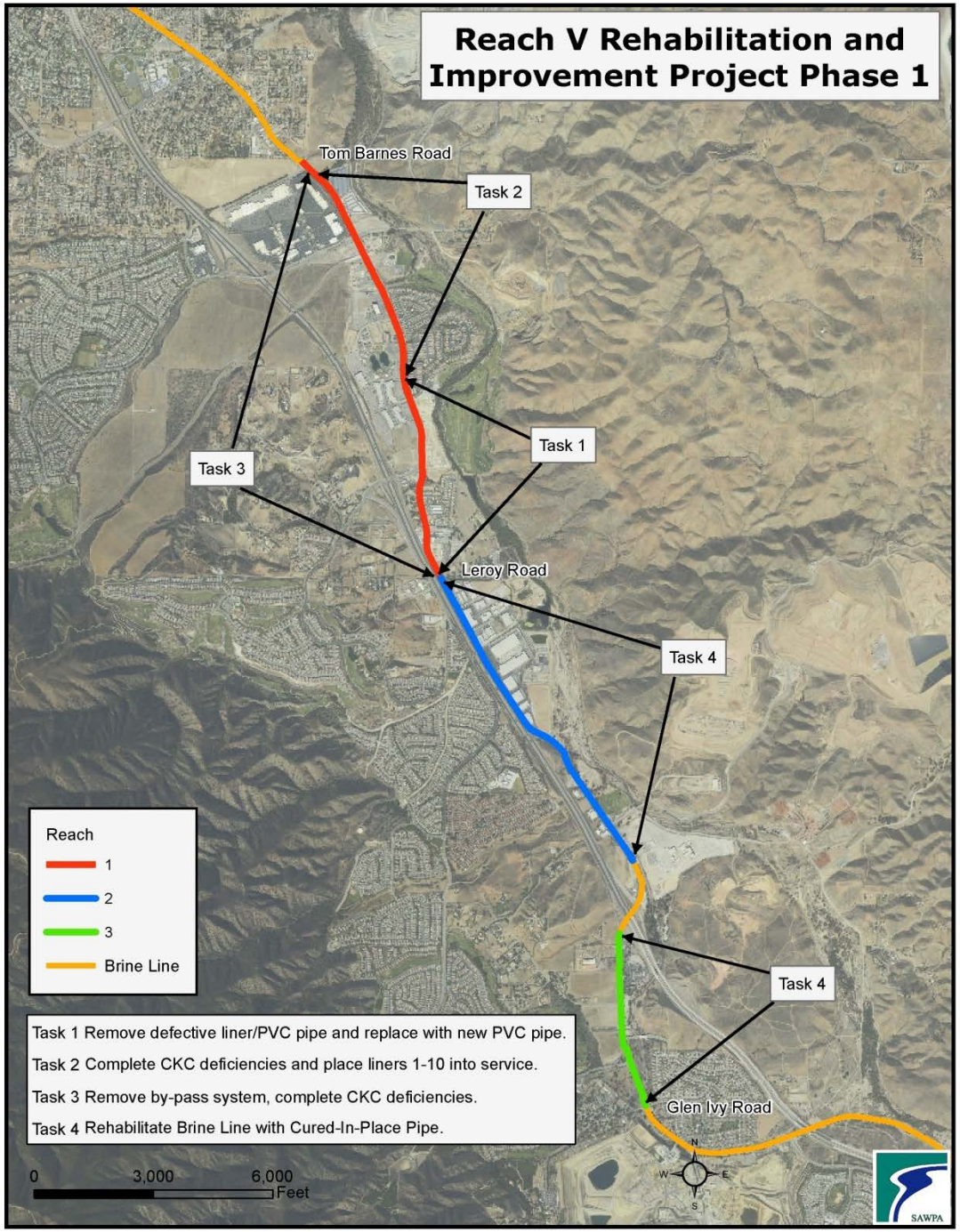
Inland Empire Brine Line Reach V Rehabilitation and Improvement Project – Phase 1

