Santa Ana Watershed Project Authority

Capitol Update

September 2020

Michael Boccadoro
Beth Olhasso

West Coast Advisors
Strategic Public Affairs

Overview

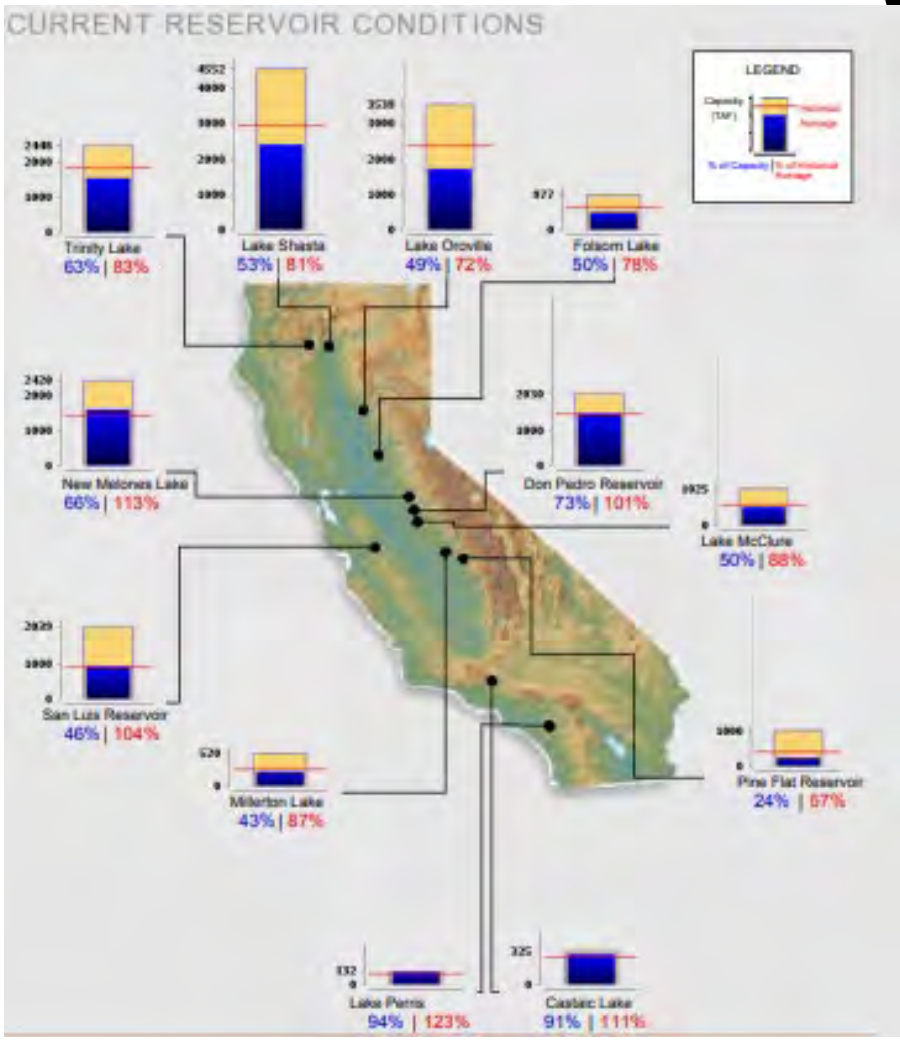
- Water supply situation
- Delta Conveyance Update
- Water Resilience Portfolio
- 2020 Session Recap
- 2021 Looking Forward
- Strategies & Recommendations

Water Supply Update

Dry 2020

➔ 80% of CA at least "abnormally dry"

Surface water supplies remain constrained



Delta Conveyance Update- DCA Financing

COST ASSESSMENT UPDATE

Future Steps

- **Create a Baseline Program Capital Plan that represents the time-value of money over the 20-year delivery period.**
  - Include the estimated value of all contracts in the year the contracts are scheduled to be procured.
- **Continue developing soft costs, e.g.**
  - Community Benefit Fund
  - DWR Environmental Planning Work
- **Develop final conceptual construction cost estimate when CEQA is approved**
  - Concept design confirmed
  - Final environmental mitigations identified
- **Update Board periodically as new information is developed that affects cost, e.g.**
  - Geotechnical exploration data
  - Major scope changes

DCA

Water Resilience Portfolio

- Final Version Released:
  - ➔ includes over 120 recommendations
  - ➔ Achieve reliable access to safe and affordable drinking water
  - ➔ Drive greater water use efficiency in all sectors
  - ➔ Make funding available for groundwater recharge & storage projects
  - ➔ Support local and regional recycling or reuse at least 2.5 MAF/year by 2030
  - ➔ Support cities and counties on stormwater capture and reuse

2020 Legislative Recap

- COVID-19 pandemic drastically altered legislative session.
- Focus on economic recovery, pandemic relief, housing & wildfire.
- Economic Stimulus did not materialize at the end of session
- Budget assumed federal relief- not yet materialized.

2020 Climate Bond Recap

- All Proposals Tabled
  - ➔SB 45 (Allen): $5.5 Billion
  - ➔AB 3256 (Garcia): $6.9 Billion (June proposed amends)
  - ➔Governor's Budget Trailer Bill: $4.7 Billion (withdrawn in May)
- Lack of resources/looming deficits
- Next opportunity--2022

2020 Legislation

- **SB 414 (Caballero):** Small System Water Authority Act of 2019- Held on Assm. Appr. Suspense
- **AB 2560 (Quirk):**NL/RL Procedures: On Governor's Desk
- **AB 3030 (Kalra):** Conservation Goals: Held on Sen. Appr. Suspense
- **AB 1672 (Bloom):** Disposable wipes: Held on Sen. Appr Suspense

Moving Ahead

Outlook for 2020/2021

Legislature

- New Legislature to be sworn in Dec 2020
- 2021-2022 will likely be dominated by economic recovery, homelessness, wildfire.
- Budget difficulties continue

Most Important Environmental Issues

- **What do you think is the most important environmental issue facing California today?**

➔Global Warming/Climate Change	21%
➔Air Pollution	13%
➔Wildfires	11%
➔Water Supply/Drought	**11%**
➔Waste/Recycling	7%

Note: Water 5% (IE) 10% (OC/SD)

PPIC July 2020

Views on Water

- How big of a problem is the "supply of water" in California?
  - ➔Big Problem 46%
  - ➔Somewhat of a Problem 40%
  - ➔Not Much of a Problem 14%
  - ➔Don't Know ---

Note: 35% (IE), 37% (OC/SD)

PPIC July 2020

Looking Ahead to 2021

- California facing fiscal challenges
- Economic recovery/focus on green jobs
- National politics/focus on climate change
- Rise in environmental/social justice
- Water supply/drought in CA
  - ➔ Increasing water scarcity

Major Water issues for 2021

- Bay-Delta flows/water reliability
- Affordability/rising energy & compliance costs
- Drinking water/water quality
  - ➔PFOA/PFOS
- Fiscal/protection of property taxes/reserves
- Elimination of Ocean Discharge
- Conveyance/Delta tunnel

Strategies & Recommendations As We Move Forward

- Continue to increase SAWPA's presence in Sacramento
- Local legislative meetings/ briefings via video conference
- Work with DWR/SWRCB to implement Water Resilience Portfolio
- Continue to engage on climate/ water/energy nexus discussions

Thank You

Questions?

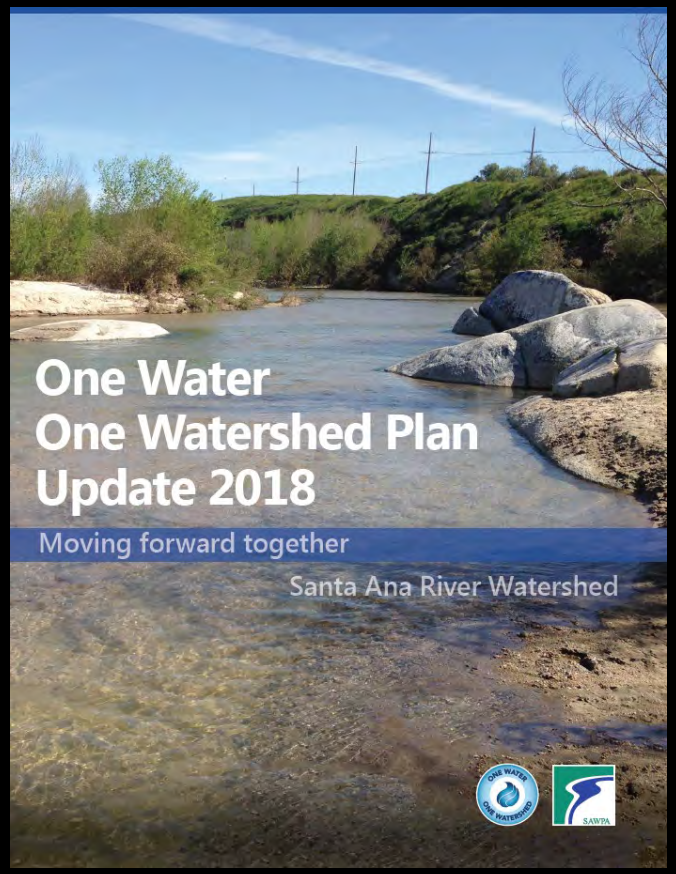
2019 SANTA ANA RIVER WATERSHED SUSTAINABILITY ASSESSMENT

Ian Achimore, Senior Watershed Manager
SAWPA Commission | September 1, 2020
Item No. 7.A.

SAWPA

ONE WATER ONE WATERSHED

OWOW PLAN UPDATE 2018



The six goals of the OWOW Plan Update 2018 are to:

- Achieve resilient water resources through innovation and optimization.
- Ensure high-quality water for all people and the environment.
- Preserve and enhance recreational areas, open space, habitat, and natural hydrologic function.
- Engage with members of disadvantaged communities to diminish environmental injustices.
- Educate and build trust between people and organizations.
- Improve data integration, tracking, and reporting to strengthen decision making.

