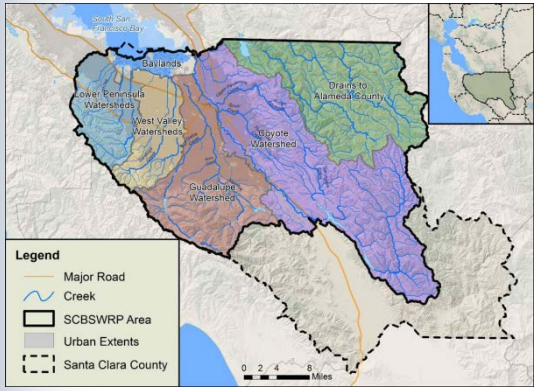
Santa Clara Basin
Stormwater Resource Plan

Technical Advisory Committee Kick-off Meeting



March 23, 2017

Jill Bicknell, P.E.
Tracy Hemmeter
Vishakha Atre

Meeting Topics

- Project Background
  - Stormwater Resource Plan (SWRP) Purpose
  - Project Area Watersheds
  - Previous and Current Planning Efforts
  - District's *One Water Plan*
  - Water Quantity and Water Quality Issues
- Project Approach (Scope & Schedule)
- Stakeholder Involvement
- SWRP Detailed Outline

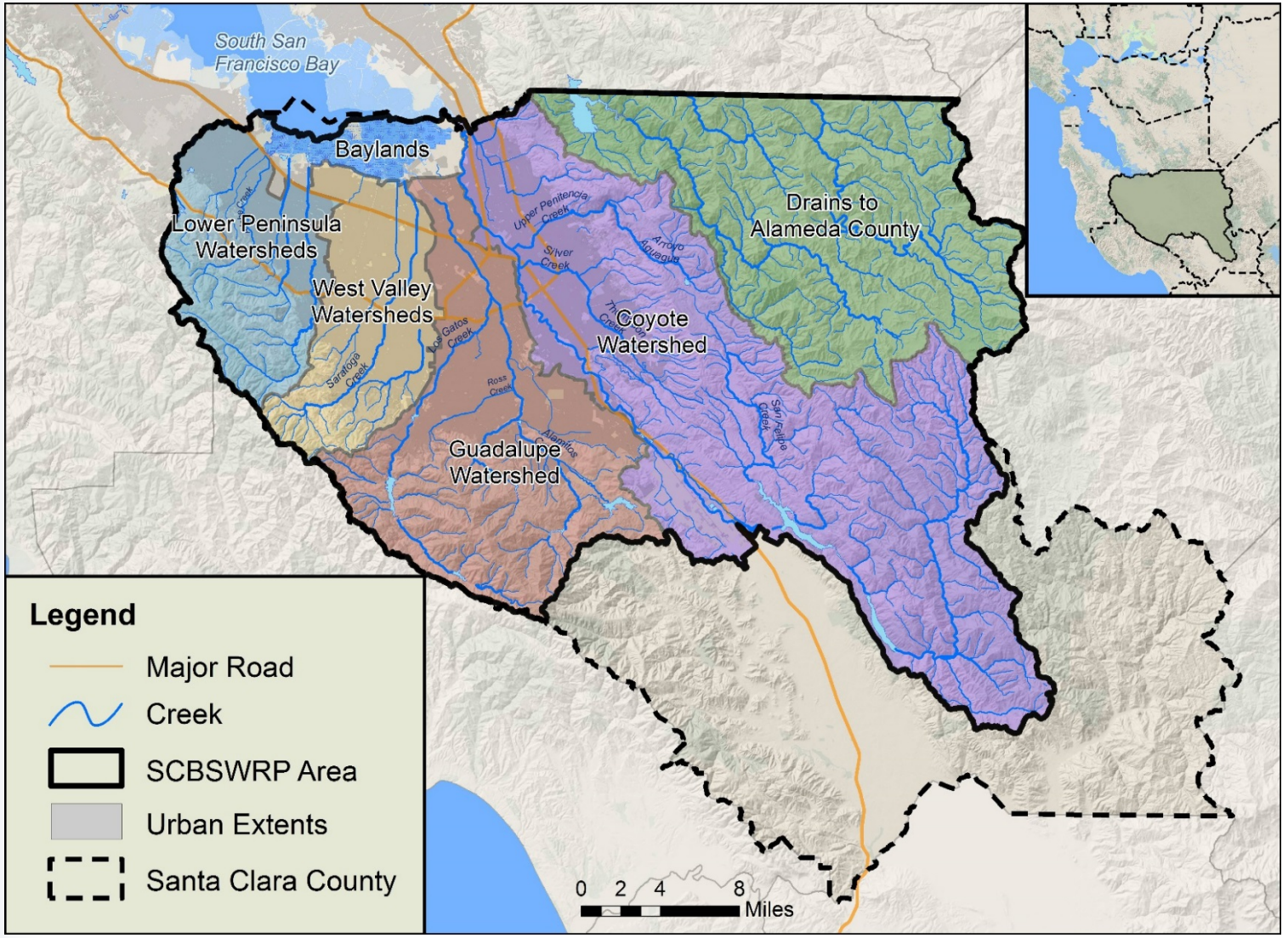
Stormwater Resource Plan - Overview

- Prop 1 Stormwater Planning Grant
  - Awarded to District and SCVURPPP to prepare a Stormwater Resource Plan for the Santa Clara Basin in Santa Clara County
  - Total Project Budget: $940,000
    - Grant amount: ~$470,000
    - 50% match (~$470,000 in-kind + SCVURPPP tasks)
  - Start Date: February 2017
  - Completion Date: December 2018