October 18, 2016

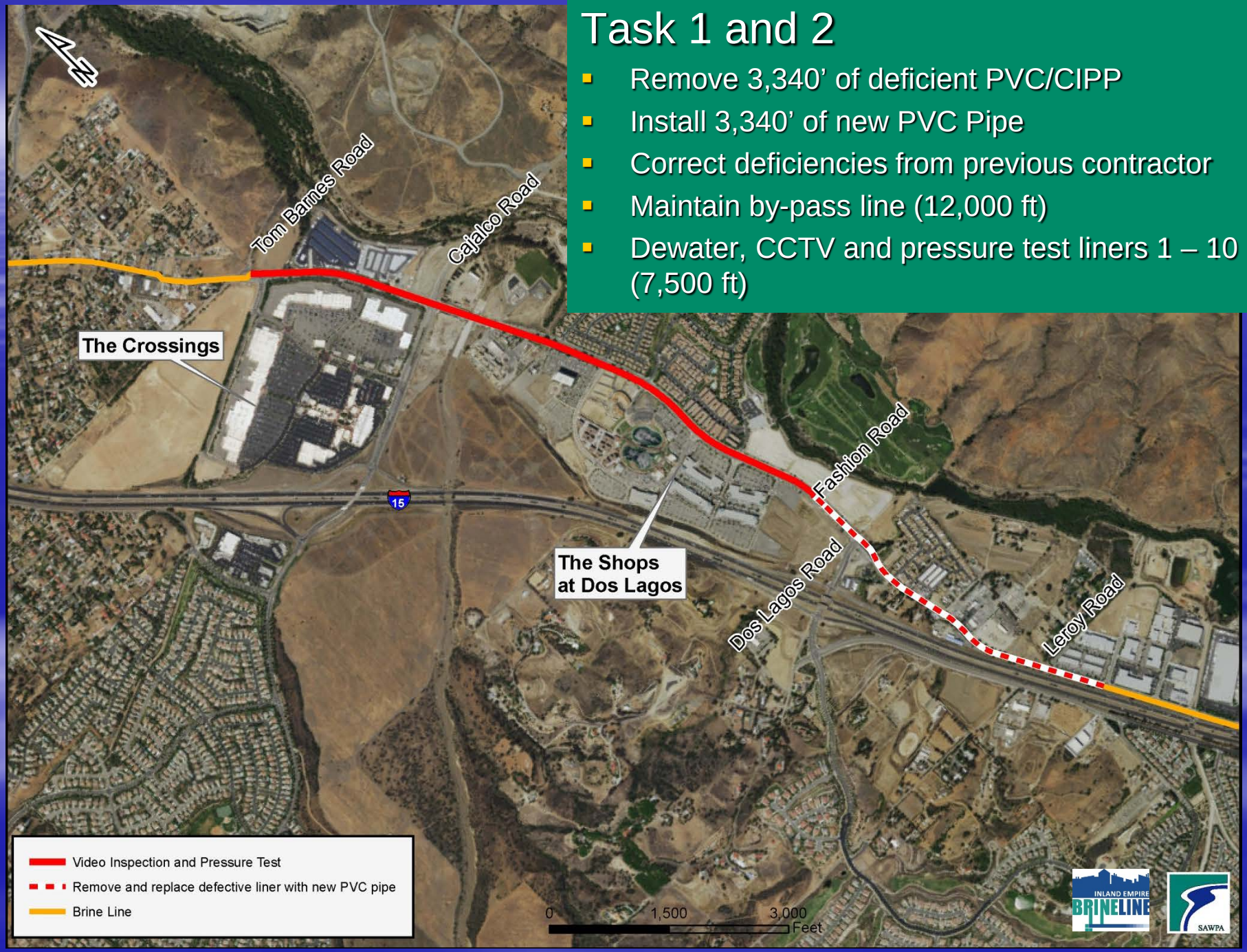
Recommendation

- Find that the unfinished condition of the Reach V Rehabilitation and Improvement Project after the termination for cause of the Project contractor continues to be an emergency that requires immediate action per the Commission's prior action on August 2, 2016.


Reach V Rehabilitation and Improvement Project Phase 1
Tom Barnes Road
Task 2
Task 1
Task 3
Leroy Road
Task 4
Task 4
Glen Ivy Road
Reach
1
2
3
Brine Line
Task 1 Remove defective liner/PVC pipe and replace with new PVC pipe.
Task 2 Complete CKC deficiencies and place liners 1-10 into service.
Task 3 Remove by-pass system, complete CKC deficiencies.
Task 4 Rehabilitate Brine Line with Cured-In-Place Pipe.
0
3,000
6,000
Feet
N
W
E
S
SAWPA

Task 1 and 2

- Remove 3,340’ of deficient PVC/CIPP
- Install 3,340’ of new PVC Pipe
- Correct deficiencies from previous contractor
- Maintain by-pass line (12,000 ft)
- Dewater, CCTV and pressure test liners 1 – 10 (7,500 ft)




KOMATSU
Fashion
RIGHT LANE
MUST
TURN RIGHT
WEKA


STOP

Questions?

Task 1 and 2

- Remove 3,340’ deficient PVC/CIPP
- Install 3,340’ new PVC Pipe
- Correct deficiencies from previous contractor
- Maintain by-pass line (12,000 ft)
- Dewater, CCTV and Pressure test Norditube liners (7,500 ft)

Disadvantaged Community Involvement Program

Proposition 1 IRWM Grant Proposal

Mike Antos, Watershed Manager

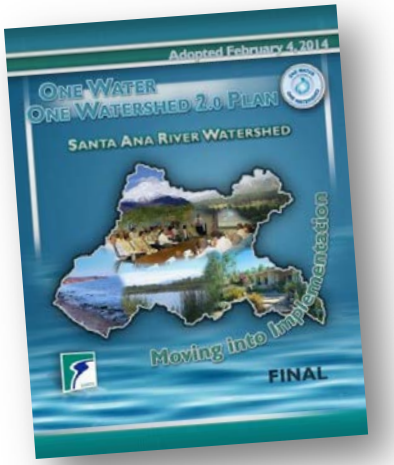
SAWPA Commission Meeting
November 1, 2016