ASSESSMENT AND INDICATORS

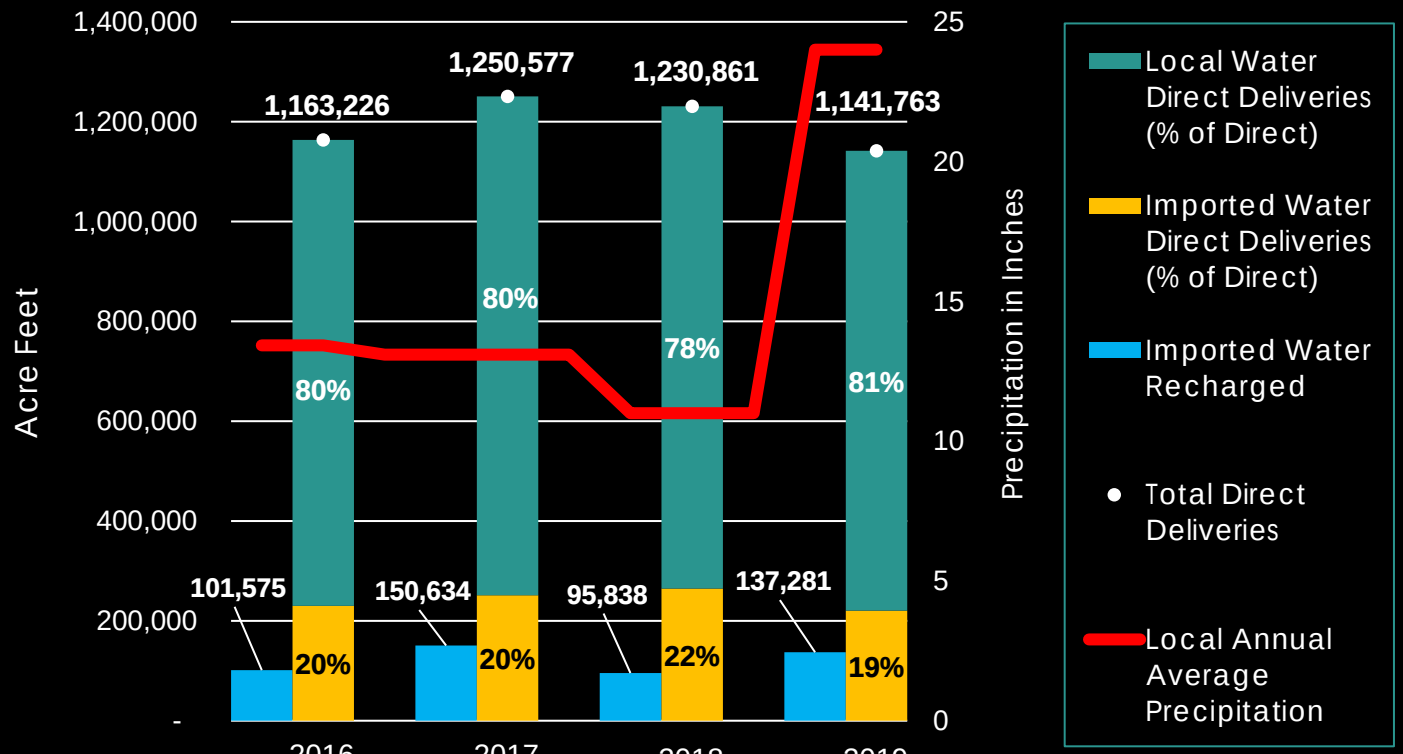
Rating System

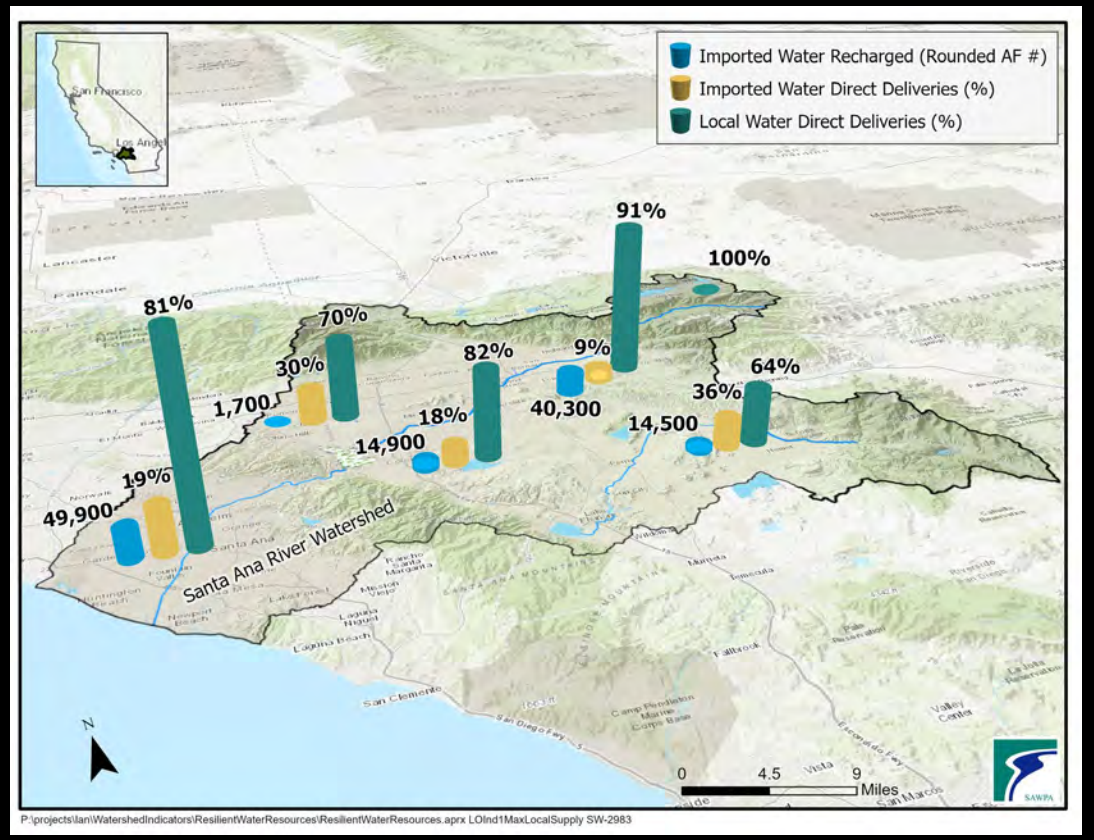
OWOW Goal	Indicator No.	Indicator Definition	Rating from 2018 Assessment	Rating from 2019 Assessment
Achieve resilient water resources through innovation & optimization	1	Maximization of locally-managed supplies	Neutral	Positive
	2	Efficiency of outdoor water use	Positive	Positive
Ensure high quality water for all people & the environment	3	Maintenance of groundwater salinity at target levels	Positive	Positive
	4	Safety of water for contact recreation	Positive	Positive
Preserve & enhance recreational areas, open space, habitat	5	Abundance of riparian vegetation	Positive	Positive
	6	Abundance of conserved open space	Positive	Positive
Engage with members of disadvantaged communities	7	Equitable access to clean drinking water	Neutral	No Data
	8	Equitable implementation of climate change adaptation	Neutral	No Data
Educate & build trust between people & organizations	9	Collaboration for more effective outcomes	Positive	Positive
	10	Adoption of a watershed ethic	Positive	Positive
Improve data integration, tracking & reporting to strengthen decision-making	11	Broaden access to data for decision-making	Positive	Positive
	12	Participation in a regional database.	Neutral	Neutral

GOAL: ACHIEVE RESILIENT WATER RESOURCES THROUGH INNOVATION AND OPTIMIZATION.

1

MAXIMIZATION OF LOCALLY-MANAGED SUPPLIES





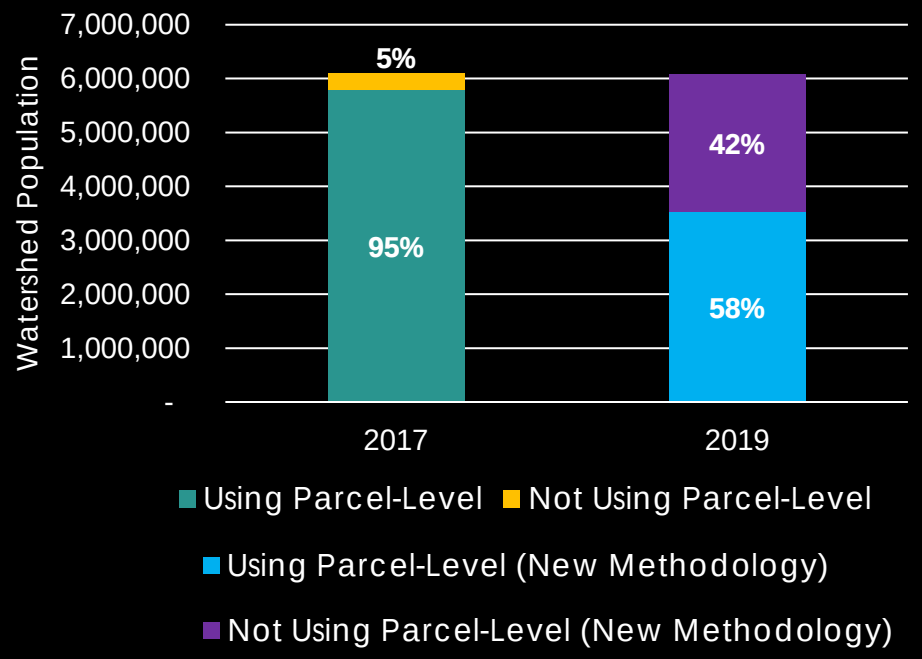
2019: Positive

(2018: Neutral)

2

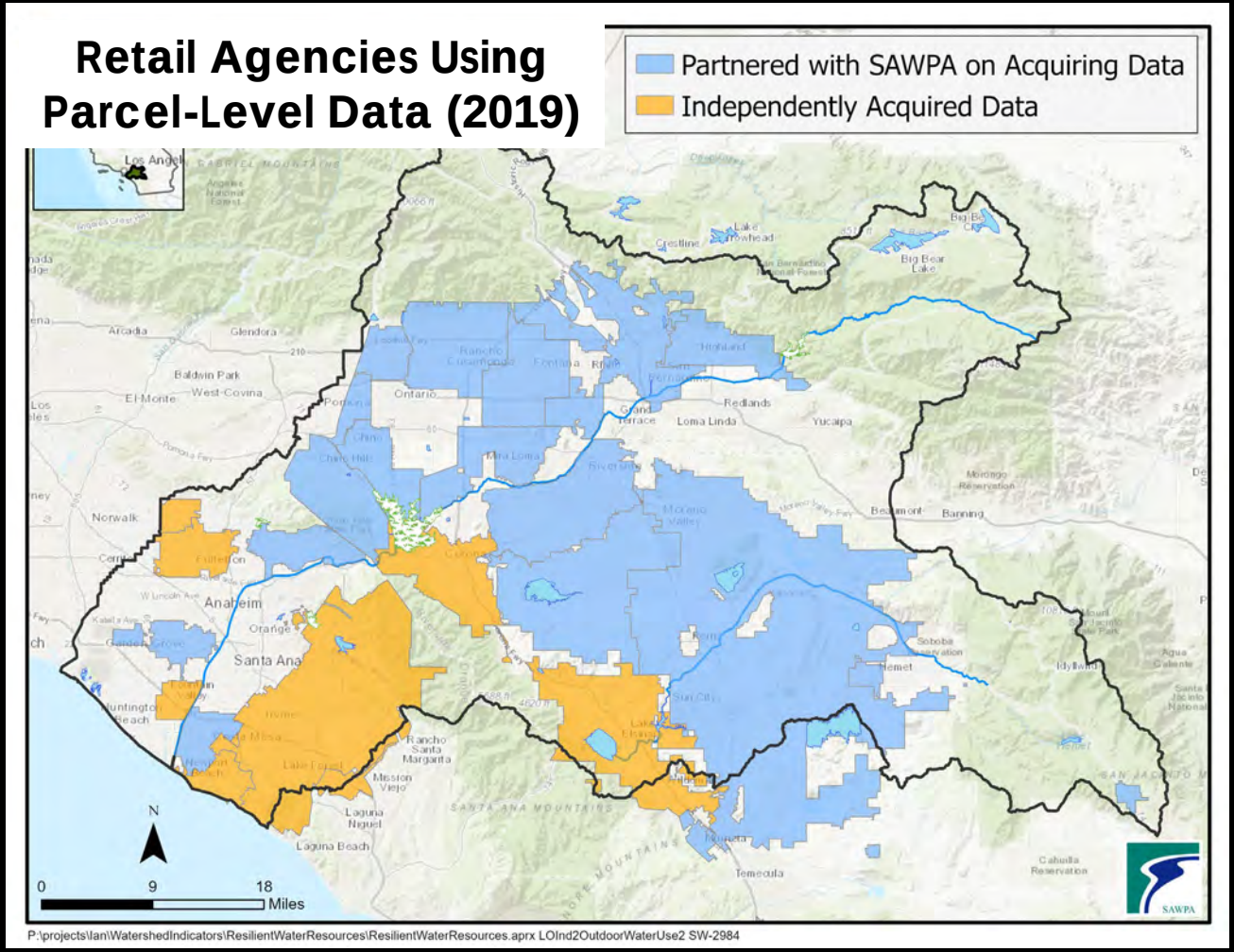
EFFICIENCY OF OUTDOOR WATER USE

(Methodology Varies Between Years)



2019: Positive

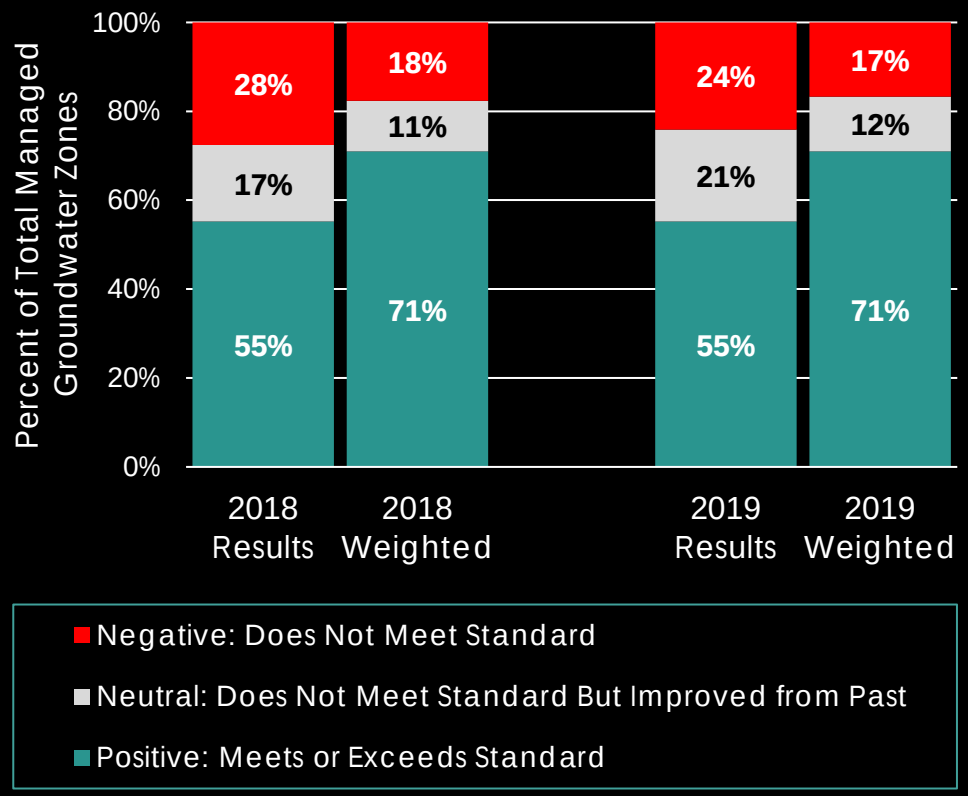
(2018: Positive)



GOAL: ENSURE HIGH QUALITY WATER FOR PEOPLE AND THE ENVIRONMENT.