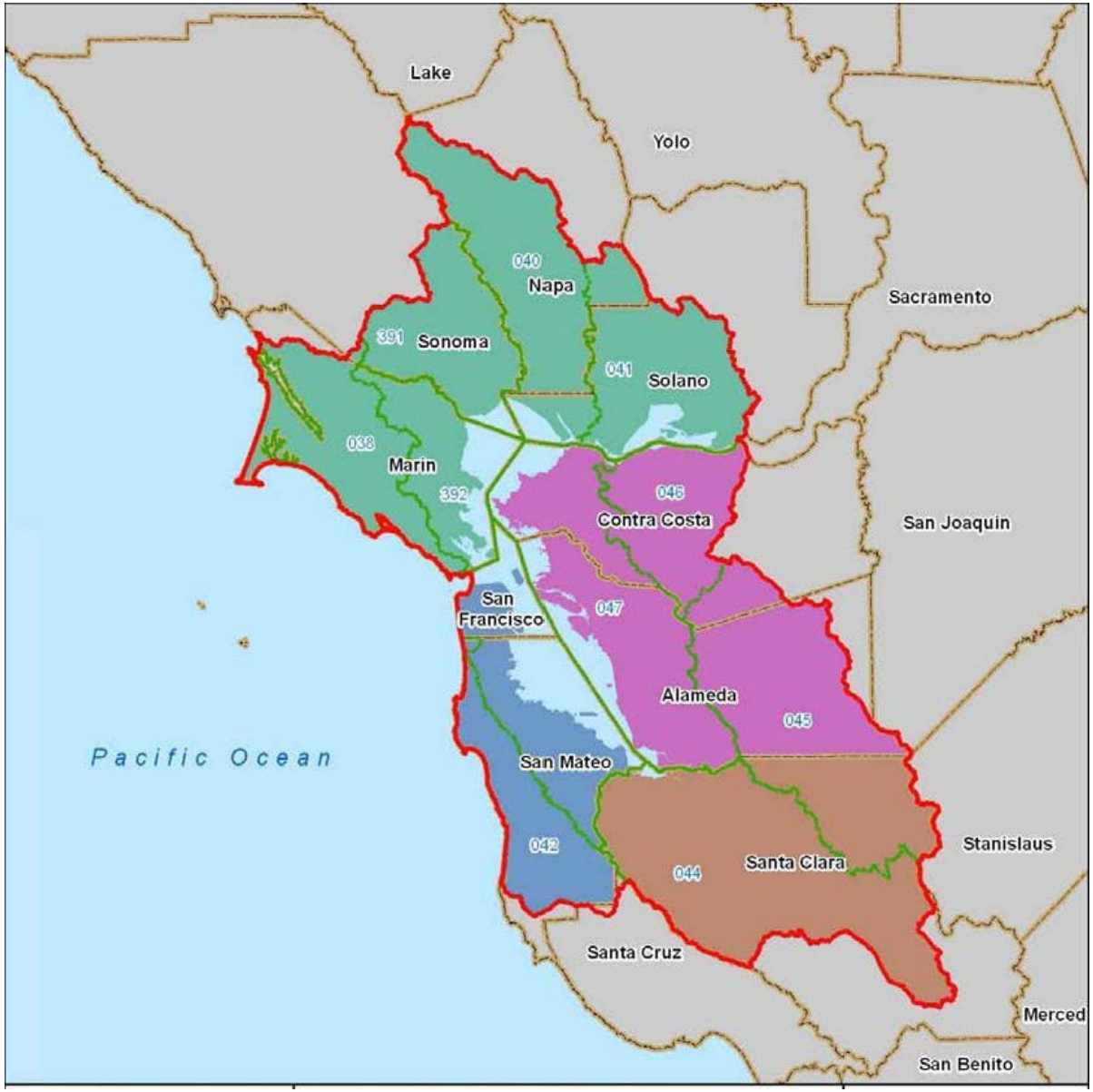
SWRP Purpose

- Support development and implementation of Green Infrastructure (GI) Plans within the Basin
- Produce list of prioritized multi-benefit stormwater capture/treatment/use projects eligible for future State implementation grant funds
- Coordinate with District's One Water Plan and local storm drain master plans