OWOW Business Line - Critical Success Factors

Active Participation of a diverse group of stakeholders

OWOW Business Line - Critical Success Factors

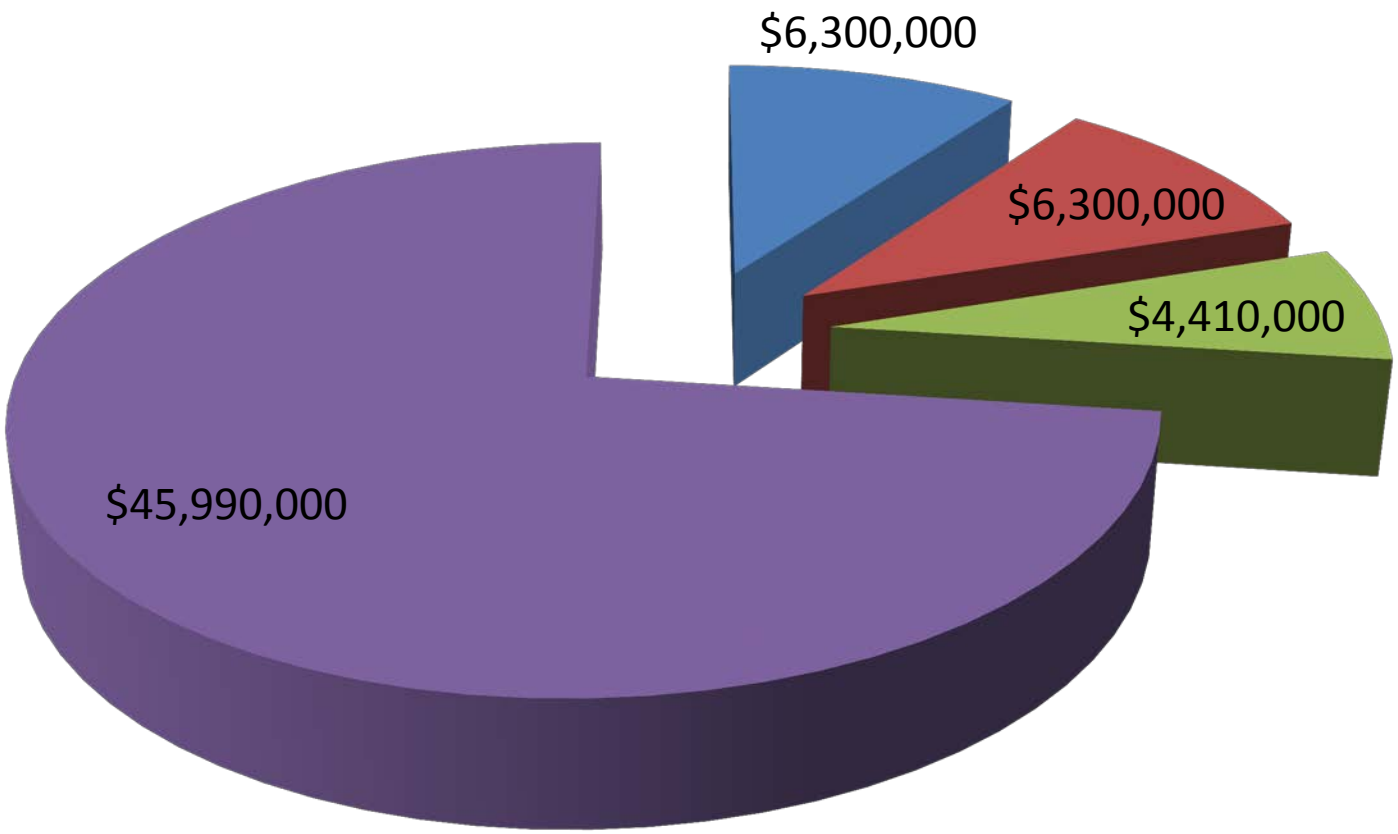
Successful implementation of an integrated regional water resource plan



ONE WATER ONE WATERSHED

SAWPA

Refresher: Proposition 1 IRWM



Prop 1 - 10% for Involvement

Bond calls for:

1. "ensuring involvement of disadvantaged communities (DACs), economically distressed areas (EDAs), or underrepresented communities"

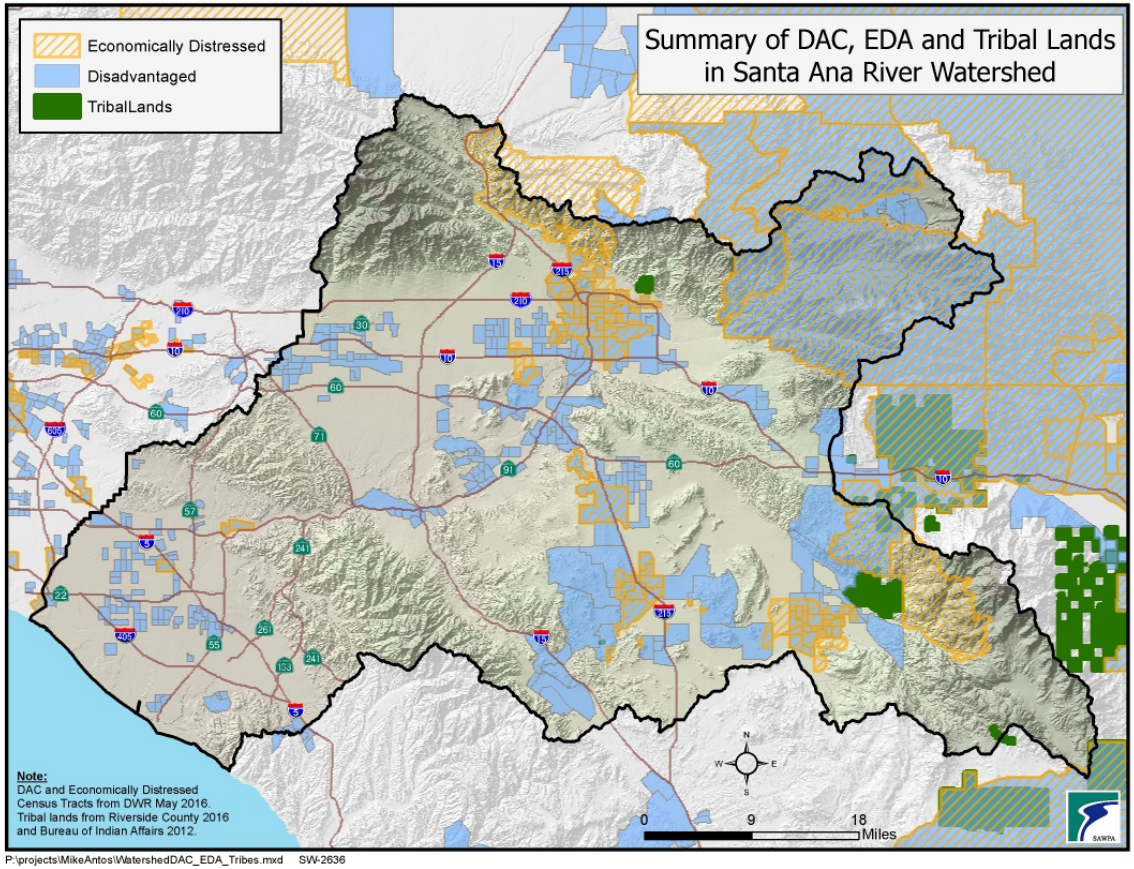
DWR program objectives:

