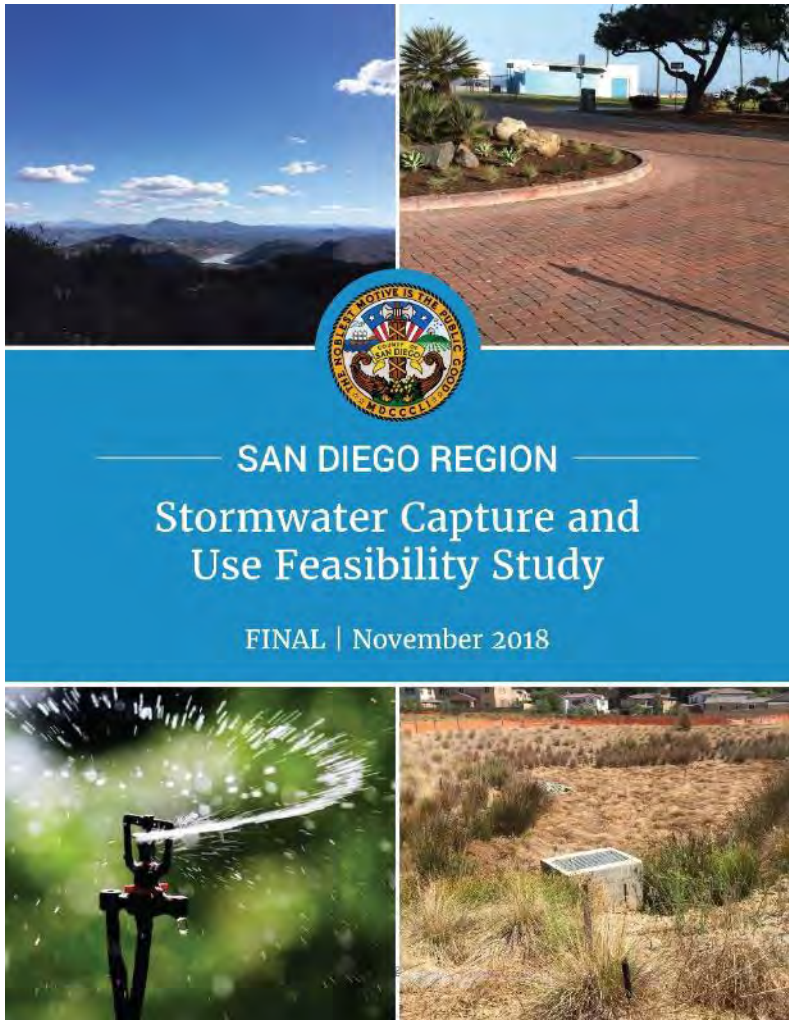
Other Examples

Low Impact Development

Nature based: Flow-through

Examples of Stormwater Capture Plans

https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-w-stormwatercapturemp?_afrLoop=163881964895659&_afrWindowMode=0&_afrWindowId=null#%40%3F_afrWindowId%3Dnull%26_afrLoop%3D163881964895659%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dfn7sthesw_17



https://projectcleanwater.org/stormwater-capture-and-use-feasibility-study/

Study Focus – Stormwater Capture in the Santa Ana River Watershed

- Purpose of the Pilot
  - Provide a **regional analysis of potential stormwater capture and use projects** for water supply and other beneficial uses.

Feedback from SAWPA Member Agencies

- Ensure it builds upon existing stormwater and water supply planning efforts
- Be aware of when stormwater is lost to the ocean
- Be cognizant of the multiple benefits from stormwater capture projects such as water quality

Additional Input from SAWPA Member Agencies

- Use of metrics
  - Assessing potential projects
- Assemble information on planned projects
  - Communicate the types and benefits of these projects in the watershed
- Involve other participants
  - Flood control districts
- Final Report:
  - Include Executive Summary
  - Provides a narrative of current and future projects to highlight these projects in the watershed

Benefits of a Stormwater Assessment Study

- Identify and describe stormwater capture opportunities:
  - Including new and innovative options
  - Including regional options
  - Potential partnerships
- Serve as a feasibility study for future project development throughout the watershed (including by cities)
- Use study for future grant opportunities