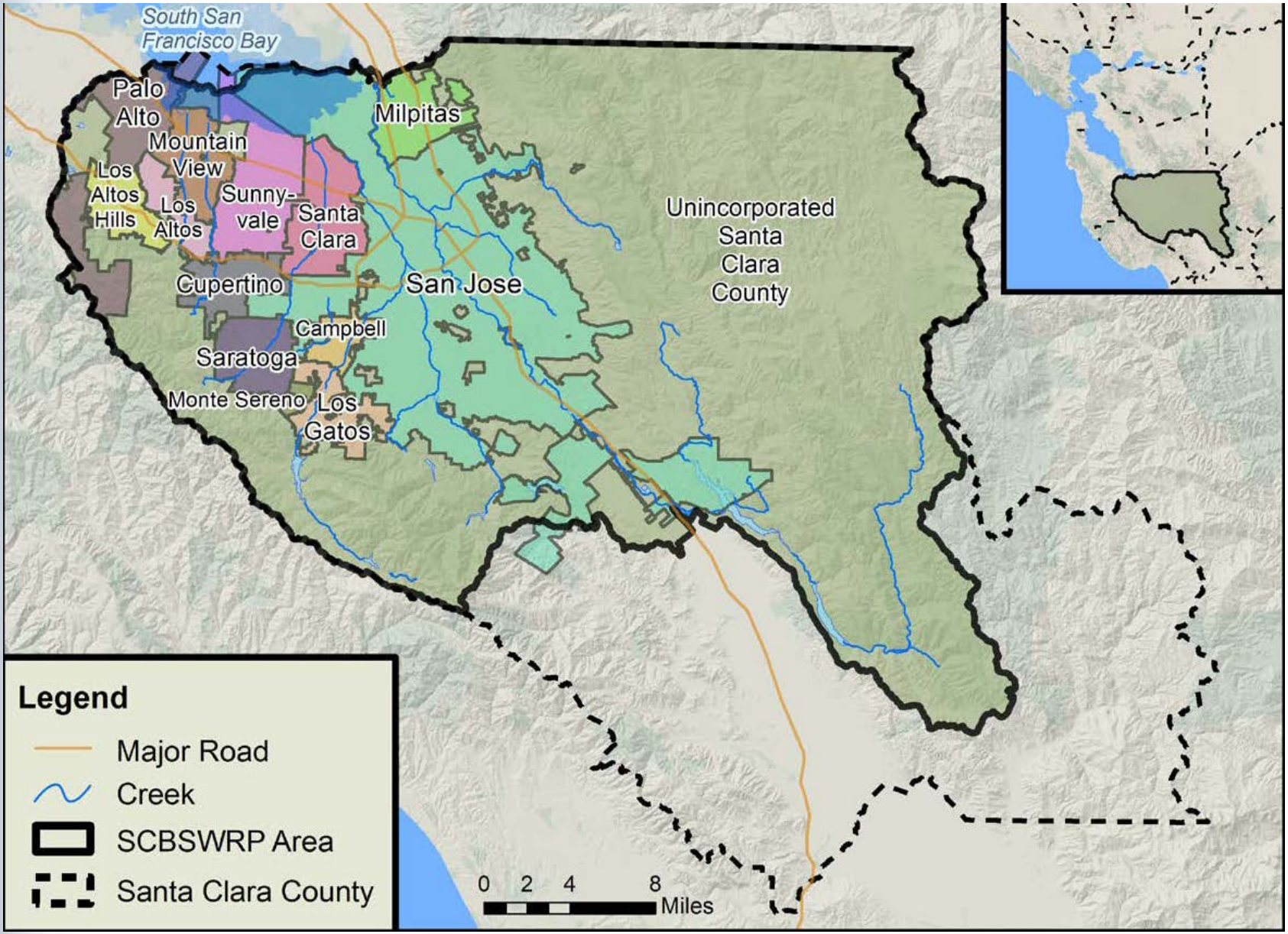
Stormwater Resource Plan Area



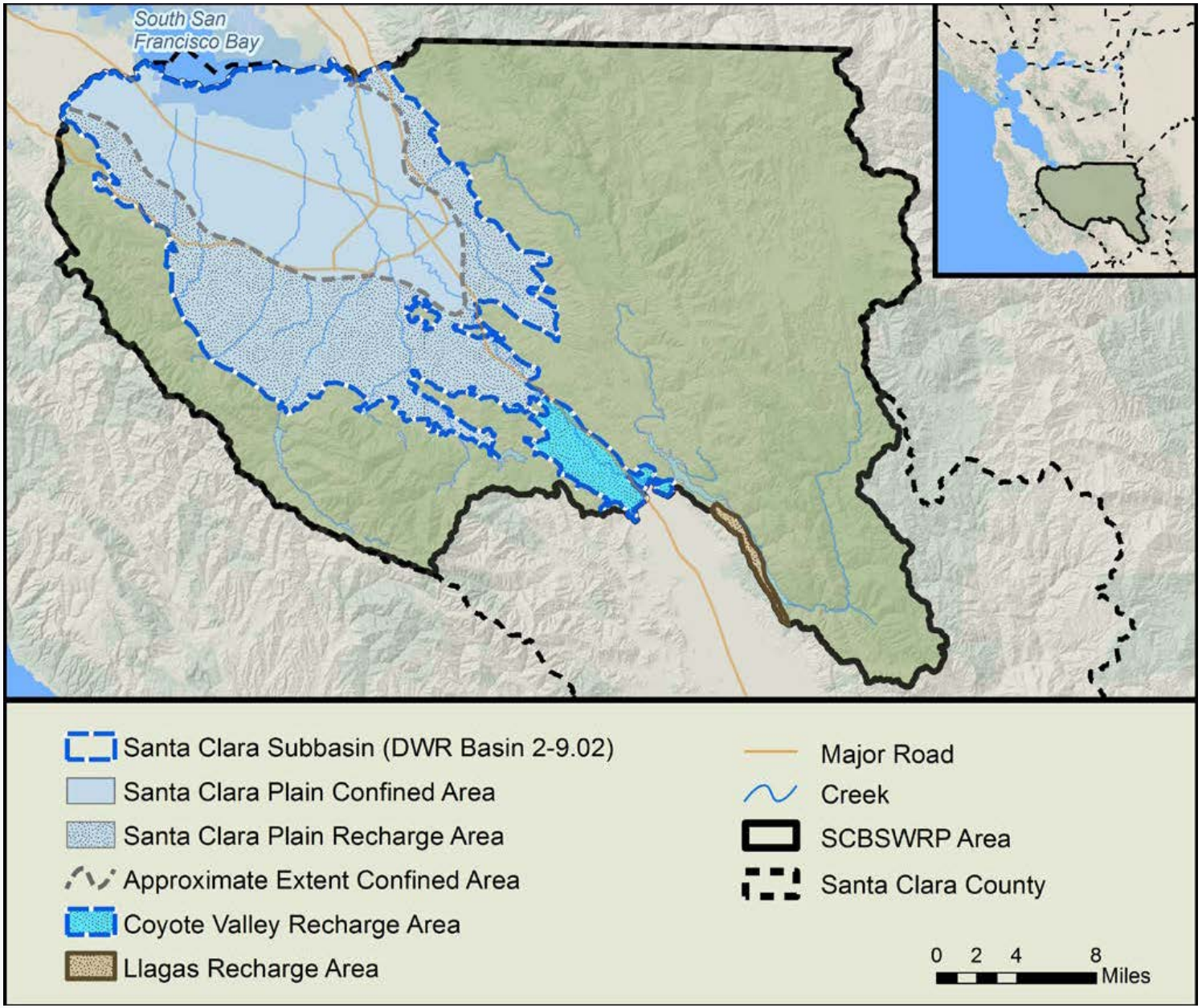
Bay Area IRWMP Regions



Cooperating Entities (SCVURPPP)



Groundwater Basins



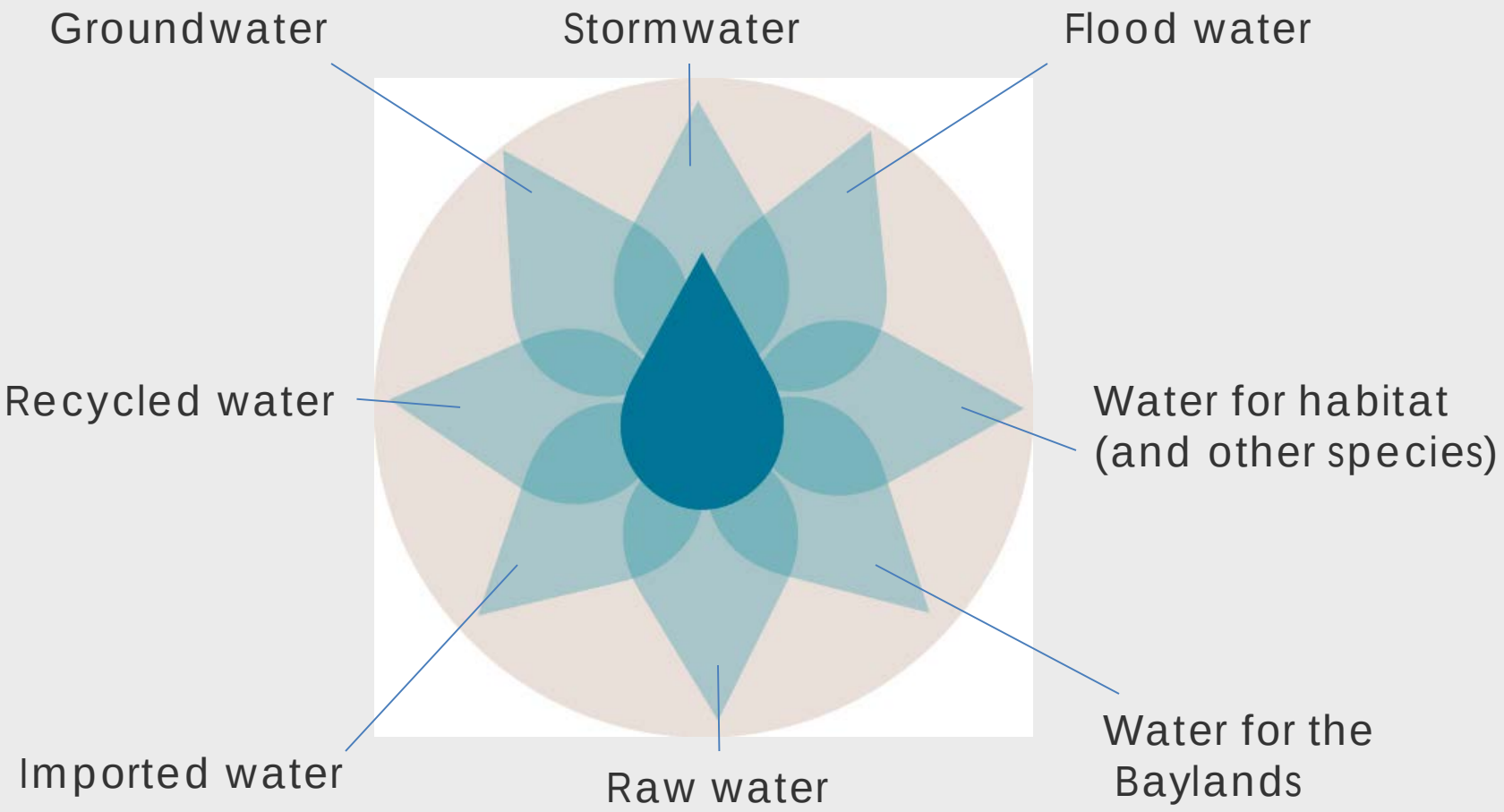
Previous/Current Planning Efforts

- San Francisco Bay Basin Plan
- Santa Clara Basin Watershed Management Initiative
  - Watershed Characteristics Report
  - Watershed Action Plan
- SCVWD Groundwater Management Plan
- SCVWD Water Supply and Infrastructure Management Plan
- SCVWD One Water Plan
- Bay Area Integrated Regional Water Management Plan