2. …ensure balanced access and opportunity for participation in the IRWM planning process
3. Increase the understanding, and where necessary, identify the water management needs…
4. Develop strategies and long-term solutions…

OWOW Program Approach

1. Strengths and Needs Assessment
2. Education and Engagement
3. Project Development

- Disadvantaged / Tribal Community Pillar
- Technical Advisory Committee



SAWPA

Program Partners

OWOW Steering Committee

SAWPA

Disadvantaged / Tribal Community Pillar

CSU The California State University

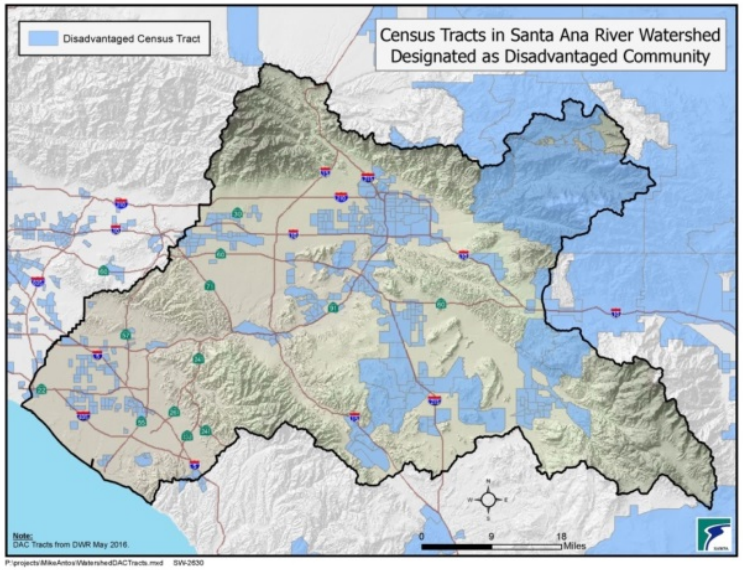
Local Government Commission
Leaders for Livable Communities