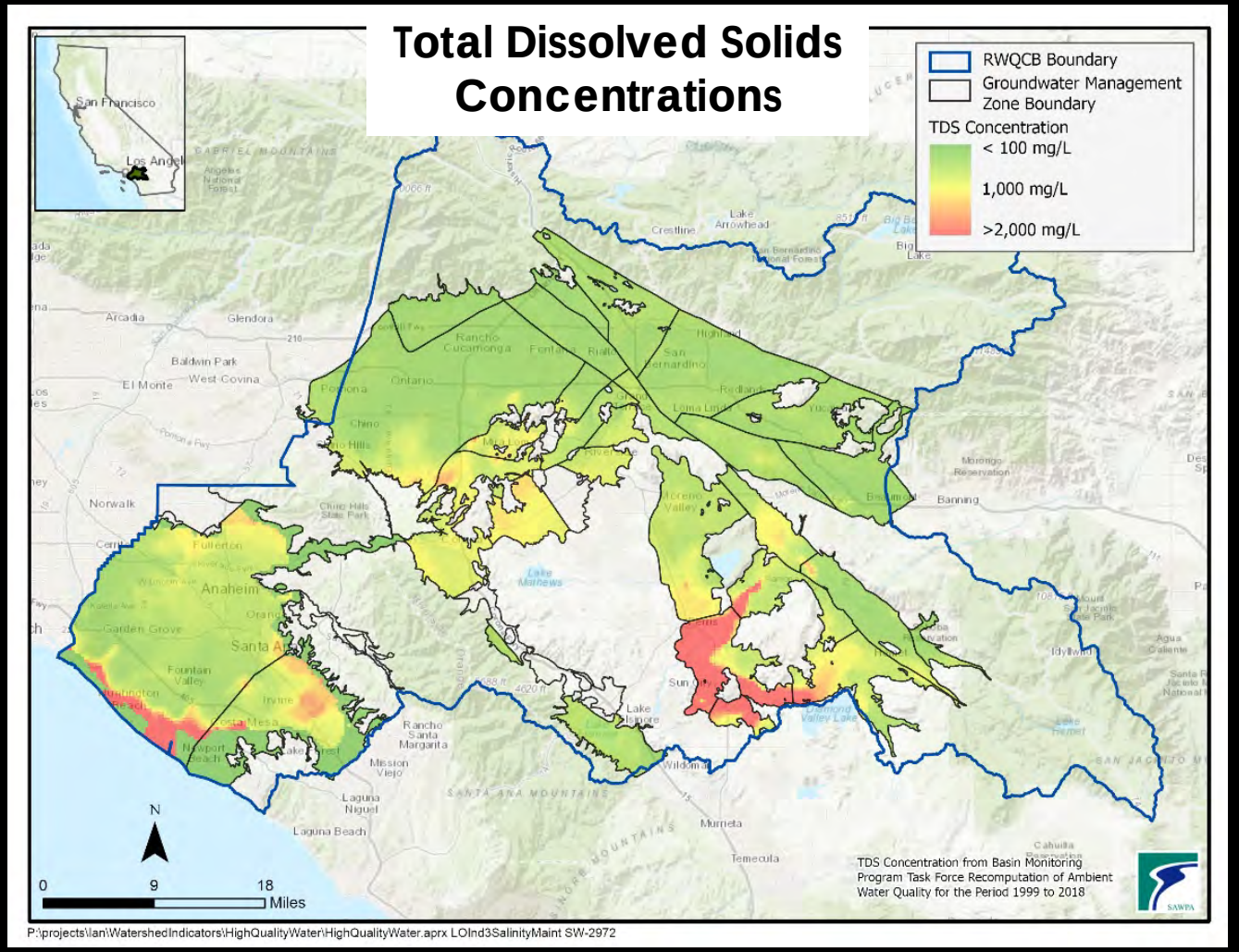
3

MAINTENANCE OF GROUNDWATER SALINITY AT TARGET LEVELS



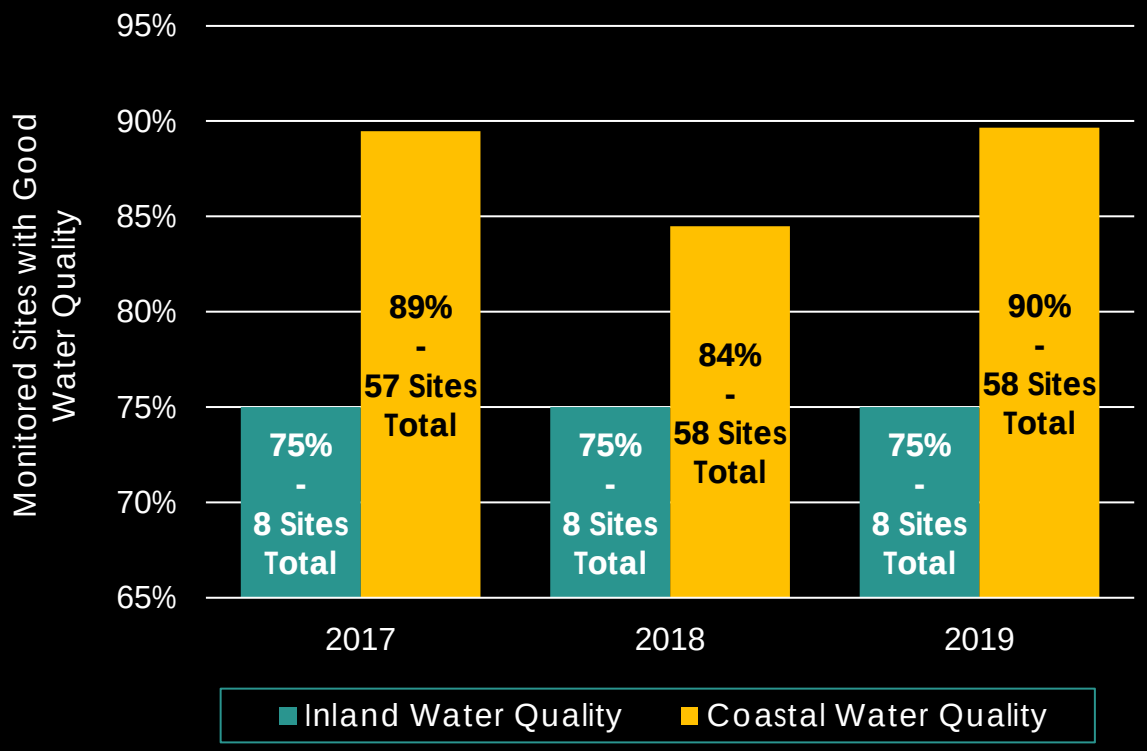
2019: Positive

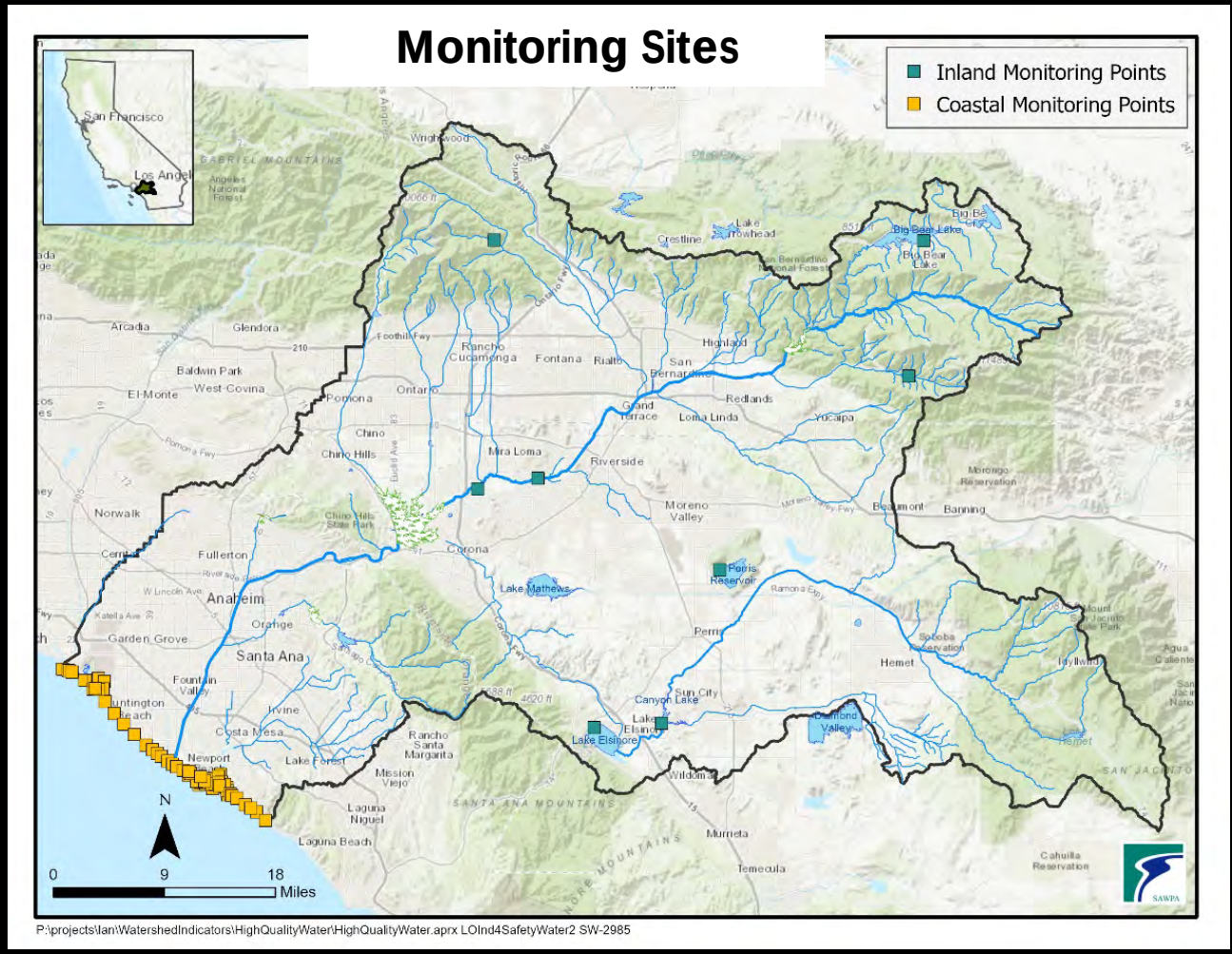
(2018: Positive)



4

SAFETY OF WATER FOR CONTACT RECREATION





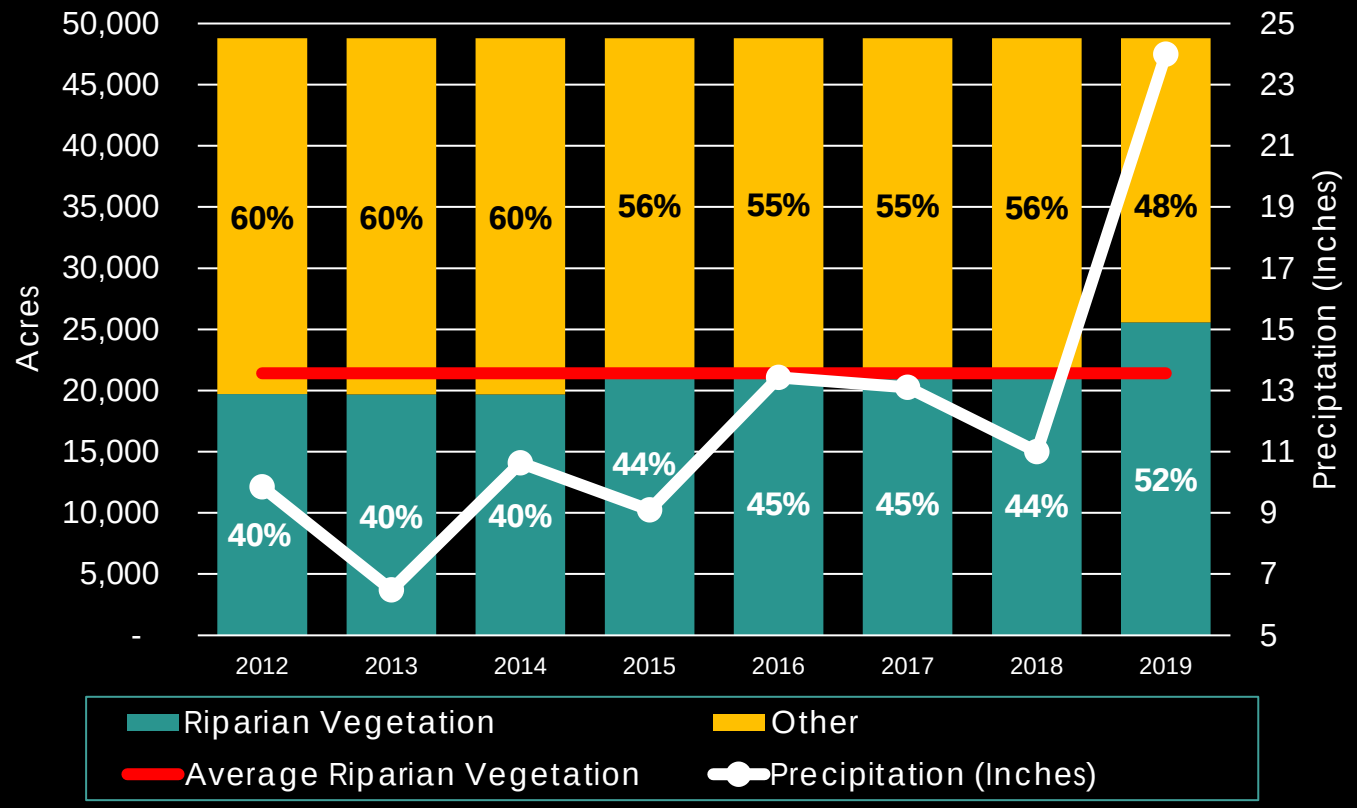
2019: Positive

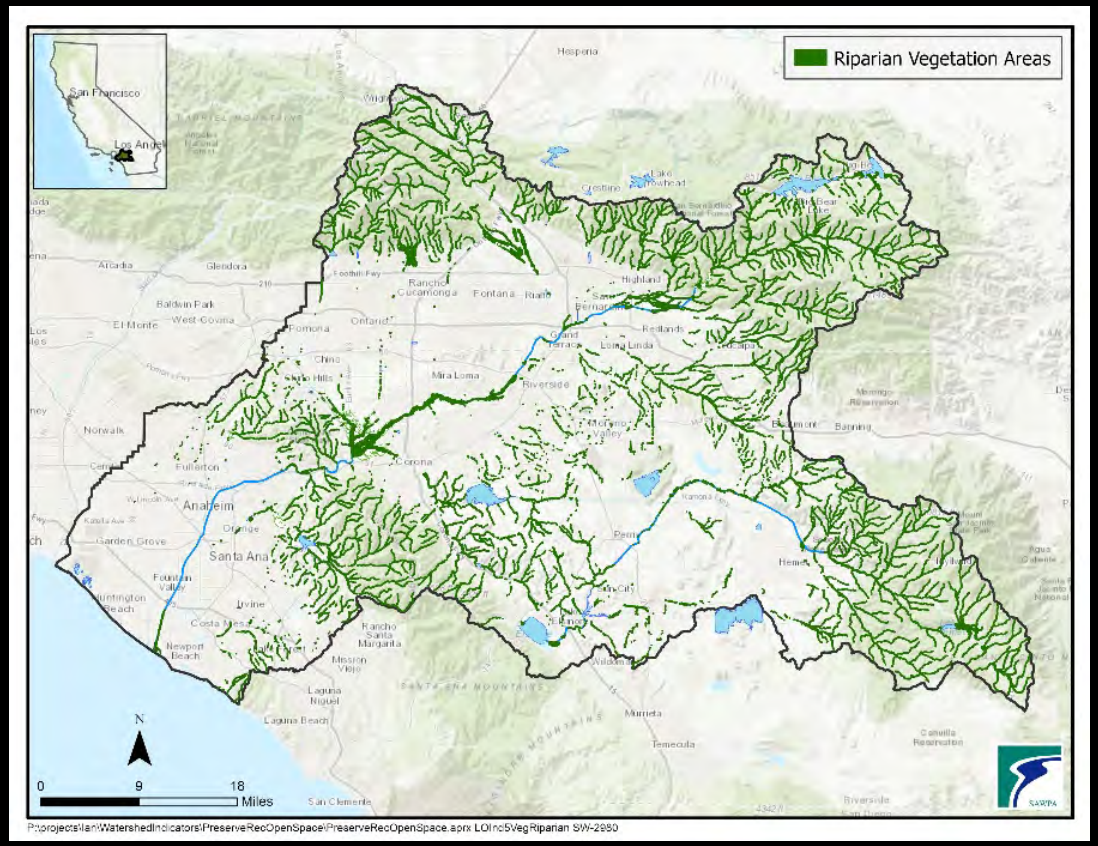
(2018: Positive)

GOAL: PRESERVE AND ENHANCE RECREATIONAL AREAS, OPEN SPACE, HABITAT, AND NATURAL HYDROLOGIC FUNCTION.