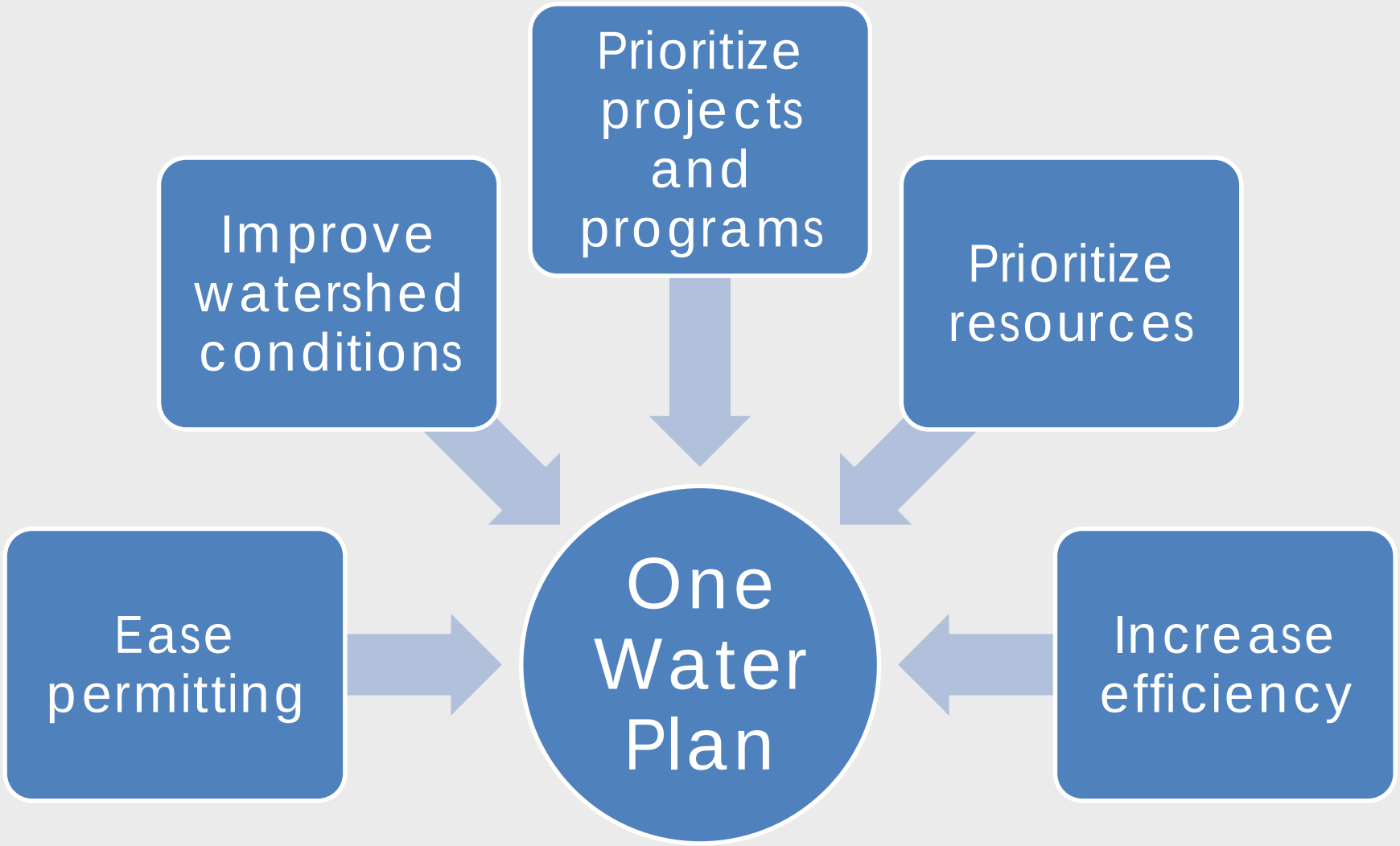
One Water
An Integrated Water Resources Master Plan

Santa Clara Valley Water District

All water is one water



Several drivers for One Water Plan



Water Resource Planning Elements

Vegetation

Wildlife

Fisheries

[Ecological Resources]

Trails

Open Space Agriculture

[Landscape Resources]

Flood Protection

Water Quality
(incl. storm water)