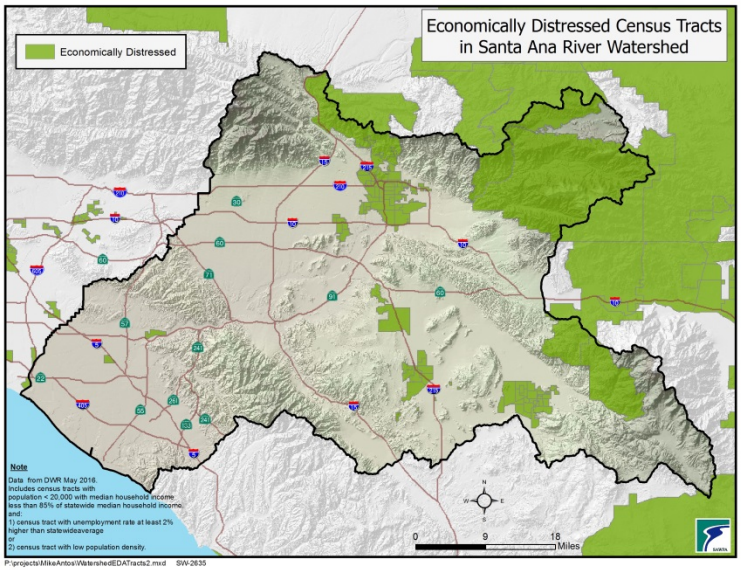
Water Education Foundation

California Rural Water Association

CivicSpark Water

Strengths & Needs Assessment

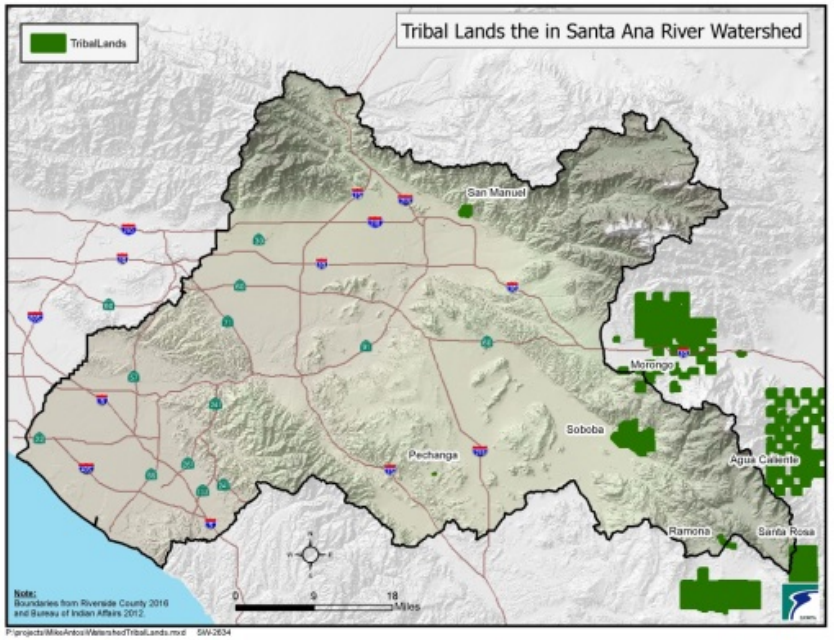




- Engagement Activities
- Community Identity

SAWPA

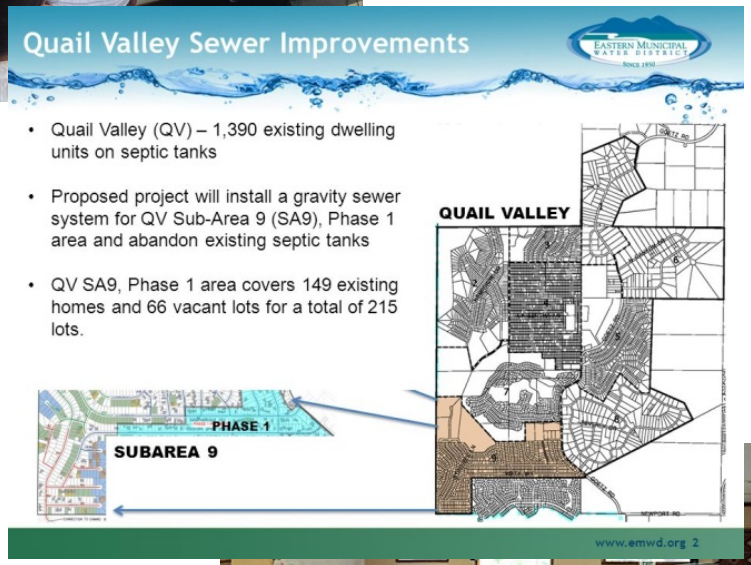
Education & Engagement

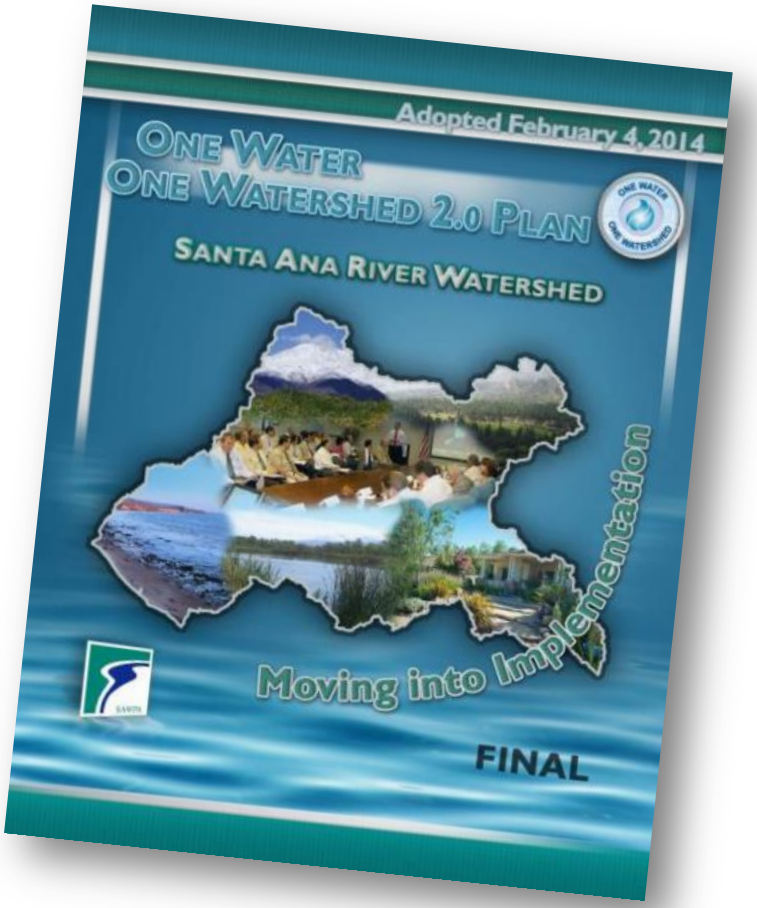


ONE WATER ONE WATERSHED

SAWPA

Project Development

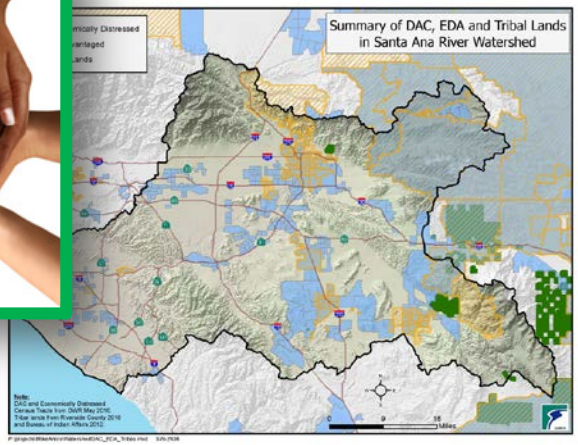




ONE WATER ONE WATERSHED

SAWPA

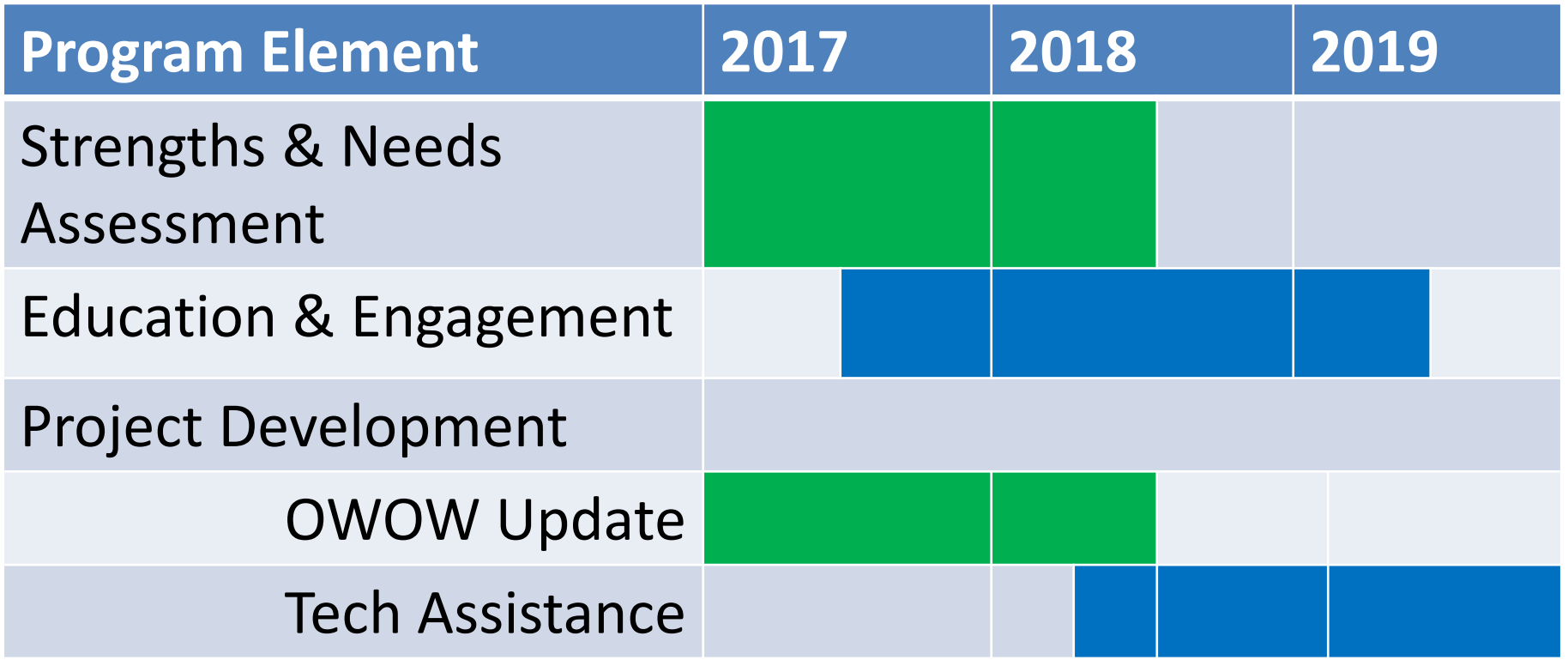
Program Deliverables



ONE WATER ONE WATERSHED

SAWPA

Plan Update Timeline



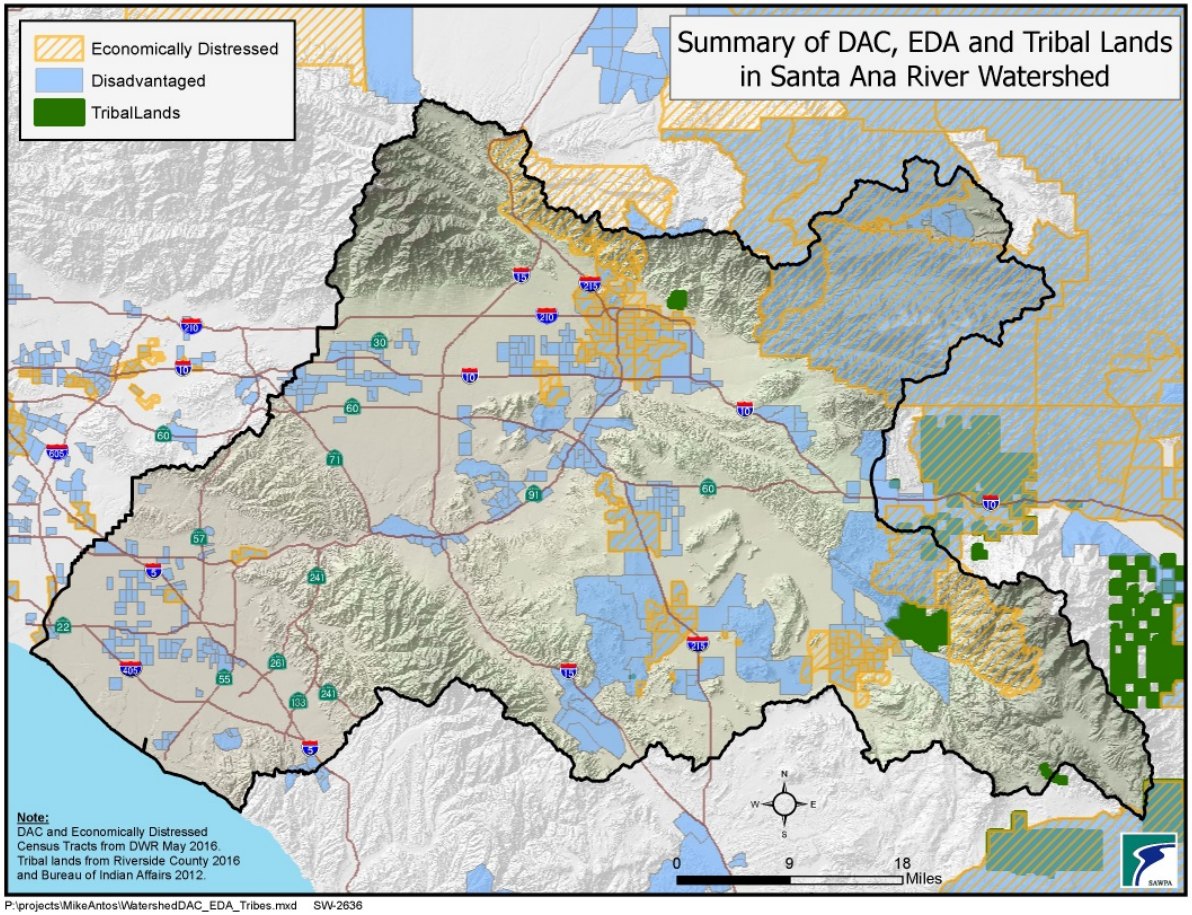
Program Task Budget

Program Element	Budget Estimate
Strength & Needs Assessment	$772,000
Engagement & Education	$1,838,000
Project Development	$3,375,000
Grant Administration	$315,000
Total:	$6,300,000

SAWPA Chart of Accounts Budget

Revenues	**Grant Total**	
State Grant Proceeds	$	6,300,000
Total Revenue	**$**	**6,300,000**
Expenses		
SAWPA salaries, benefits, G&A costs	$	1,248,891
Program Expenses (Partners)	$	2,175,500
Consulting	$	2,645,909
Other Contract Services	$	200,000
Materials & Supplies	$	6,000
Software	$	2,000
Offsite Meeting / Travel	$	18,000
Conference Expenses	$	10,000
Shipping/Postage	$	500
Office Supplies	$	2,400
Other Expenses	$	7,605
Total Expense	**$**	**6,300,000**

Building capacity and relationships



ONE WATER ONE WATERSHED

SAWPA

The memo recommends:

That the Commission ratify the OWOW Steering Committee's approval of the submittal of a proposal to Department of Water Resources to initiate the Disadvantaged Community Involvement Program in the Santa Ana River Watershed subject to incorporation of minor comments.