5

ABUNDANCE OF RIPARIAN VEGETATION



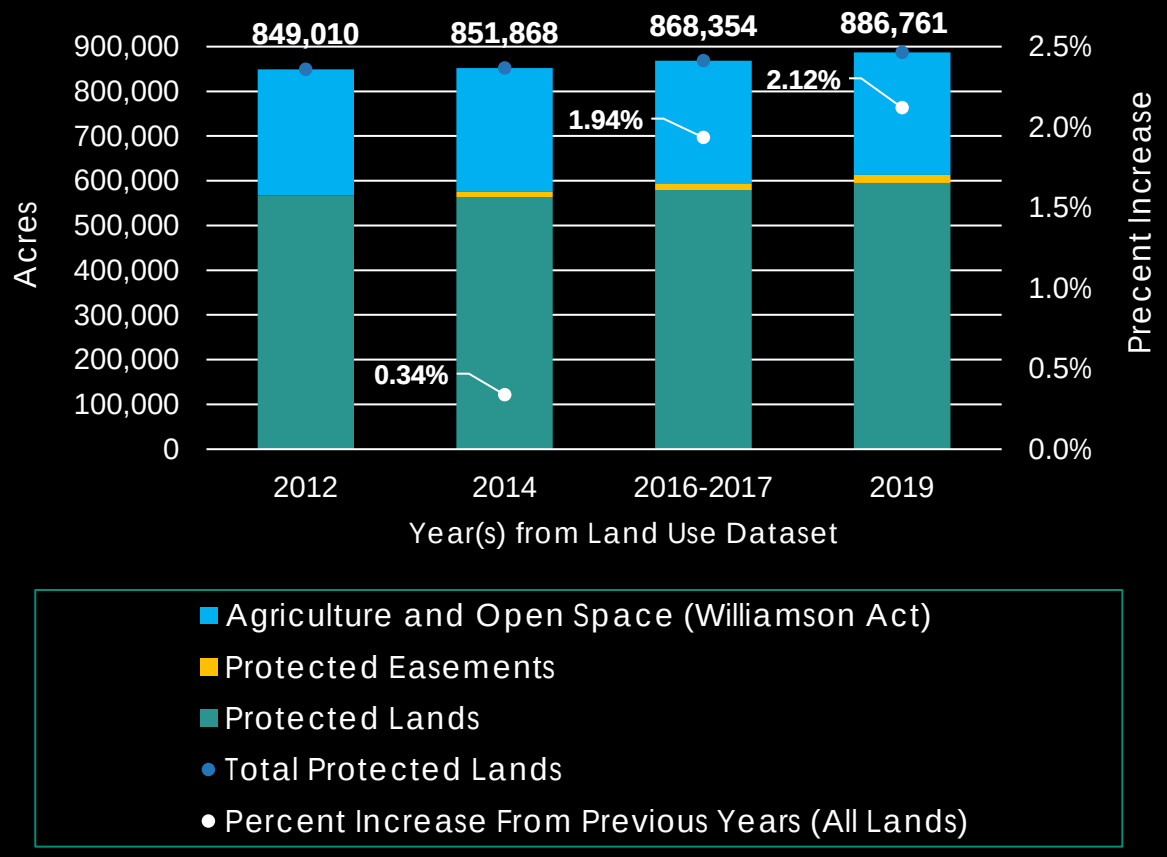


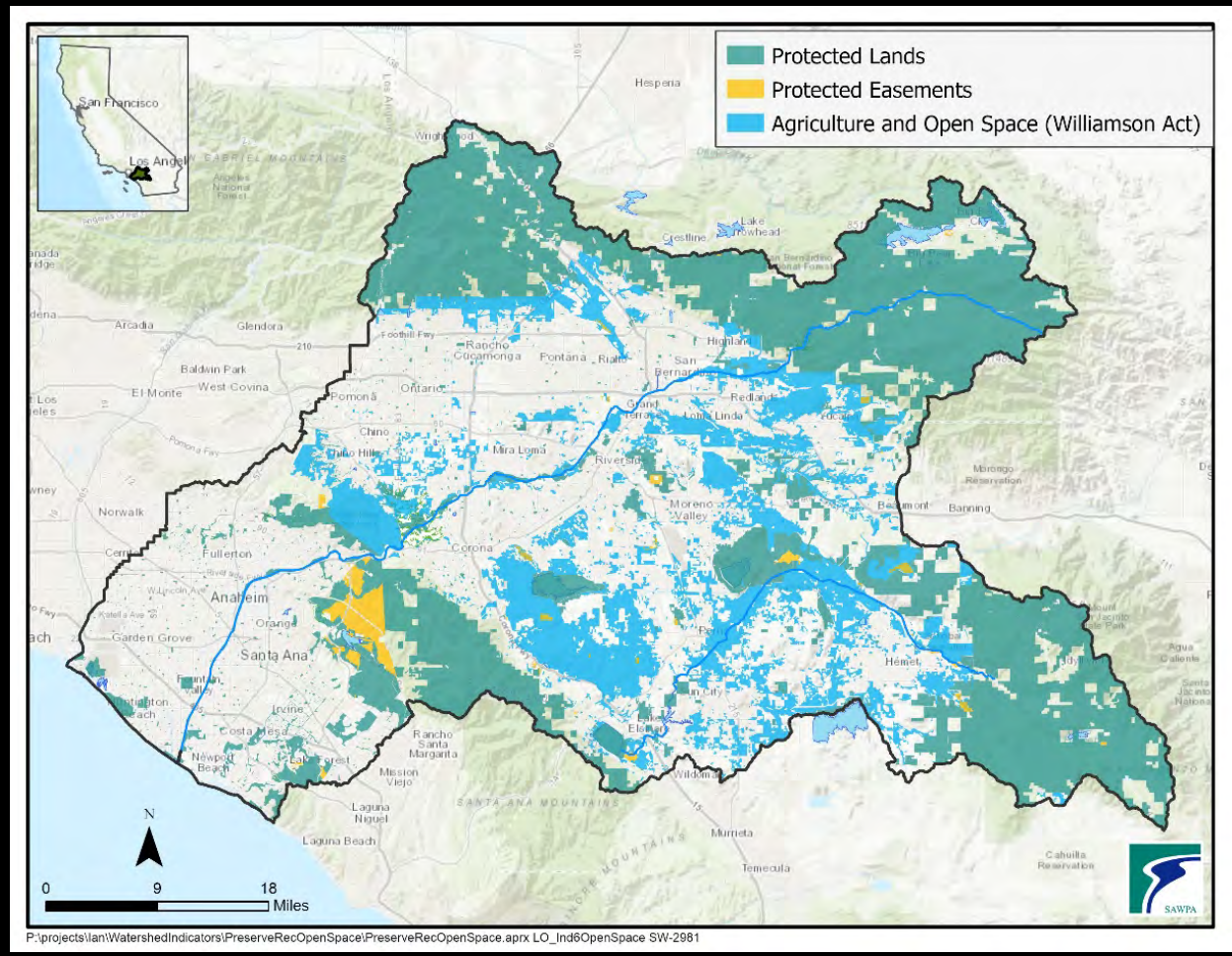
2019: Positive

(2018: Positive)

6

ABUNDANCE OF CONSERVED OPEN SPACE





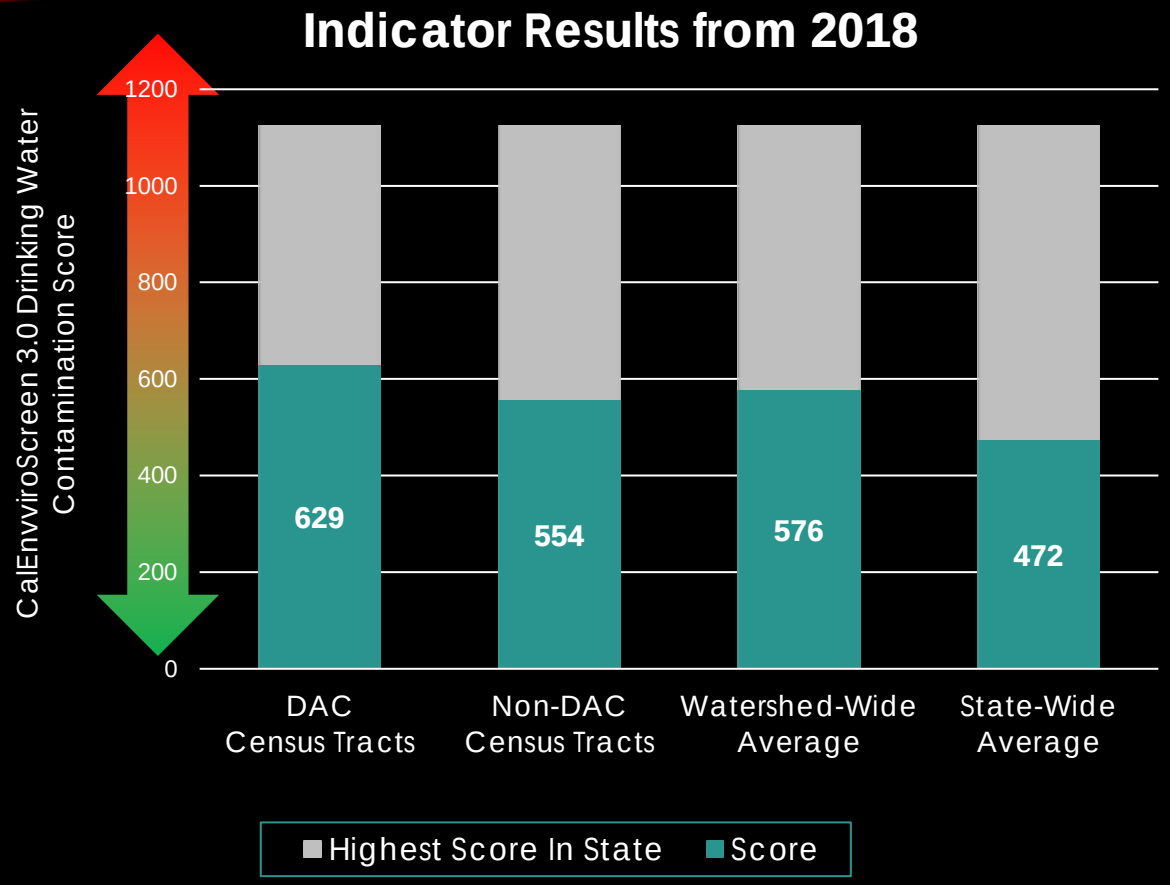
2019: Positive

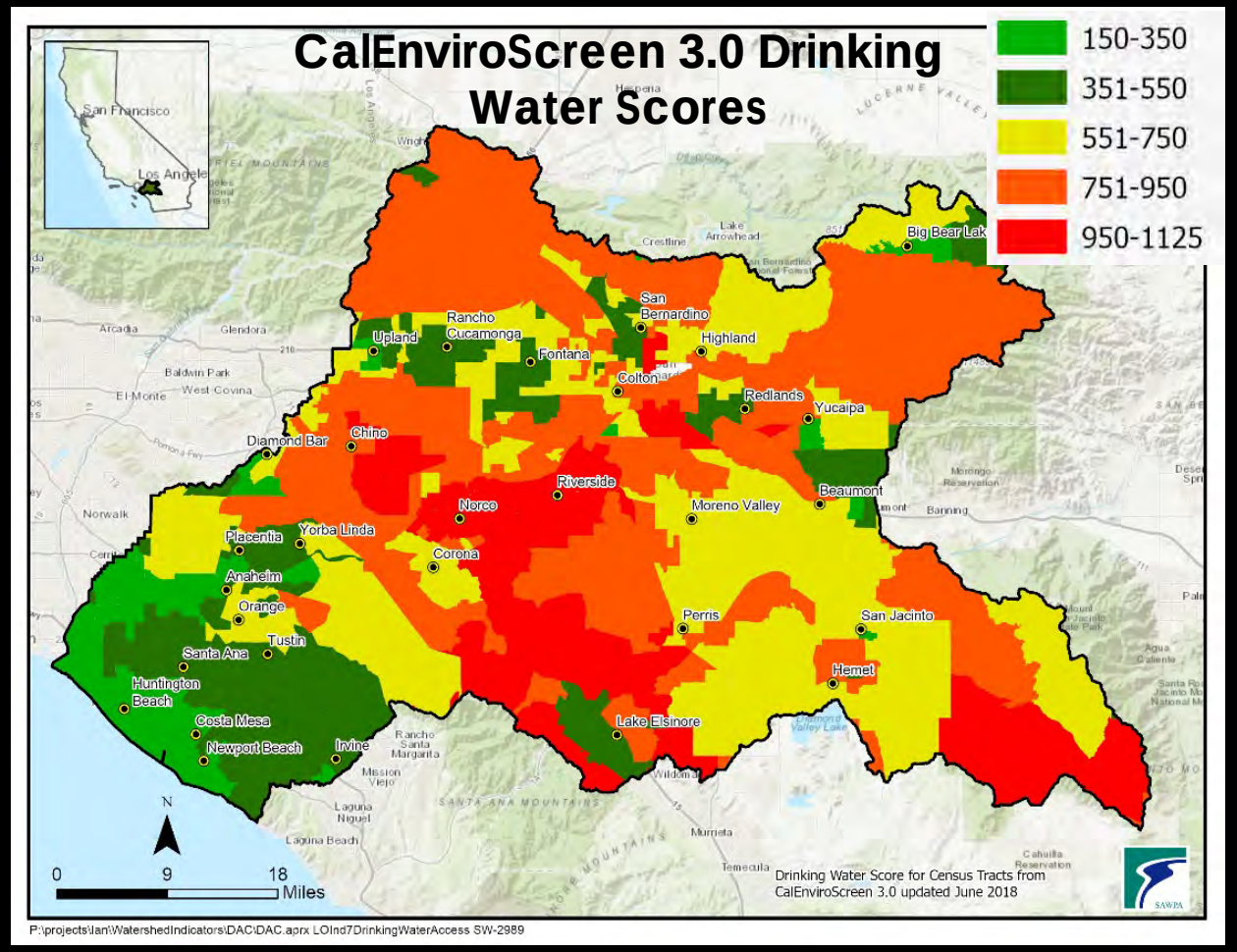
(2018: Positive)

GOAL: ENGAGE WITH MEMBERS OF DISADVANTAGED COMMUNITIES AND ASSOCIATED SUPPORTING ORGANIZATIONS TO DIMINISH ENVIRONMENTAL INJUSTICES AND THEIR IMPACTS ON THE WATERSHED.