Water Supply

Baylands

Climate Change

One Water - Integrated Goals

1. Valued and Respected Rain

Manage rainwater to improve flood protection, water supply, and ecosystem health

2. Healthful & Reliable Water

Enhance the quantity and quality of water to support beneficial uses

3. Ecologically Sustainable Streams & Watersheds

Protect, enhance and sustain healthy and resilient stream ecosystems

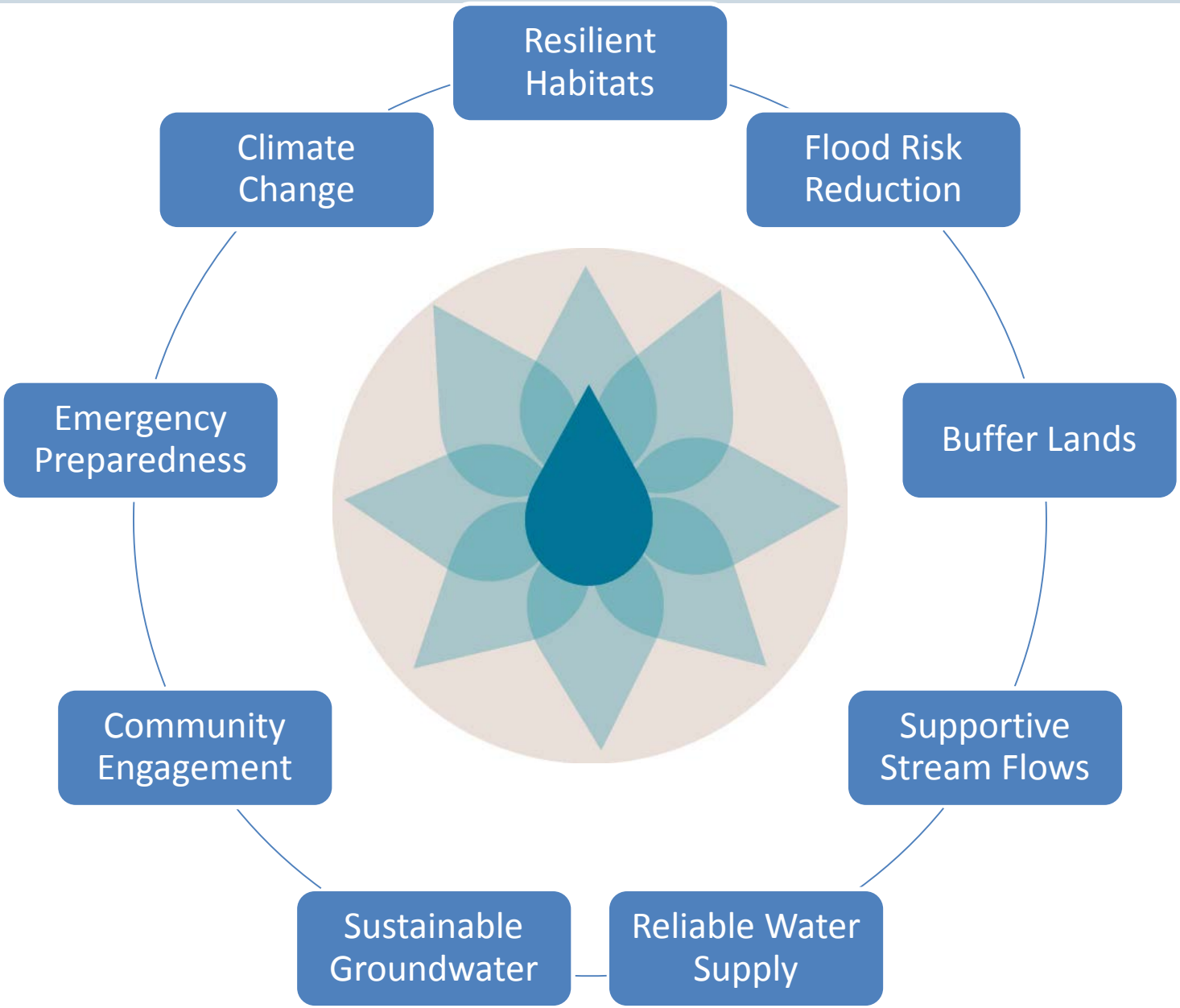
4. Resilient Baylands

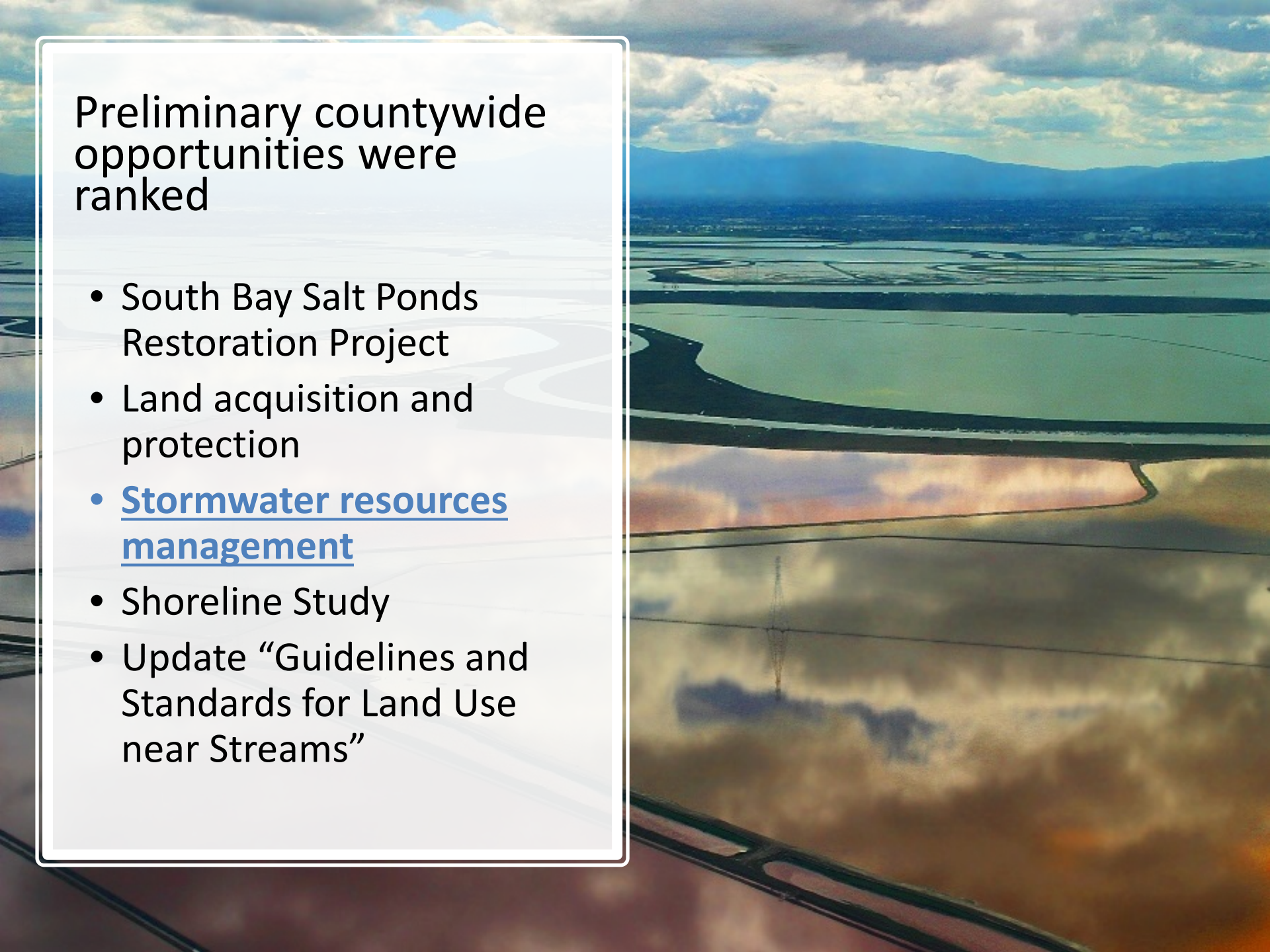
Protect, enhance and sustain healthy and resilient baylands ecosystems and infrastructure

5. Community Collaboration

Work in partnership with an engaged community to champion wise decisions on water resources