The Southern California Coastal Water Research Project Authority (SCCWRP)

Stephen B. Weisberg
Executive Director

BACKGROUND

- **SCCWRP is a water quality research institute located in Costa Mesa**
- **Much of our work is on topics of potential interest to SAWPA**
  - A number of our projects are even conducted in your geography
- **Celeste and I have been discussing ways we can enhance interaction between our organizations**
  - Maybe even develop some collaborative projects
- **Goal of this presentation: Acquaint you with SCCWRP and identify some topic areas of mutual interest**

WHAT IS SCCWRP?

- **Joint Powers Agency**
  - Founded in 1969
- **Our mission: Provide an unbiased scientific foundation for water quality management in California**
  - We don’t do policy
  - We don’t do regulation
  - However, we judge success on whether our science is being used by those who do policy and regulation
- **Member organizations include city, county, state, and federal agencies**
  - Unique combination of regulators and dischargers

MEMBER ORGANIZATIONS

Los Angeles County Sanitation Districts

City of Los Angeles

Orange County Sanitation District

City of San Diego

Ventura County Watershed Protection Division

Los Angeles County Flood Control District

Orange County Public Works

County of San Diego

San Diego Regional Water Quality Board

Santa Ana Regional Water Quality Board

Los Angeles Regional Water Quality Board

State Water Resources Control Board

U.S. Environmental Protection Agency

California Ocean Protection Council