Photo from San Diego Region Stormwater Capture and Use Feasibility Study

Opportunity – FY 2022 USBR Water Management Options Pilot Program

- Water Management Options Pilot Program Details:
  - Water agencies receive Bureau of Reclamation in-house technical expertise and staff time
  - Available to water agencies that have completed a “Basin Plan” in partnership with Reclamation
  - SAWPA Basin Plan = OWOW 2.0 Plan completed in 2013
- SAWPA submitted a pre-application letter of interest to Reclamation (Spring 2022)
- Reclamation has invited SAWPA to submit a full application:
  - Initial budget estimate used in letter was $750,000 for the total cost of the Pilot
  - Reclamation will match 50% of what the local partner (i.e., SAWPA) provides

BUREAU OF RECLAMATION

Focus of the Assessment

- Prioritize stormwater capture efforts that provide the following:

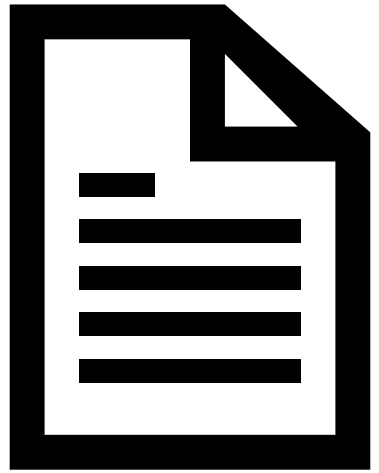
Augment groundwater supplies for potable use

Divert dry-weather flows to wastewater treatment plants (WWTPs)

Control discharge of stormwater to WWTPs for indirect potable reuse, or recycled water use

Draft Outline of the Assessment

1. Purpose and Drivers
2. Regulatory Environments for Stormwater Capture
3. Assessment of Existing Stormwater Projects and Plans
4. Opportunities for Stormwater Capture (by project type):
    a) Groundwater augmentation through “Dry Wells” and/or injection wells (treatment needed)
    b) Storage Basins for infiltration or use
    c) Sub-regional storage/recharge facilities
    d) Dry-weather flows
5. Approached and Incentives for Project Implementation



Possible Data Needed for the Assessment

A. Groundwater quality
B. Infiltration capacity
C. Climate change and precipitation predictions
D. Overlying municipal code-requirements
E. Diversions of dry weather flows
F. Local regulations including watermaster requirements
G. Assessor parcel lines and street boundaries
H. Right-of-ways and easements
I. Slopes
J. Existing stormwater capture projects and groundwater, production wells
K. Locations of disadvantaged communities.

Bureau of Reclamation Tasks

- Data gathering and organization
- Updating climate projections from Basin Study (i.e., the latest OWOW Plan)
- Summarizing adjudicated basin rules
- Other technical tasks
- Technical writing to help produce a draft/final of the Assessment

SAWPA Tasks

- Overall study management
- Manage advisory committee
  - Member Agency staff
- Defining and assessing alternatives:
  - Criteria and metrics
  - Opportunities and constraints
- Groundwater modeling calibration
- Producing modeled data for stormwater capture project opportunities at the resolution needed
- Determining cost and benefits of project opportunities

Outcomes of Study

- High level document
  - Highlights currently planned stormwater projects in the watershed
  - Identifies alternatives we are missing
  - Reviews innovative approaches
- Guidance for use by water districts and cities
  - Supports planning by cities by providing a roadmap
  - Underscores partnerships
  - Pathways to implement stormwater projects
  - Identifies potential incentives
- Supports future grant opportunities

Preliminary Budget and Schedule

- Budget:
  - $750,000 total estimated costs (preliminary estimate)
- Schedule:
  - Two-year Study
  - March 2023 to March 2025
  - Final Assessment document completed by March 2025

Assessment Budget

Bureau Share (50%)	SAWPA Share (50%)
$375,000	$375,000

BUREAU OF RECLAMATION

SAWPA

Total costs estimated at $750,000

Stormwater Assessment Pilot: Potential Next Steps

- July 19 – Direction from Commission
- July-August
  - Prepare proposal scope
  - Review scope with Member Agency Planning Staff
- August 9 – Review scope with GMs
- Prepare Application for USBR based on Member Agency input
- August 16 – Present a final recommendation to the Commission for submission of the Assessment
- September 7 – Deadline to submit Application

Recommendation

- Provide feedback regarding the potential for a “Santa Ana River Stormwater Capture and Use Assessment” under a grant from the Bureau of Reclamation