Progress toward achieving objectives will be measured

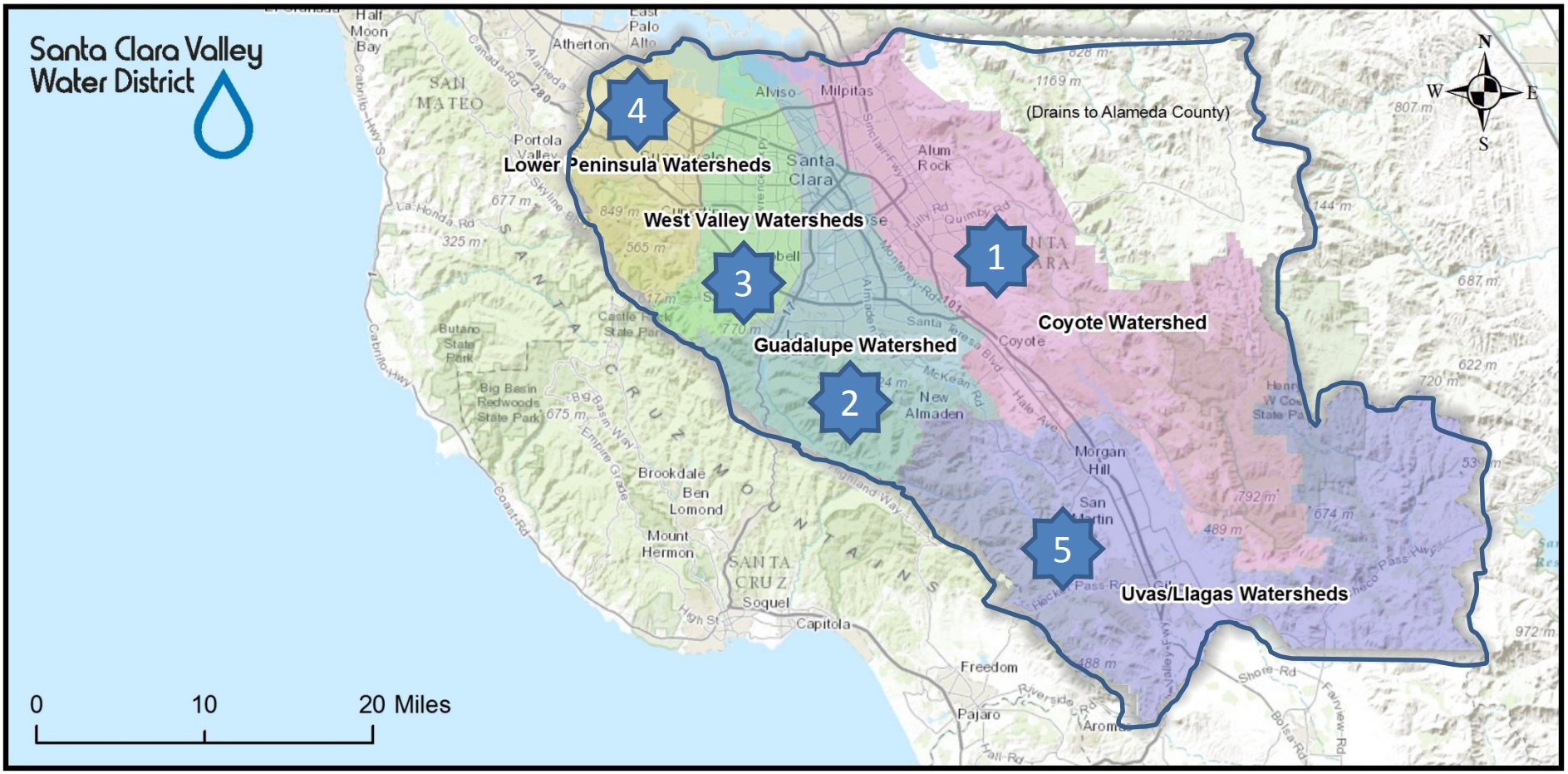




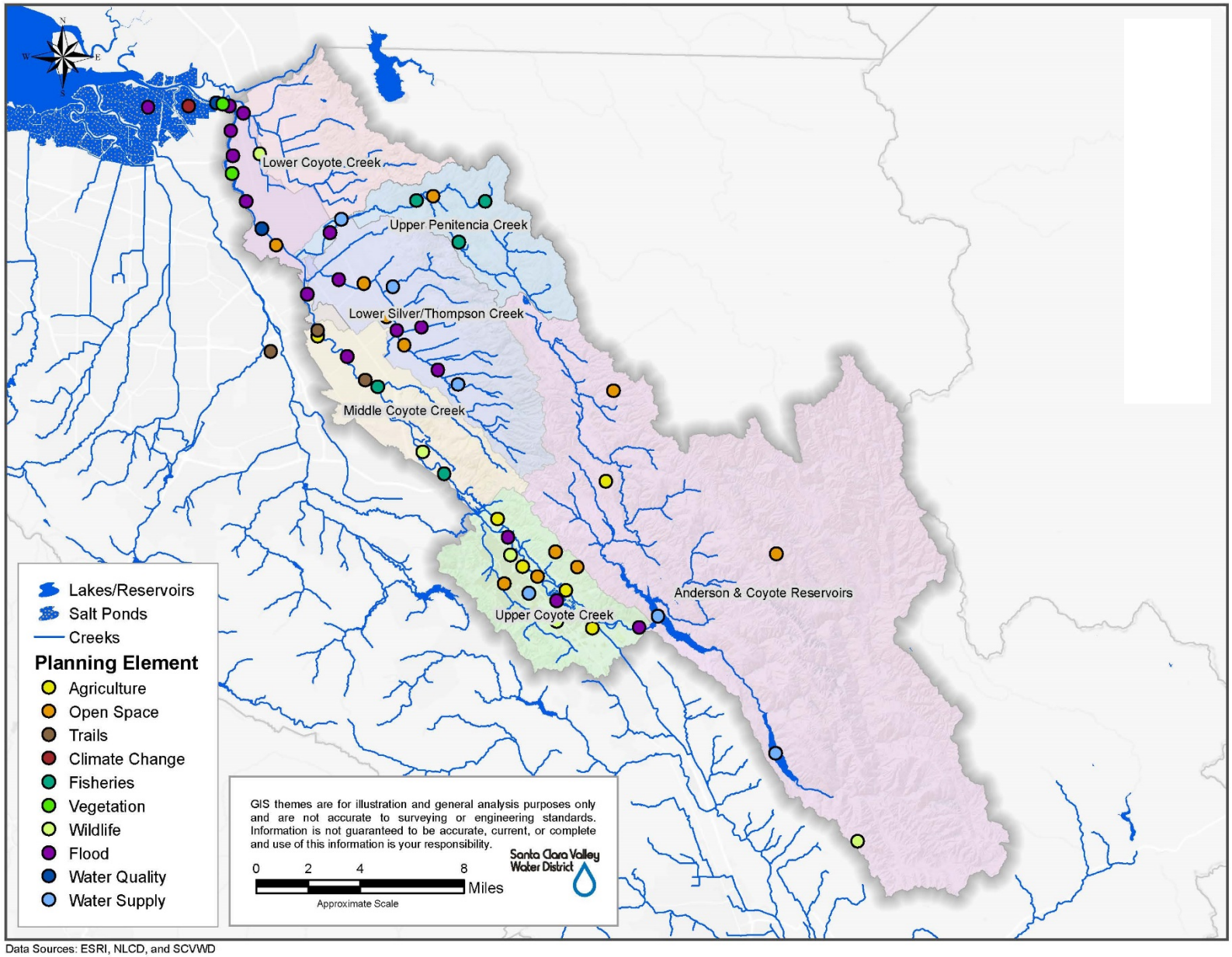
Preliminary countywide opportunities were ranked

- South Bay Salt Ponds Restoration Project
- Land acquisition and protection
- **Stormwater resources management**
- Shoreline Study
- Update “Guidelines and Standards for Land Use near Streams”