COMMISSION

- **Governing board that includes decision leaders from each member agency**
  - Meets quarterly

- **Unique interface between science and management**
  - The real strength of the organization

INTERNAL STRUCTURE

- **42 full-time staff**
  - 22 of whom have a Ph.D.
- **Six departments**
  - Biology
  - Microbiology
  - Chemistry
  - Biogeochemistry
  - Toxicology
  - Information Management and Analysis
- **98% of our projects are conducted collaboratively**
  - We have published scientific papers with 177 different institutions from 26 countries in the last four years
  - Collaboration is a critical part of creating scientific consensus

RESEARCH PRIORITIES

- **New measurement methods**
  - Better, faster, cheaper
  - Present focus is on transitioning to molecular and real-time methods
- **Regional monitoring**
  - Provide big picture assessment of management success
  - Achieve consistency in data collection methods
- **Interpretational tools and threshold development**
  - Biotic indices
  - Nutrients
- **Emerging issues**
  - Debris
  - Ocean acidification
  - Harmful algal blooms

FOUR TOPICS FOR TODAY

- **Nutrient criteria**
  - SCCWRP is assisting the State with a scientific foundation for their nutrient criteria development
- **Emerging contaminants**
  - We are developing cell-line assays that will improve upon chemical-by-chemical monitoring
- **Regional stream monitoring**
  - SCCWRP leads a southern California-wide regional monitoring program that samples in your backyard
- **Flow ecology**
  - How much flow is needed to support balanced biotic communities?