7

EQUITABLE ACCESS TO CLEAN DRINKING WATER





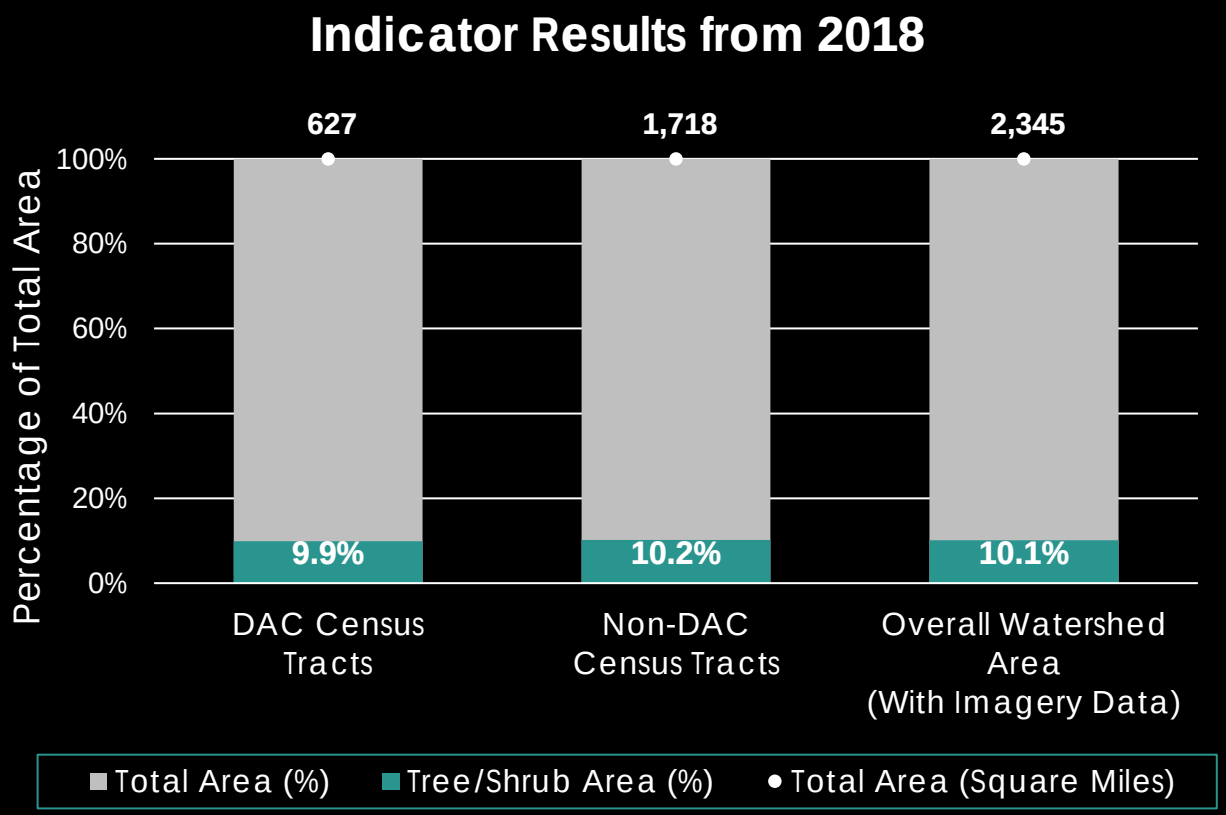
?

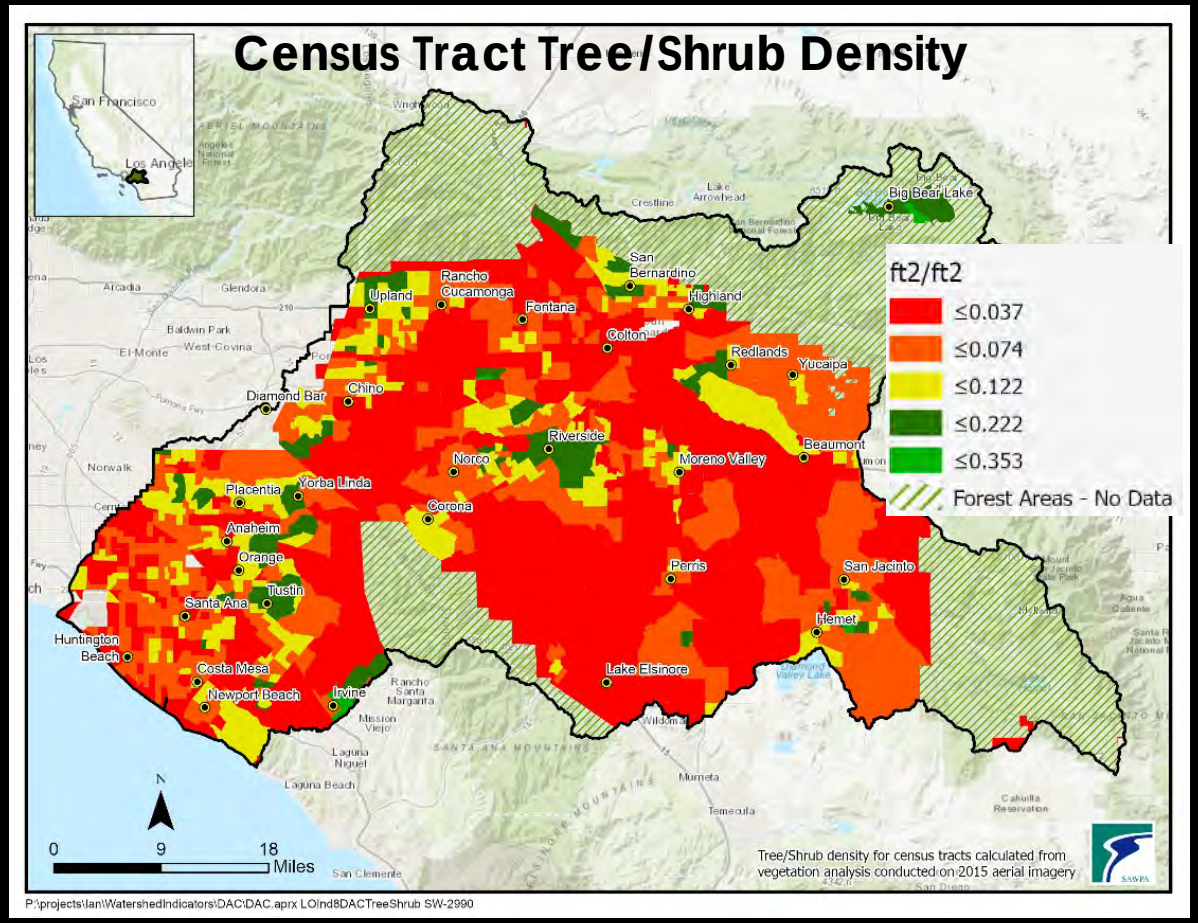
2019: No Current Data

(2018: Neutral)

8

EQUITABLE IMPLEMENTATION OF CLIMATE CHANGE ADAPTATION





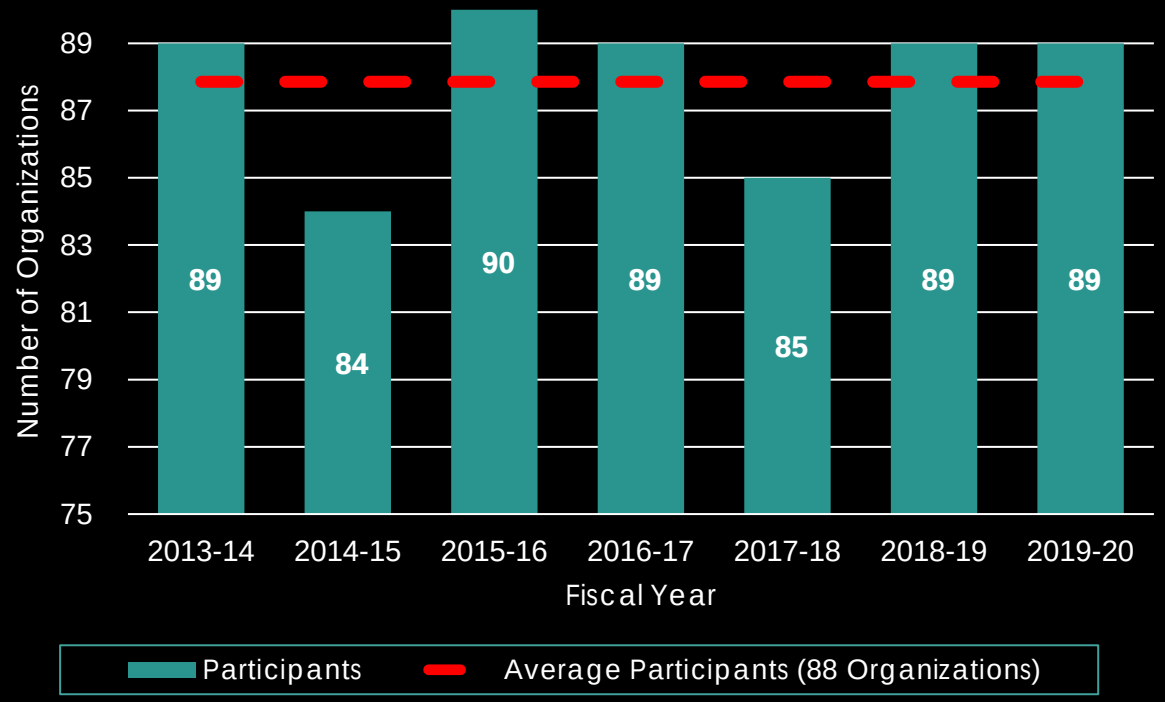
?

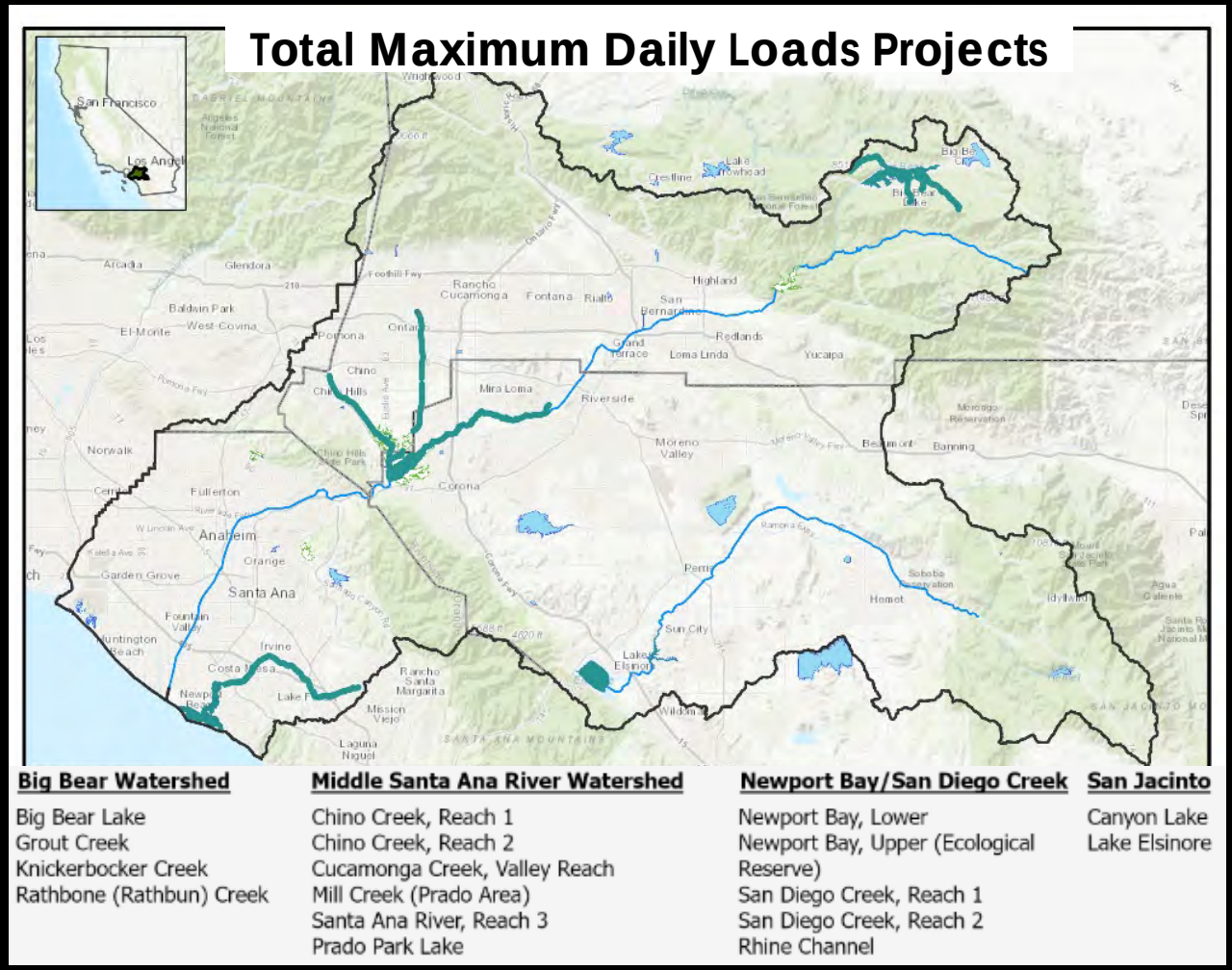
2019: No Current Data

(2018: Neutral)

GOAL: EDUCATE AND BUILD TRUST BETWEEN PEOPLE AND ORGANIZATIONS.

COLLABORATION FOR MORE EFFECTIVE OUTCOMES

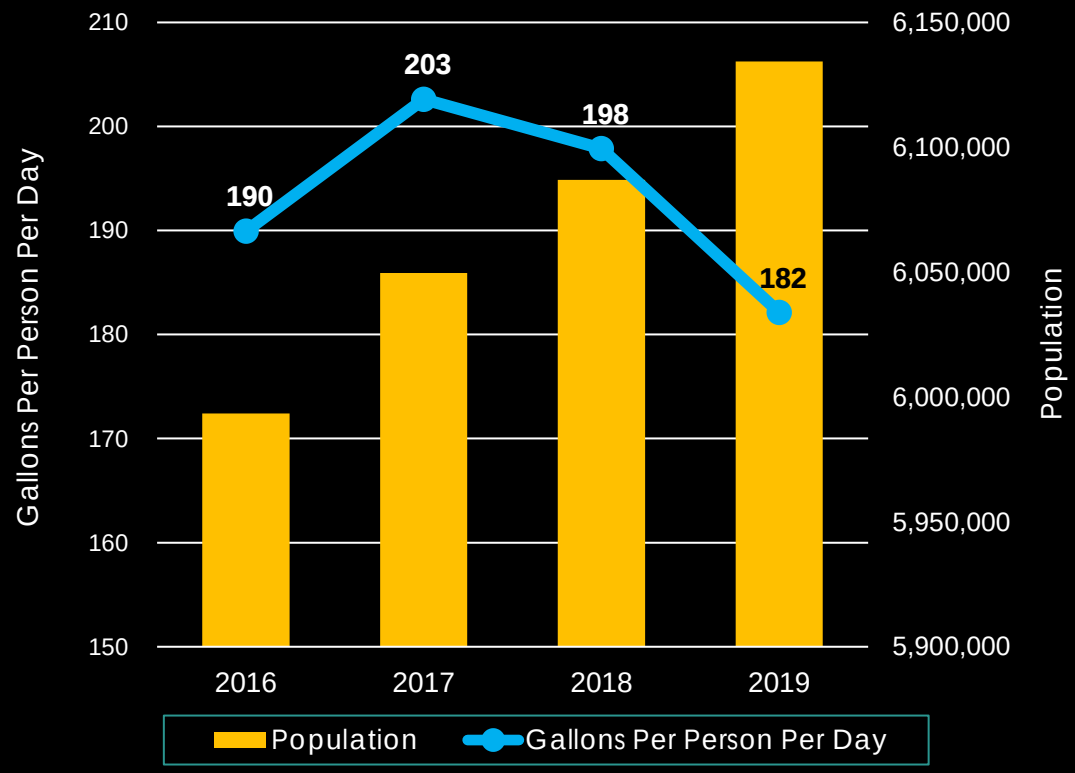




2019: Positive
(2018: Positive)