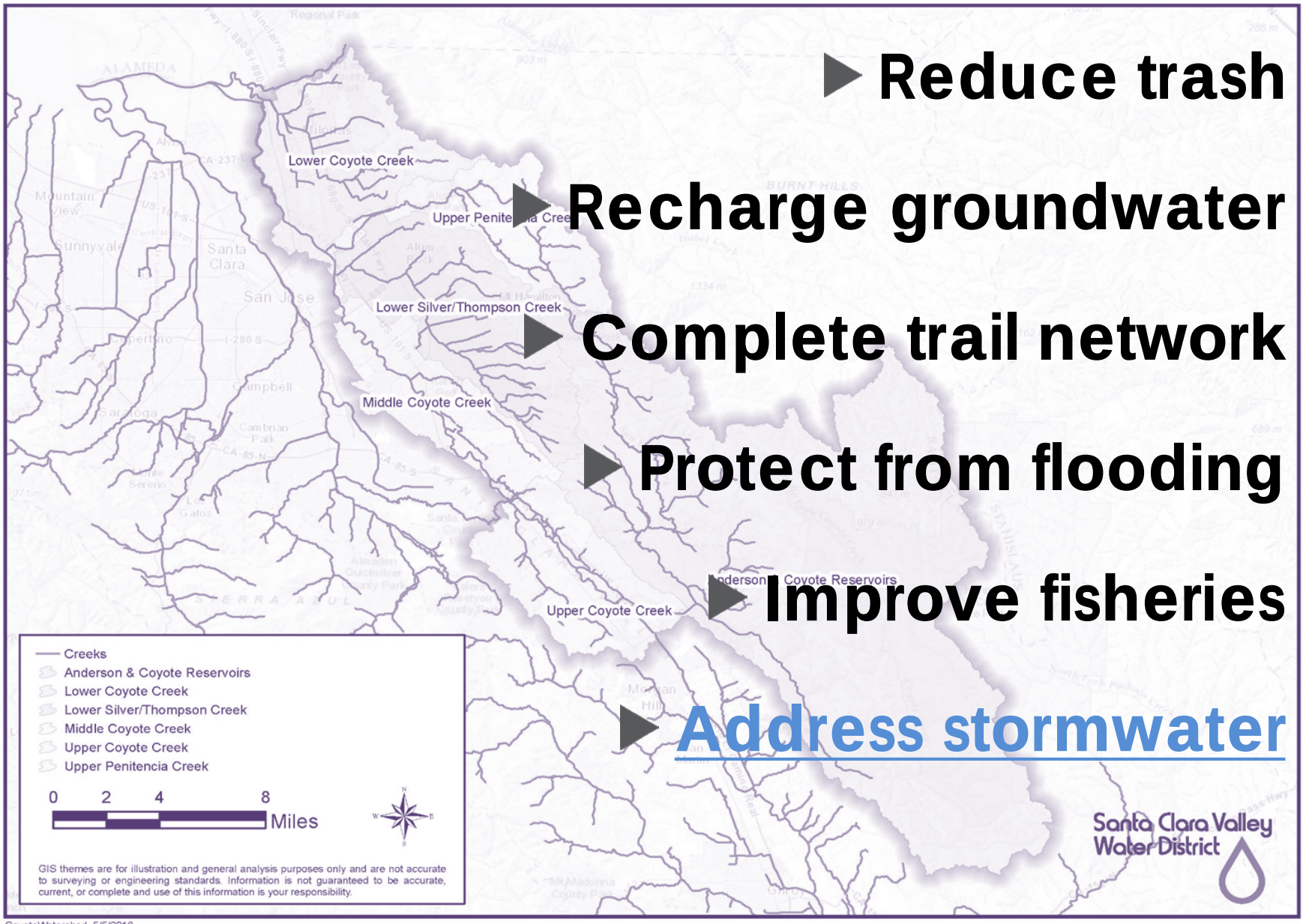
One Water's Tiered Approach



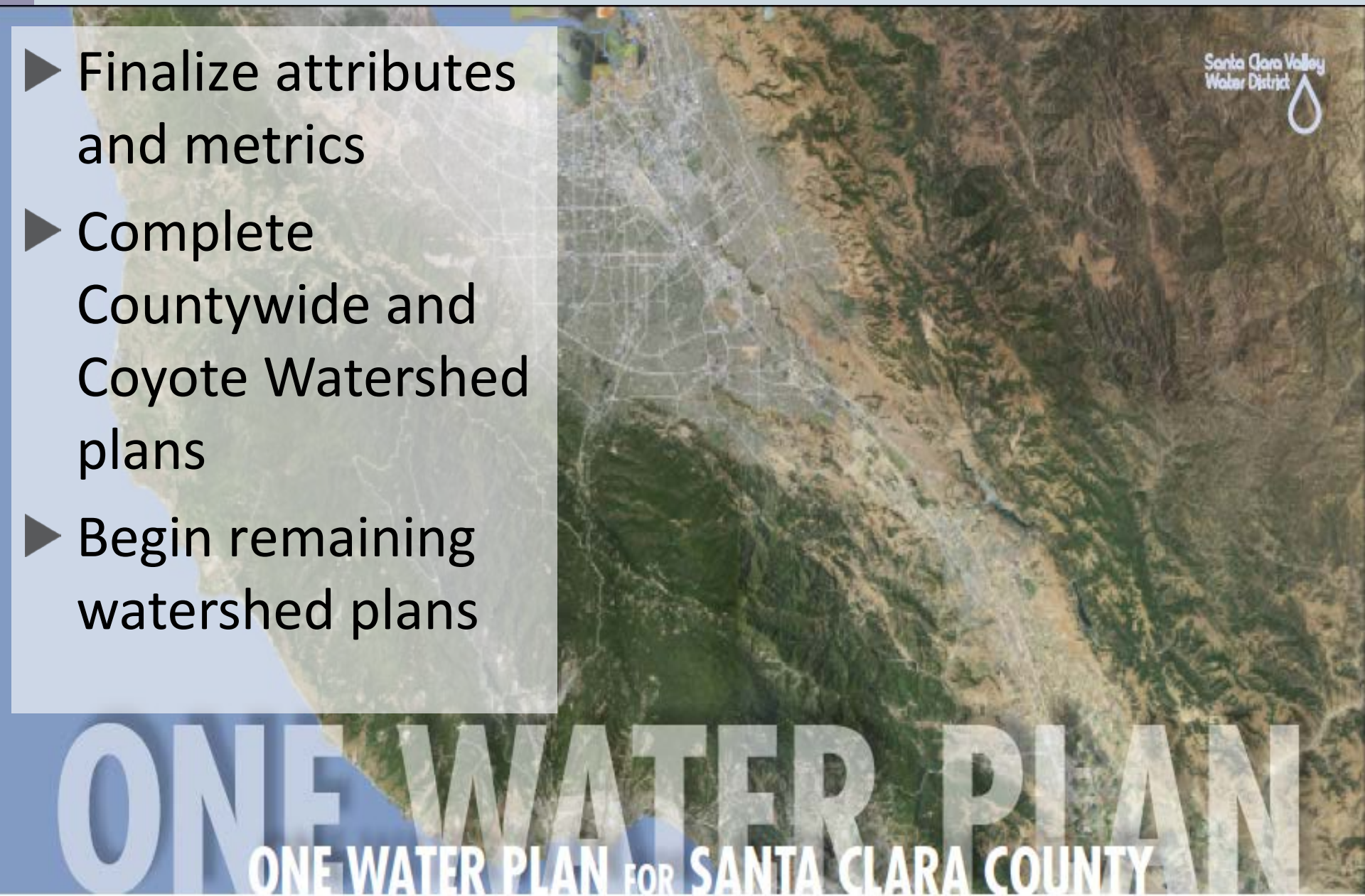
Identify Opportunities to Meet Objectives