NUTRIENTS PRESENT AN INTERESTING MANAGEMENT CHALLENGE

- **They don’t behave like typical contaminants**
  - Nutrients are required to support natural biological communities
  - Driving them to zero isn’t the aim
- **They are biologically active and ephemeral**
  - More does not equal bad; less does not equal good
- **Toxicity is not the key endpoint of interest**
  - More concerned about algal blooms and associated effects like hypoxia and aesthetics
- **No wonder there are no national nutrient criteria!**

STATE WATER BOARD FAVORS AN ECOLOGICAL RESPONSE APPROACH

- **Approach consists of two major components**
  - Assessment endpoints for waterbody assessment based on biological response
  - Link back to nutrient concentrations in permits
- **Policy development targeted for wadeable streams first**
  - Lakes and estuaries to follow

Algae & Aquatic Plants

Dissolved Oxygen, pH

SCCWRP INDICATOR DEVELOPMENT

- **Benthic macroinvertebrates (California Stream Condition Index)**
  - Already in implementation phase
- **Soft bodied algae and diatoms (Algal Stream Condition Index)**
  - Late stage development – in trial use
  - Uses a molecular approach
- **Cyanobacteria and toxins**
- **Organic matter abundance (benthic chl-a, percent cover)**

EMERGING CONTAMINANTS

- **The State Water Board sponsored an expert panel to advise them on CECs in surface waters**
  - Provided a list of new chemicals recommended for monitoring
  - You all have identified a similar list
- **Expert Panel also identified biological screening as a more effective approach**
  - Less expensive and more protective than measuring many chemicals
- **SCCWRP is developing such screening techniques**
  - Cell line assays that look at modes of action
  - Just beginning to roll those out for field application
  - Anticipate that the Stormwater Monitoring Coalition will deploy them soon as part of their regional monitoring program

OPPORTUNITIES FOR ENGAGEMENT

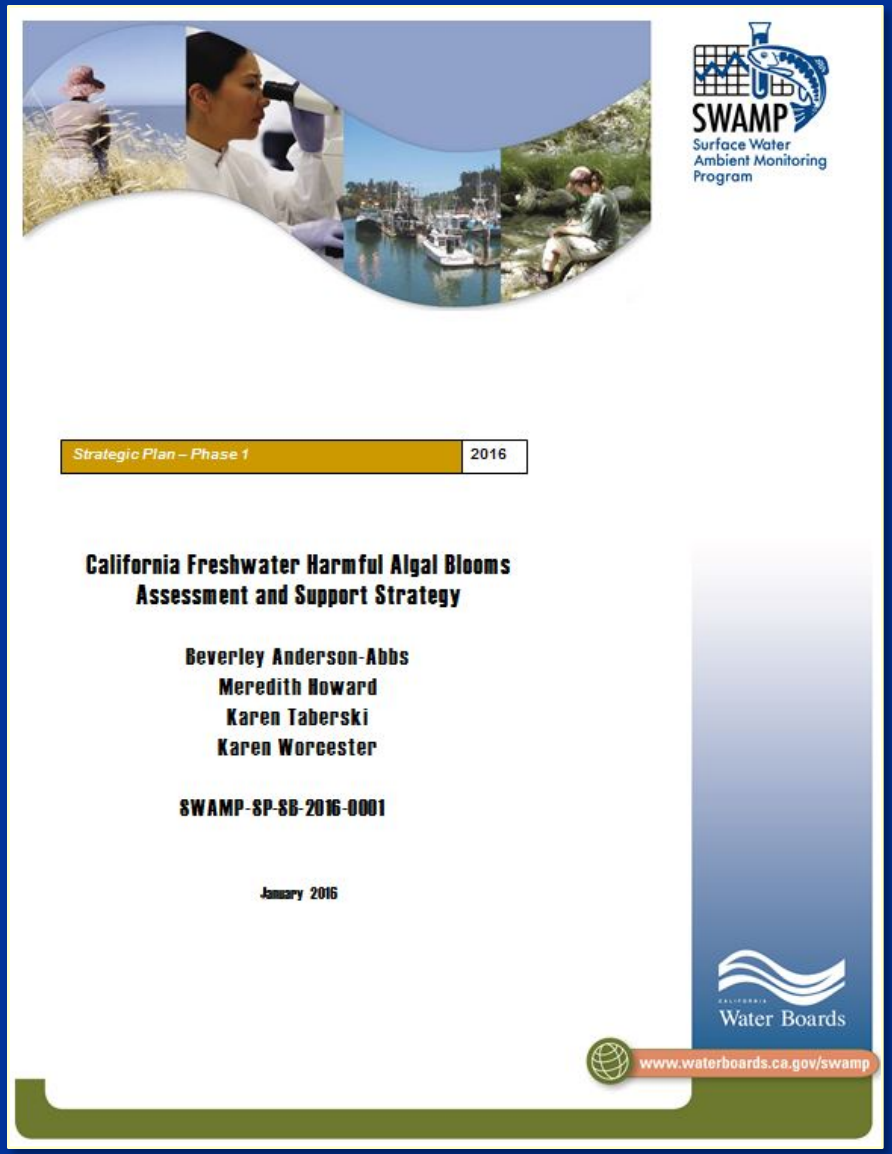
- **Periodic briefings and other information sharing**
  - Glad to share out Annual and/or Quarterly reports as a means of keeping you informed of our activities
- **Advisory or stakeholder committees**
- **Joint projects**
- **Celeste and I discussed identified naming liaisons to coordinate interaction as a good first step**
  - Eric Stein will be our liaison

Newly Developed Monitoring Tool for Toxins: SPATT

Solid Phase Adsorption Toxin Tracking (SPATT)

- Passive sampler that is time-integrative
- Provides continuous toxin detection to capture ephemeral events
- Applicable to both marine and freshwater toxins

CALIFORNIA FRESHWATER HABS STRATEGY



- Currently, no routine monitoring programs for freshwater HABs
- Coordinated long-term program to assess, communicate, and manage freshwater HABs
- SWAMP investing resources to build infrastructure to support strategy