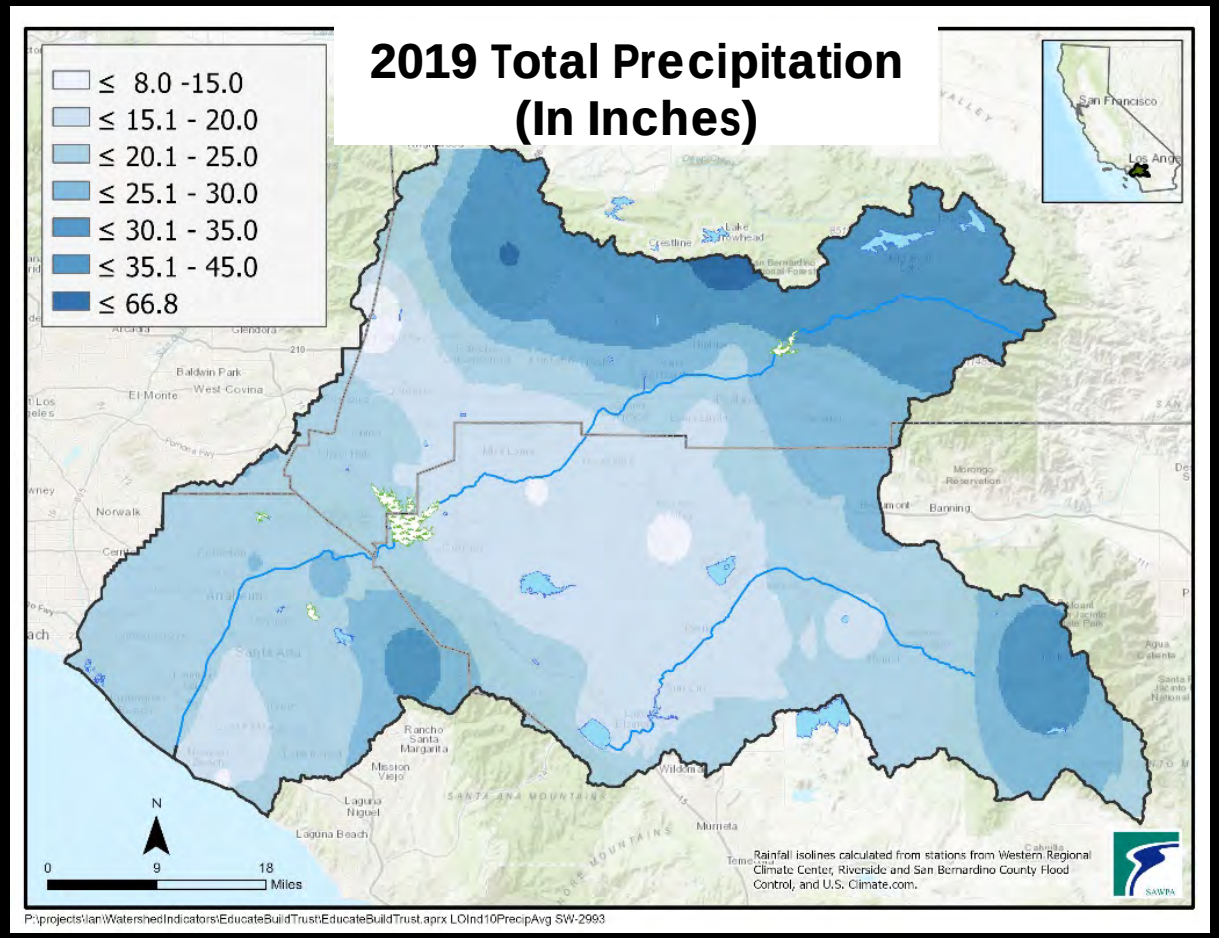
10

ADOPTION OF A WATERSHED ETHIC



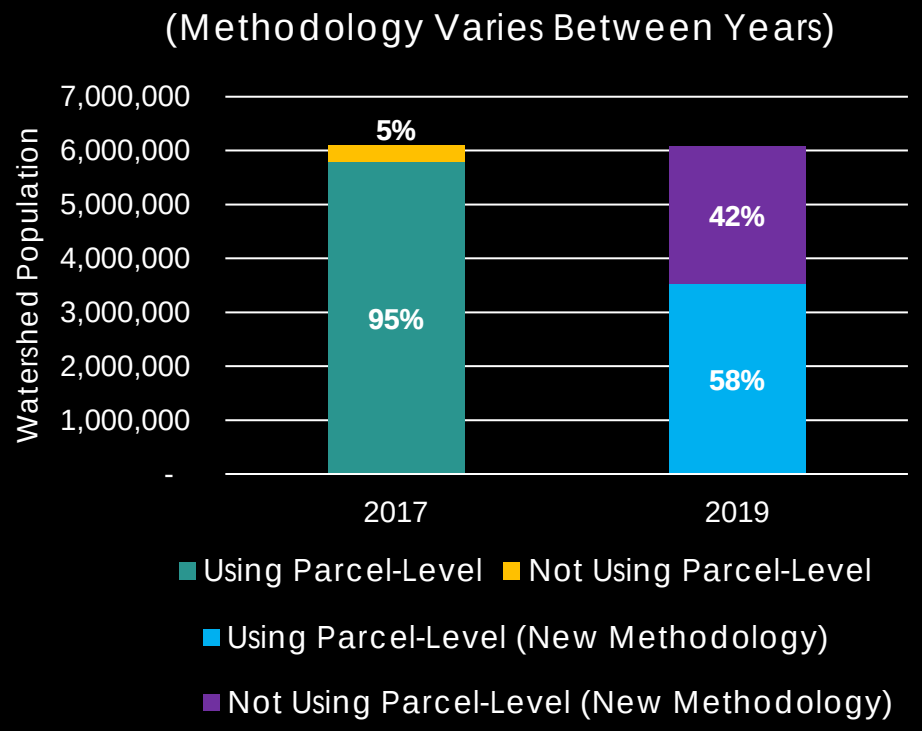
2019: Positive

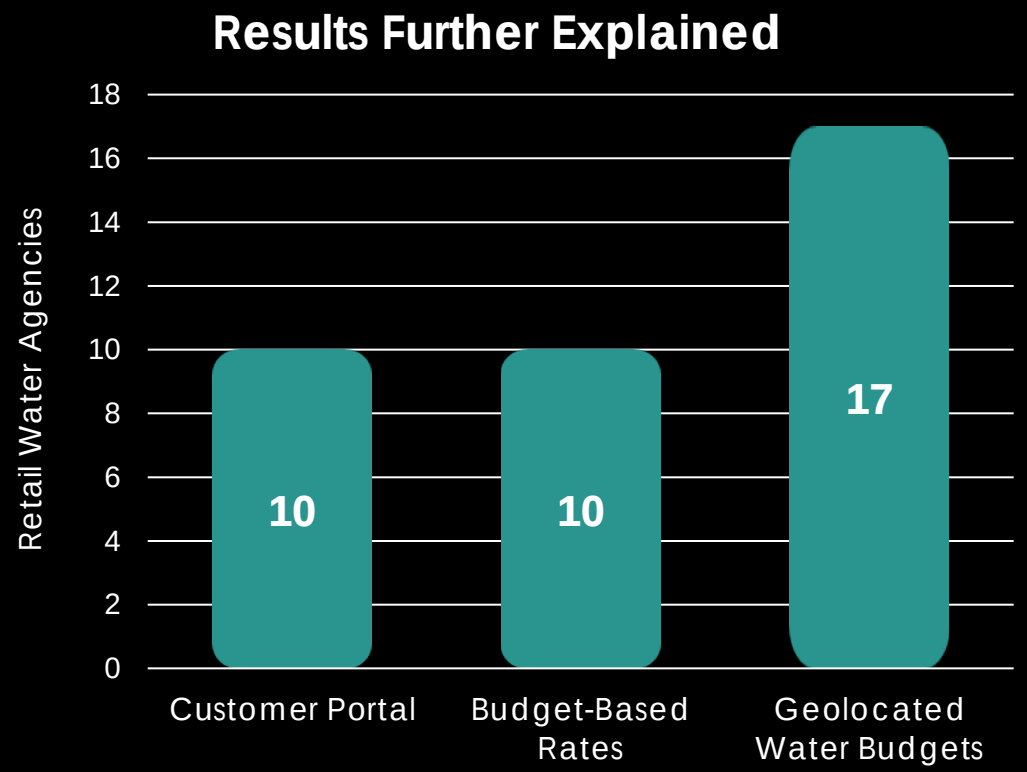
(2018: Positive)



GOAL: IMPROVE DATA INTEGRATION, TRACKING AND REPORTING TO STRENGTHEN DECISION-MAKING.

BROADEN ACCESS TO DATA FOR DECISION-MAKING

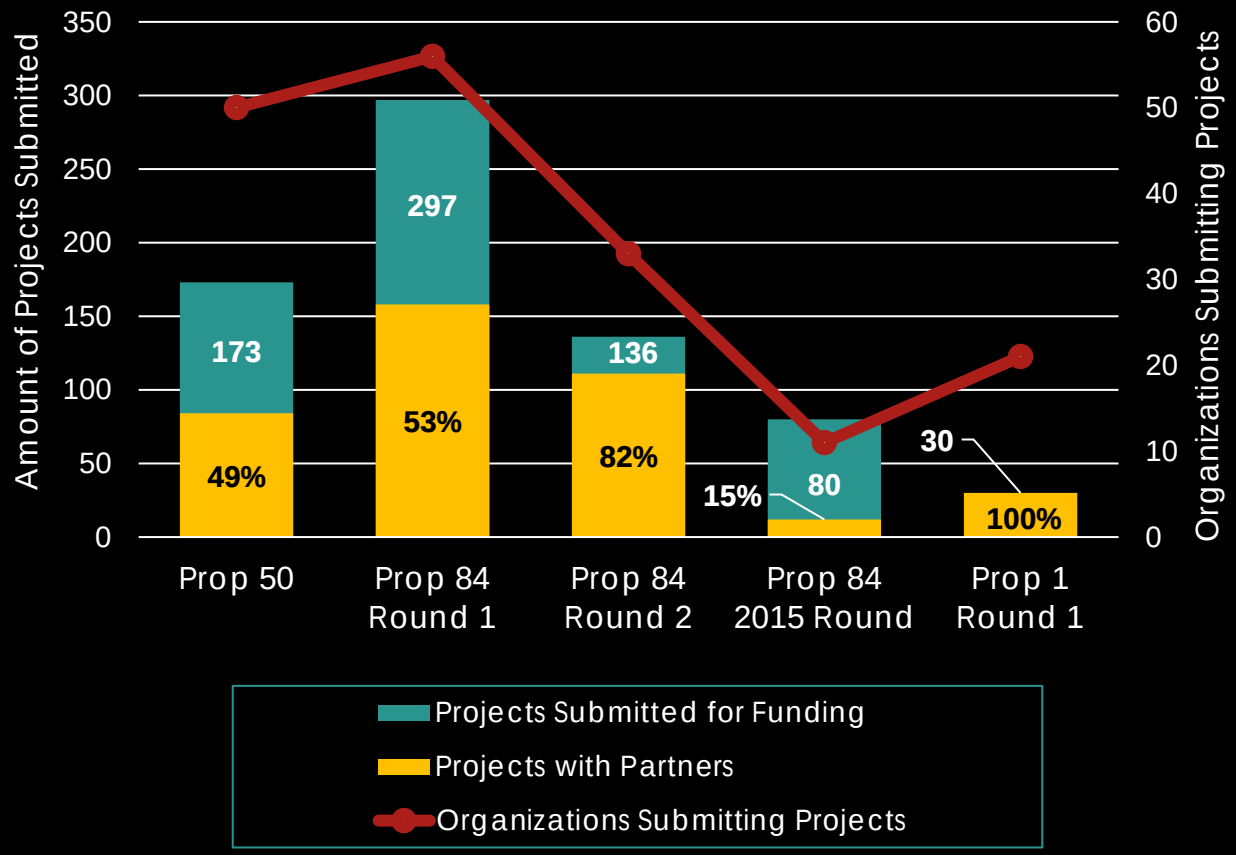


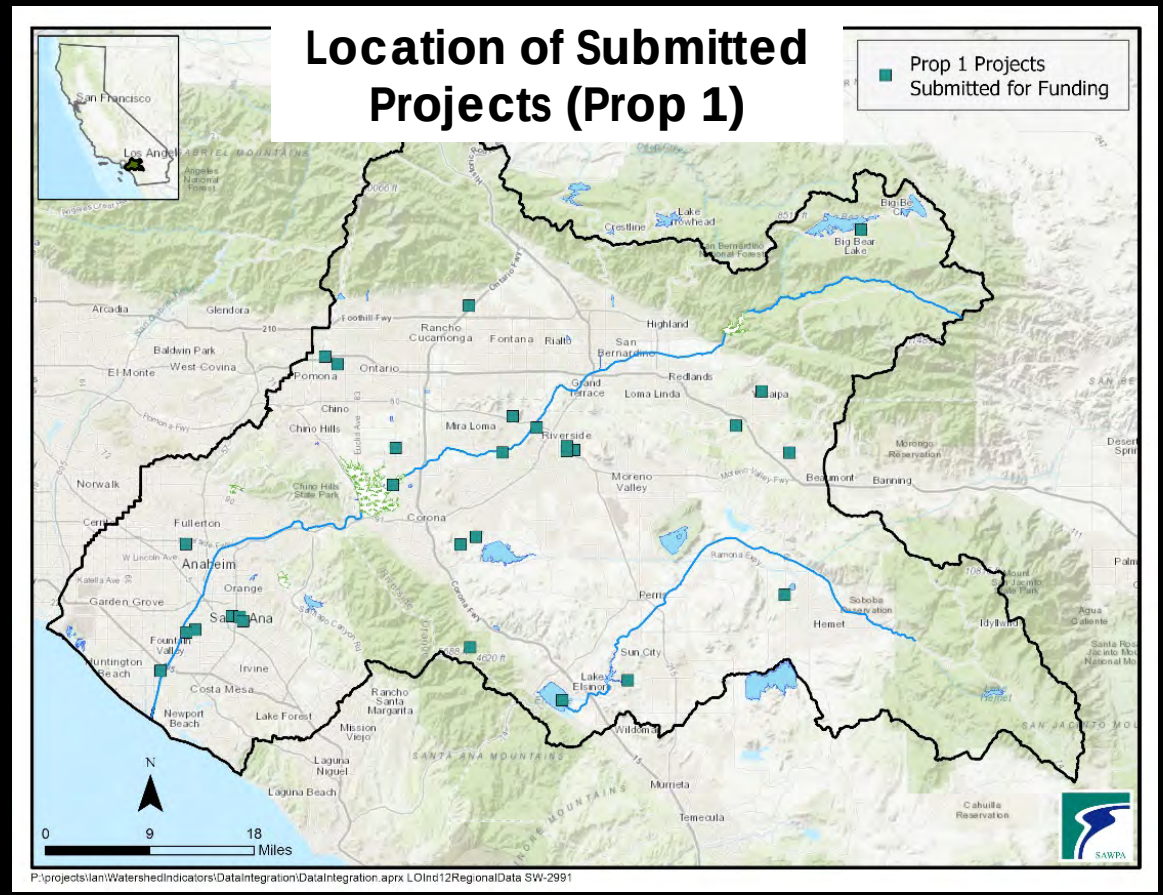


2019: Positive
(2018: Positive)

The amount of agencies in each category is provided above (some are in more than one category).

PARTICIPATION IN AN OPEN DATA PROCESS





2019: Neutral

(2018: Neutral)

OBSERVATIONS

- Overall, watershed doing very well in meeting its goals, although more data needed on DAC-related measures,
  - New data will be available through 2020-21 high-resolution aerial imagery and updates to the State's CalEnviroScreen database.
- More work to be done to create open-data processes and encourage more projects to submit in the OWOW Plan Database,
- Good progress in making conservation a way of life, but more retail water agencies need tools to provide customers with information about their water use, and
- Updates of this Assessment very important as it will show changes over time,
  - This will be helpful for showing changes especially between wet and dry years.

Recommendation

Adopt the 2019 Santa Ana River Watershed Sustainability Assessment.

Goal	Indicator No.	Indicator Definition	Rating from 2018 Assessment	Rating from 2019 Assessment
Achieve resilient water resources through innovation & optimization	1	Maximization of locally-managed supplies	😐	🙂
	2	Efficiency of outdoor water use	🙂	🙂
Ensure high quality water for all people & the environment	3	Maintenance of groundwater salinity at target levels	🙂	🙂
	4	Safety of water for contact recreation	🙂	🙂
Preserve & enhance recreational areas, open space, habitat	5	Abundance of riparian vegetation	🙂	🙂
	6	Abundance of conserved open space	🙂	🙂
Engage with members of disadvantaged communities	7	Equitable access to clean drinking water	😐	?
	8	Equitable implementation of climate change adaptation	😐	?
Educate & build trust between people & organizations	9	Collaboration for more effective outcomes	🙂	🙂
	10	Adoption of a watershed ethic	🙂	🙂
Improve data integration, tracking & reporting to strengthen decision-making	11	Broaden access to data for decision-making	🙂	🙂
	12	Participation in a regional database.	😐	😐

Assessing Homelessness Impacts on Water Quality, Riparian and Aquatic Habitat in Upper Santa Ana River Watershed

Ryan Kearns, CWE
Jason Pereira, CWE
Richard Meyerhoff, GEI Consultants

SAWPA Commission | September 1, 2020 | Item No. 7.B.

Task 1 – Literature Review and Assessment of Existing Conditions

- Assess the current nature and extent of homeless encampments in the upper watershed
- Provide best available information about the relationship between presence of homeless encampments and impacts to water quality and riparian and aquatic habitats


Homeless Encampments in the Upper Santa Ana River Watershed

GEI Consultants
Consulting Engineers and Scientists

Submitted to:
Santa Ana Watershed Project Authority
11615 Sterling Avenue
Riverside, CA 92503

Submitted by:
GEI Consultants, Inc.
Denver, CO

CWE
Fullerton, CA

January 2020

Task 1 – Key Findings

- No studies found that directly tie water quality to homeless impacts
- Recently completed Middle Santa Ana River Synoptic Study found some evidence of human bacteria sources in river, but not consistent from week to week
- Transient nature of camps and differences in how they operate or handle waste will make design of a preliminary monitoring program challenging

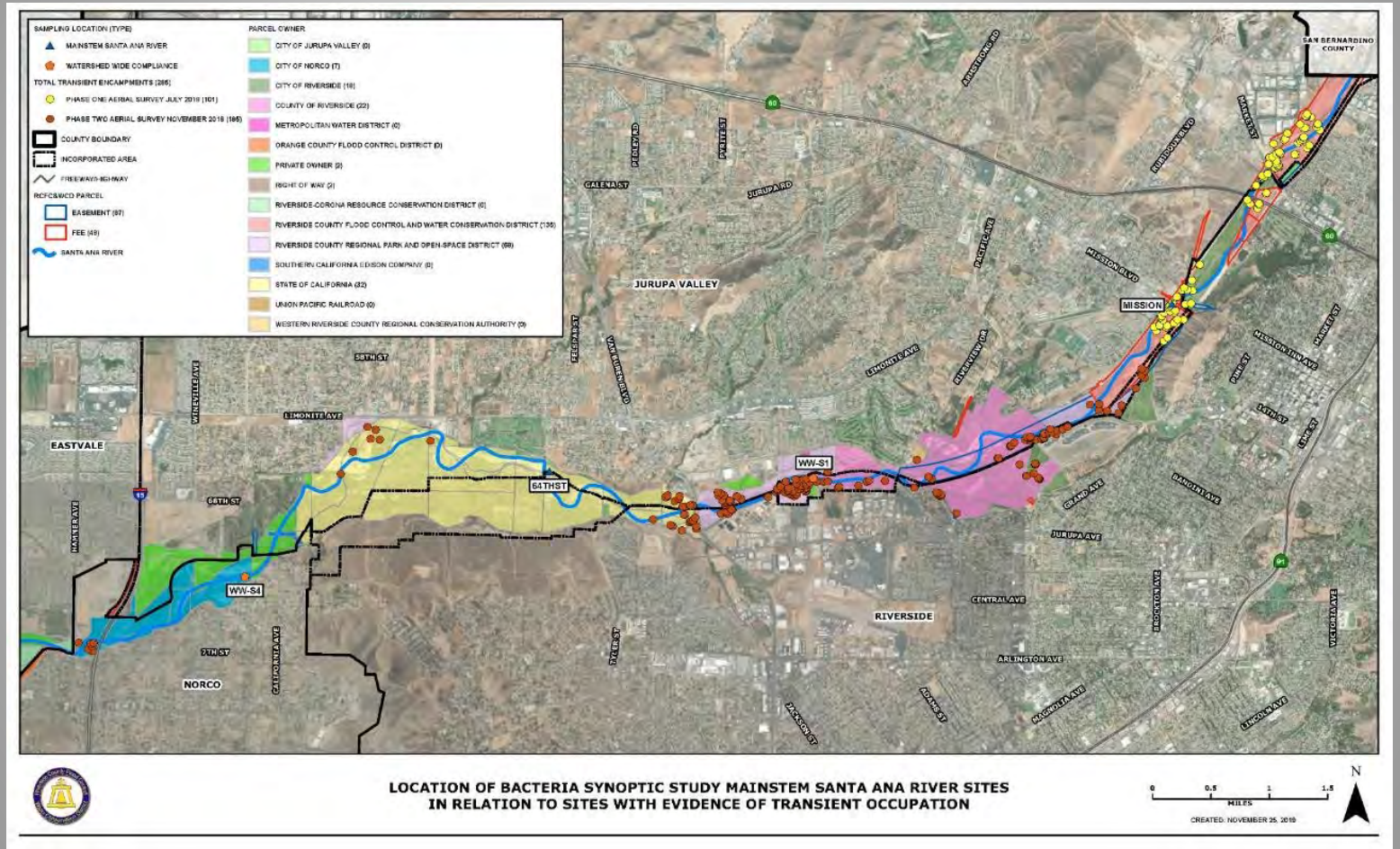
Task 1 – Key Findings

- Upper Santa Ana River Watershed – Five areas where homeless encampments concentrated:
  - Van Buren Boulevard bridge upstream to Anza Drain
  - Along the Tequesquite Landfill
  - Above and below the Mission Boulevard bridge crossing
  - Upstream of the 60 Freeway
  - Between the I-215 bridge and Tippecanoe Road

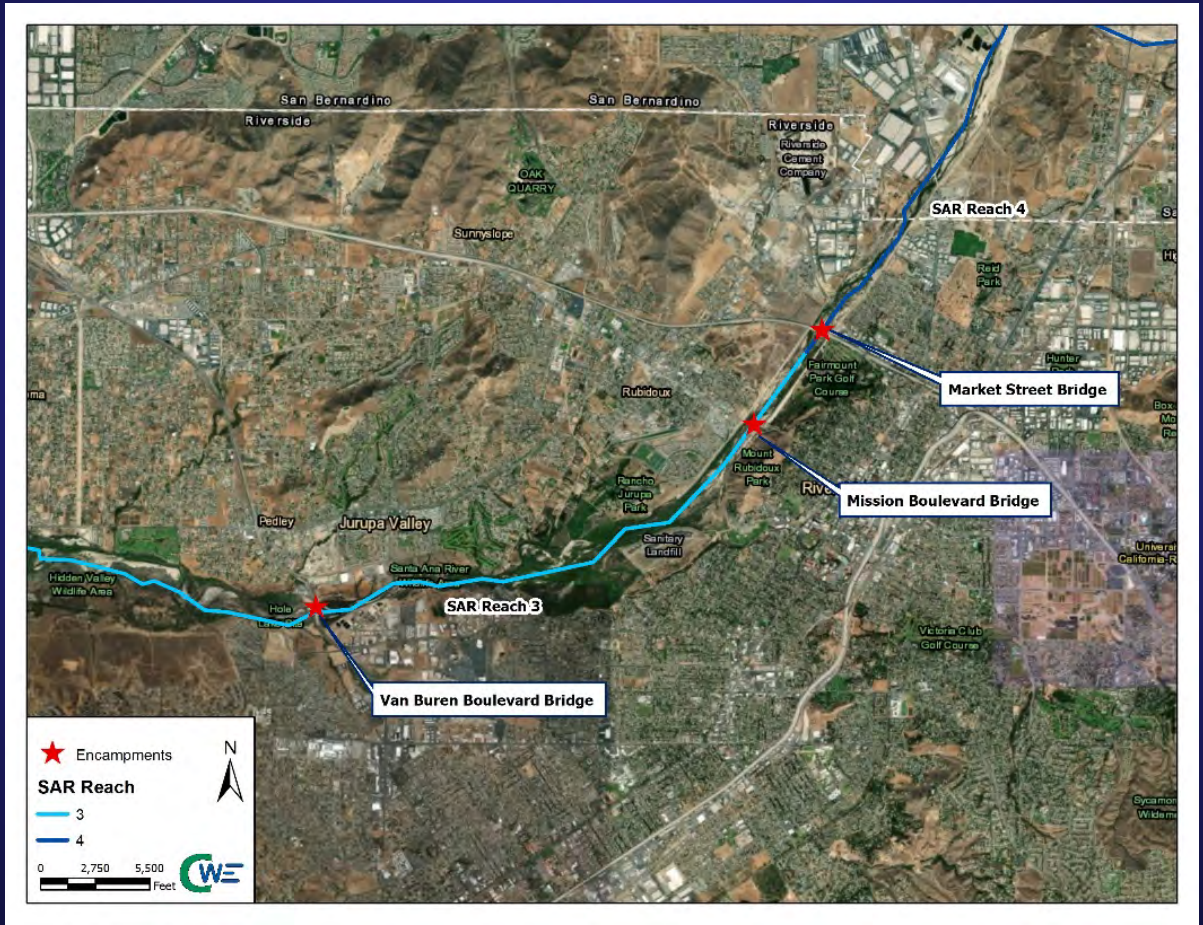
Task 2 - Preliminary Monitoring Program to Assess Impacts from Homeless Encampments

Location of Major Homeless Camps

Best Available Data

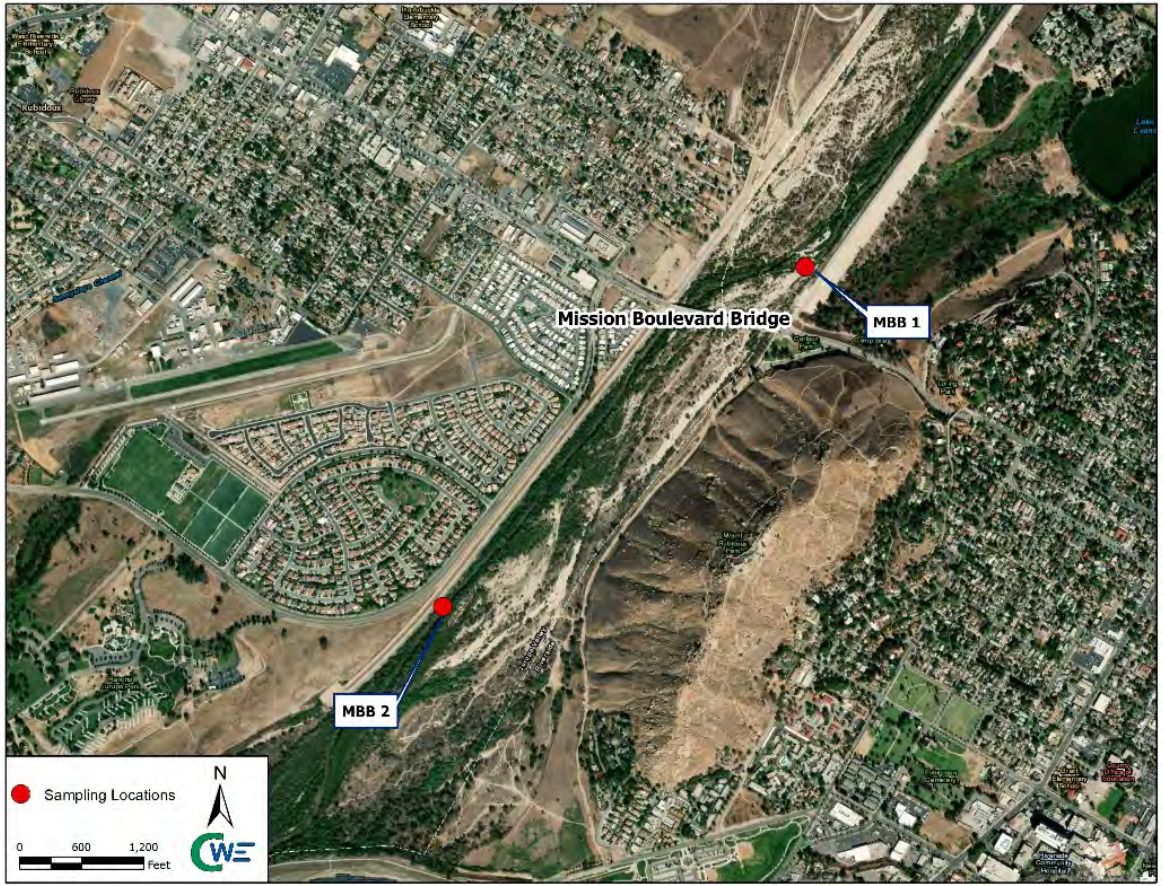


Preliminary Monitoring Locations



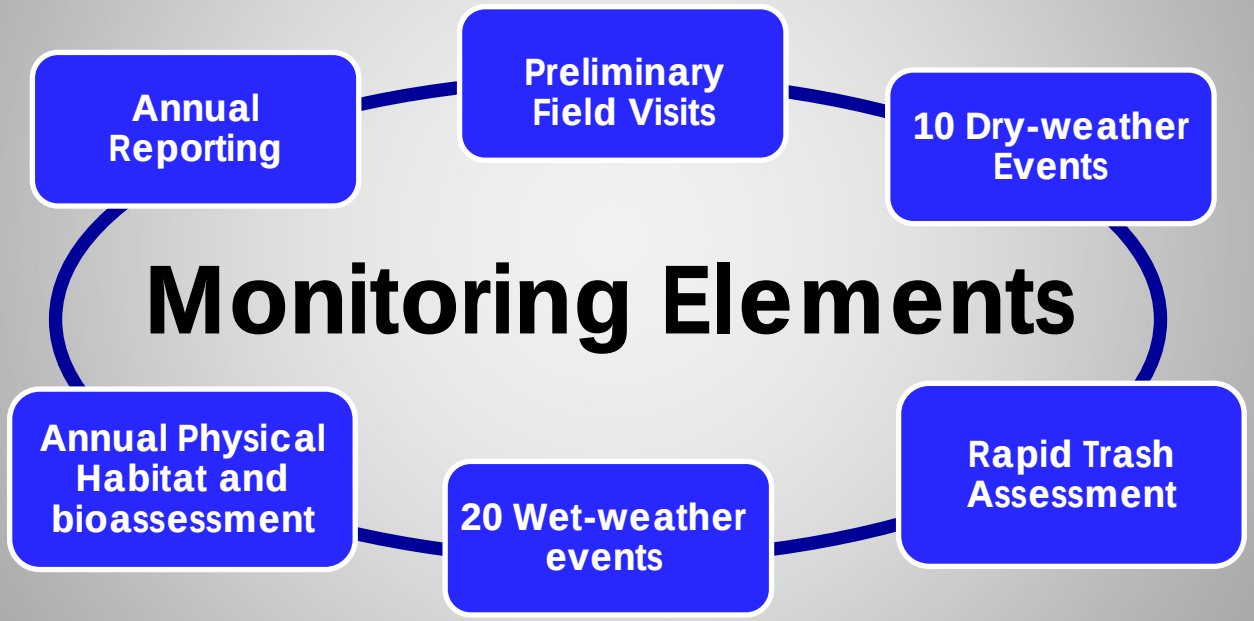
Van Buren Boulevard Bridge

Mission Boulevard Bridge



Market Street Bridge

Preliminary Monitoring Program



Preliminary Field Visits

Baseline Conditions

- Assess initial water quality, riparian habitat, and aquatic habitat conditions

Encampment Population Estimate

- Coordinate with Riverside County Point-in-Time Count

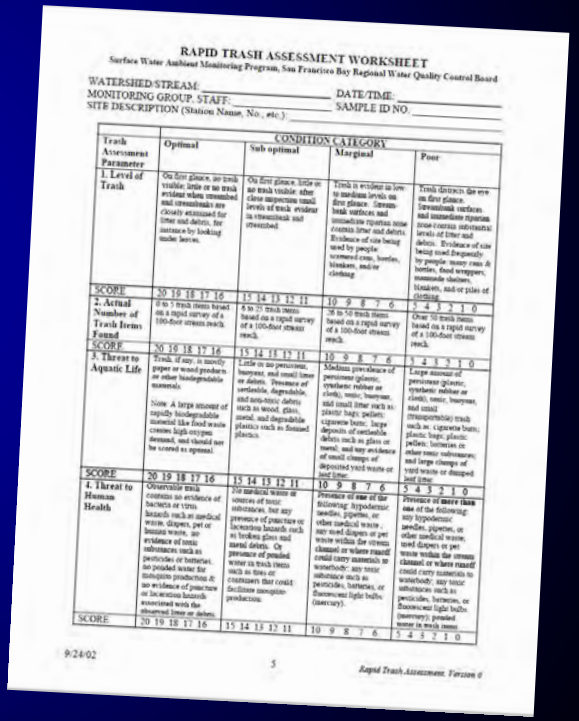
Dry-weather Events

10 total monitoring events at each site

- **Collect water samples for TSS, *E. coli,* and HF183**
- **Water Quality Sonde Measurements**
- **Rapid Trash Assessment**

Rapid Trash Assessment

- Level of trash
- Number of items found
- Threat to aquatic life
- Threat to human health
- Illegal Dumping
- Accumulation of Trash



RAPID TRASH ASSESSMENT WORKSHEET

Surface Water Ambient Monitoring Program, San Francisco Bay Regional Water Quality Control Board

WATERSHED/STREAM: _____ DATE/TIME: _____

MONITORING GROUP, STAFF: _____ SAMPLE ID NO. _____

SITE DESCRIPTION (Station Name, No., etc.): _____

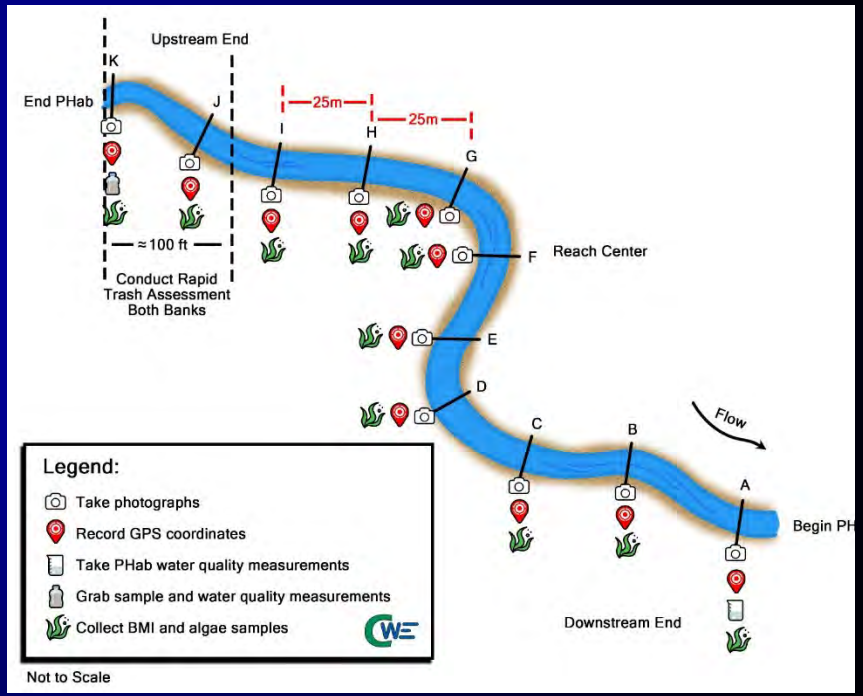
Trash Assessment Parameter	CONDITION CATEGORY			
	Optimal	Sub optimal	Marginal	Poor
1. Level of Trash	On first glance, no trash visible; little or no trash evident when streambed and streambanks are closely examined for litter and debris, for instance by looking under leaves.	On first glance, little or no trash visible; after close inspection small levels of trash evident in streambank and streambed.	Trash is evident in low- to medium levels on first glance. Stream-bank surfaces and immediate riparian zone contain litter and debris. Evidence of use being used by people: scattered cans, bottles, blankets, and/or clothing.	Trash distracts the eye on first glance. Streambank surfaces and immediate riparian zone contain substantial levels of litter and debris. Evidence of use being used frequently by people: many cans & bottles, food wrappers, manmade shelters, blankets, and/or piles of clothing.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
2. Actual Number of Trash Items Found	0 to 5 trash items based on a rapid survey of a 100-foot stream reach.	6 to 25 trash items based on a rapid survey of a 100-foot stream reach.	26 to 50 trash items based on a rapid survey of a 100-foot stream reach.	Over 50 trash items based on a rapid survey of a 100-foot stream reach.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. Threat to Aquatic Life	Trash, if any, is mostly paper or wood products or other biodegradable materials. Note: A large amount of rapidly biodegradable material like food waste creates high oxygen demand, and should not be scored as optimal.	Little or no persistent, buoyant, and small litter or debris. Presence of nonbiodegradable, and non-toxic debris such as wood, glass, metal, and degradable plastics such as formed plastics.	Medium prevalence of persistent (plastic; synthetic rubber or cloth); toxic; buoyant, and small litter such as plastic bags; pellets; cigarette butts; large deposits of nonbiodegradable debris such as glass or metal; and any evidence of small clumps of deposited yard waste or leaf litter.	Large amount of persistent (plastic; synthetic rubber or cloth); toxic, buoyant, and small (fragmentable) trash such as cigarette butts; plastic bags; plastic pellets; batteries or other toxic substances; and large clumps of yard waste or dumped leaf litter.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
4. Threat to Human Health	Observable trash contains no evidence of bacteria or virus hazards such as medical waste, diapers, pet or human waste, no evidence of toxic substances such as pesticides or batteries, no ponded water for mosquito production & no evidence of puncture or laceration hazards associated with the observed litter or debris.	No medical waste or sources of toxic substances, but any presence of puncture or laceration hazards such as broken glass and metal debris. Or presence of ponded water in trash items such as tires or containers that could facilitate mosquito production.	Presence of one of the following: hypodermic needles, pipettes, or other medical waste; any used diapers or pet waste within the stream channel or where runoff could carry materials to waterbody; any toxic substance such as pesticides, batteries, or fluorescent light bulbs. (mercury).	Presence of more than one of the following: any hypodermic needles, pipettes, or other medical waste; used diapers or pet waste within the stream channel or where runoff could carry materials to waterbody; any toxic substances such as pesticides, batteries, or fluorescent light bulbs. (mercury); ponded water in trash items.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Wet-weather Events

20 total monitoring events at each site

- **Same parameters as dry-weather**
- **More events required based on data variability**

Physical Habitat and *bioassessment*



Annual Reporting

Analyze data for trends

- Impaired Water Quality
- Impacted habitats
- Trash levels

Homeless Encampments in the Upper Santa Ana River Watershed

GEI Consultants
Consulting Engineers and Scientists

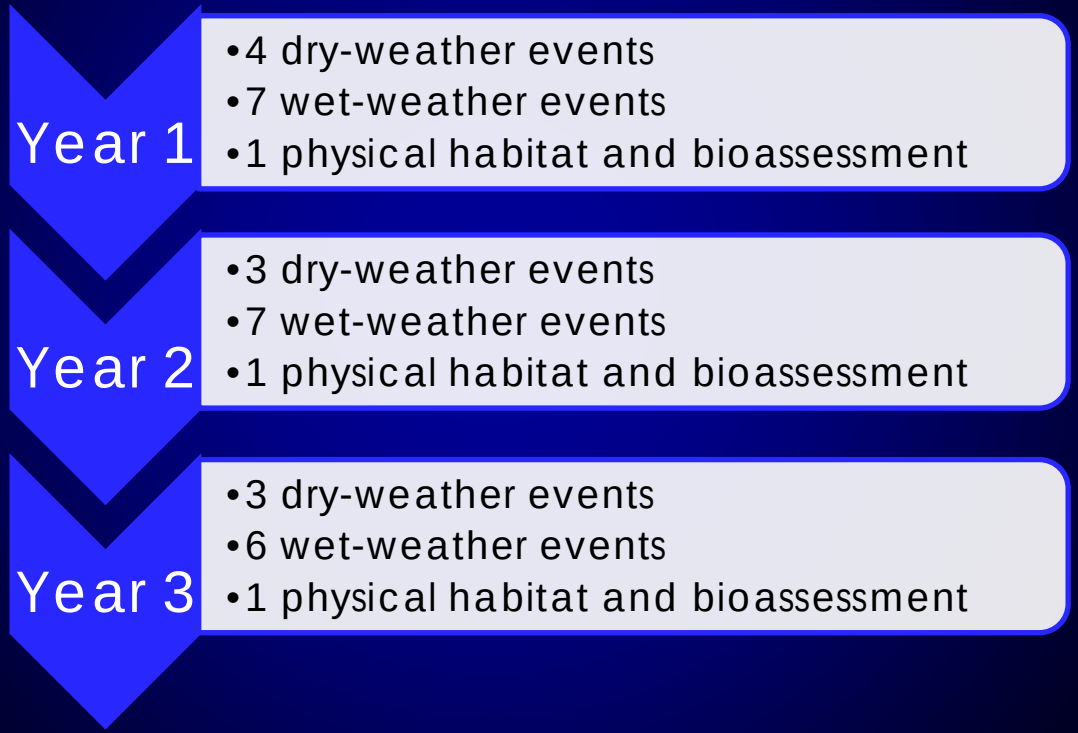
Submitted to:
Santa Ana Watershed Project Authority
11615 Sterling Avenue
Riverside, CA 92503

Submitted by:
GEI Consultants, Inc.
Denver, CO

CWE
Fullerton, CA

January 2020

Monitoring Program Timeline



Program Budget

Task	Estimated Fee
Kickoff meeting and project management	$10,000
QAPP preparation	$8,500
Preliminary field visits	
Baseline condition assessment	$8,000
Population estimate and coordination	$25,000
Dry-weather event sampling	$100,000
Physical Habitat and bioassessment (PHab)	$270,000
Wet-weather event sampling	$350,000
Data management and annual reporting	$75,000
Total	**$846,500**

Phase One: Alternative A

- First-year monitoring requirements of four dry-weather events and rapid trash assessment
- High flow suspension of recreation standards

Task	Estimated Fee
Kickoff meeting and project management	$3,800
QAPP preparation	$8,500
Preliminary field visits	
Baseline condition assessment	$8,000
Population estimate and coordination	$8,500
Dry-weather event sampling	$40,000
Data management and one annual report	$20,000
Total	**$88,800**

Phase One: Alternative B

- **First-year monitoring requirements of four dry-weather events, rapid trash assessment, and PHab**
- **No trend analysis for PHab**

Task	Estimated Fee
Kickoff meeting and project management	$4,700
QAPP preparation	$8,500
Preliminary field visits	
Baseline condition assessment	$8,000
Population estimate and coordination	$8,500
Dry-weather event sampling	$40,000
Physical Habitat and bioassessment (PHab)	$90,000
Data management and one annual report	$22,000
Total	**$181,700**

Phase Two

Expansion of Phase 1

- Conduct more dry-weather monitoring
- Conduct additional PHab sampling
- Incorporate wet-weather sampling
- Some combination of above


Questions & Discussion