Common Threads



Stay up to date at onewaterplan.wordpress.com

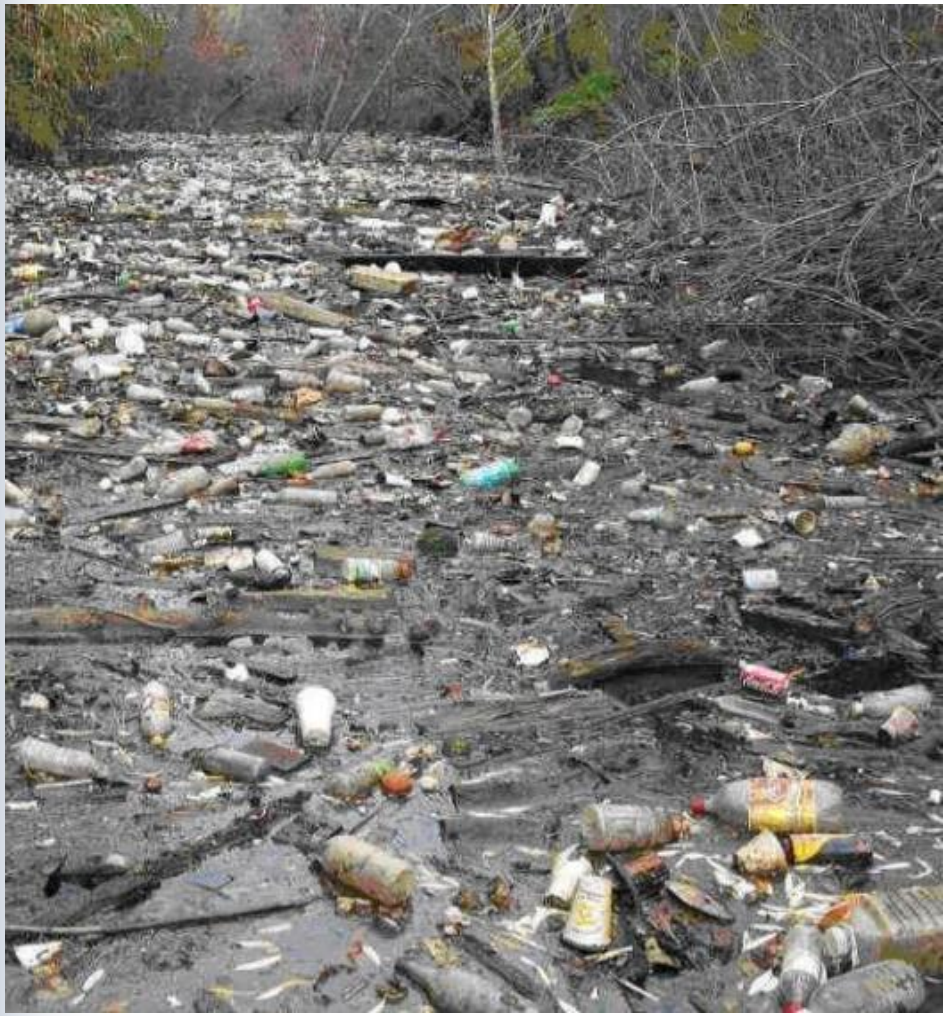


- Finalize attributes and metrics
- Complete Countywide and Coyote Watershed plans
- Begin remaining watershed plans

Water Quantity Issues

- Water resources managed by SCVWD
  - Groundwater recharge basins
  - Surface water reservoirs
- Challenges with drought and recent storms
- Urban portions of streams in poor condition
- District Plans for urban water supply, groundwater management, and water supply infrastructure address these issues

Water Quality Issues



- PCBs (TMDL)
- Mercury (TMDL)
- Pesticides (TMDL)
- Trash/Litter
- Copper
- Bacteria
- Sediment

Permit Requirements

- Municipal Regional Stormwater Permit
  - Large urban areas covered by countywide stormwater permits since 1990
  - Six countywide permits combined into Municipal Regional Permit, effective December 2009
  - Permit reissued November 2015

  - Provision C.3 contains LID and green infrastructure requirements for private and public development
  - Other provisions contains requirements for reducing pollutants of concern in stormwater

Green Infrastructure

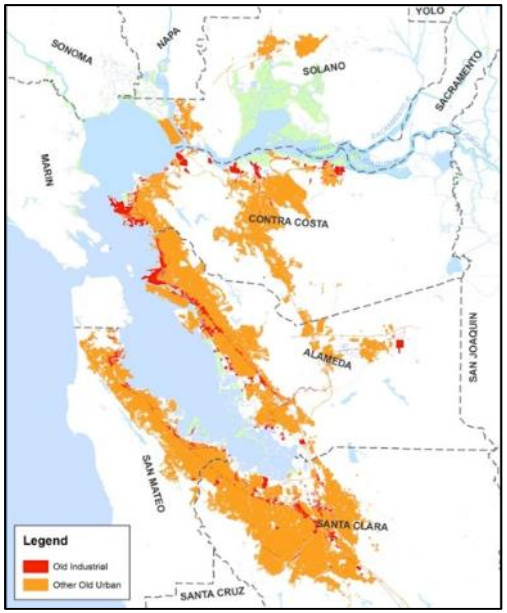
- Systems that use vegetation, soils, and natural processes to capture and treat stormwater
- Most urban green infrastructure involves retrofitting public streets, roofs and parking lots to divert runoff to:
  - Vegetated areas
  - Pervious pavements
  - Biotreatment & infiltration facilities
  - Cisterns and rain barrels
- These Low Impact Development (LID) measures supplement current requirements for LID on private projects

Green Infrastructure Requirements

- Develop a Green Infrastructure (GI) Plan
  - Prioritize and map planned and potential projects
  - Update related municipal plans
  - Evaluate funding options
  - Track progress toward pollutant reduction
- Conduct education and outreach
- Conduct “early implementation”
  - Construct planned and funded projects
  - Review public project lists and assess opportunity for incorporating GI elements

GI & Pollutants of Concern

- Link between Green Infrastructure planning and implementation and required pollutant controls
  - Control measures for certain pollutants (PCBs and mercury) include green infrastructure
  - Quantities of PCBs and mercury discharged to the Bay must be reduced to specified levels by 2040
  - GI Plans must provide reasonable assurance that specified PCB and mercury load reductions will be met (via public and private projects)



High PCB Concentrations in Sediments

SWRP Approach

- Data Collection and Watershed Identification
- Project Identification and Prioritization
  - Define methodology for project identification and metrics for assessment of benefits
    - Water quality improvement
    - Water supply (including stormwater capture & use)
    - Flood management
    - Environmental
    - Community
  - Use GIS tools and hydrologic models to identify project opportunities and quantify benefits
  - Develop list of prioritized projects
  - Prepare conceptual designs for 5-10 projects
- Plan Development
  - Prepare draft and final Plan and implementation strategy

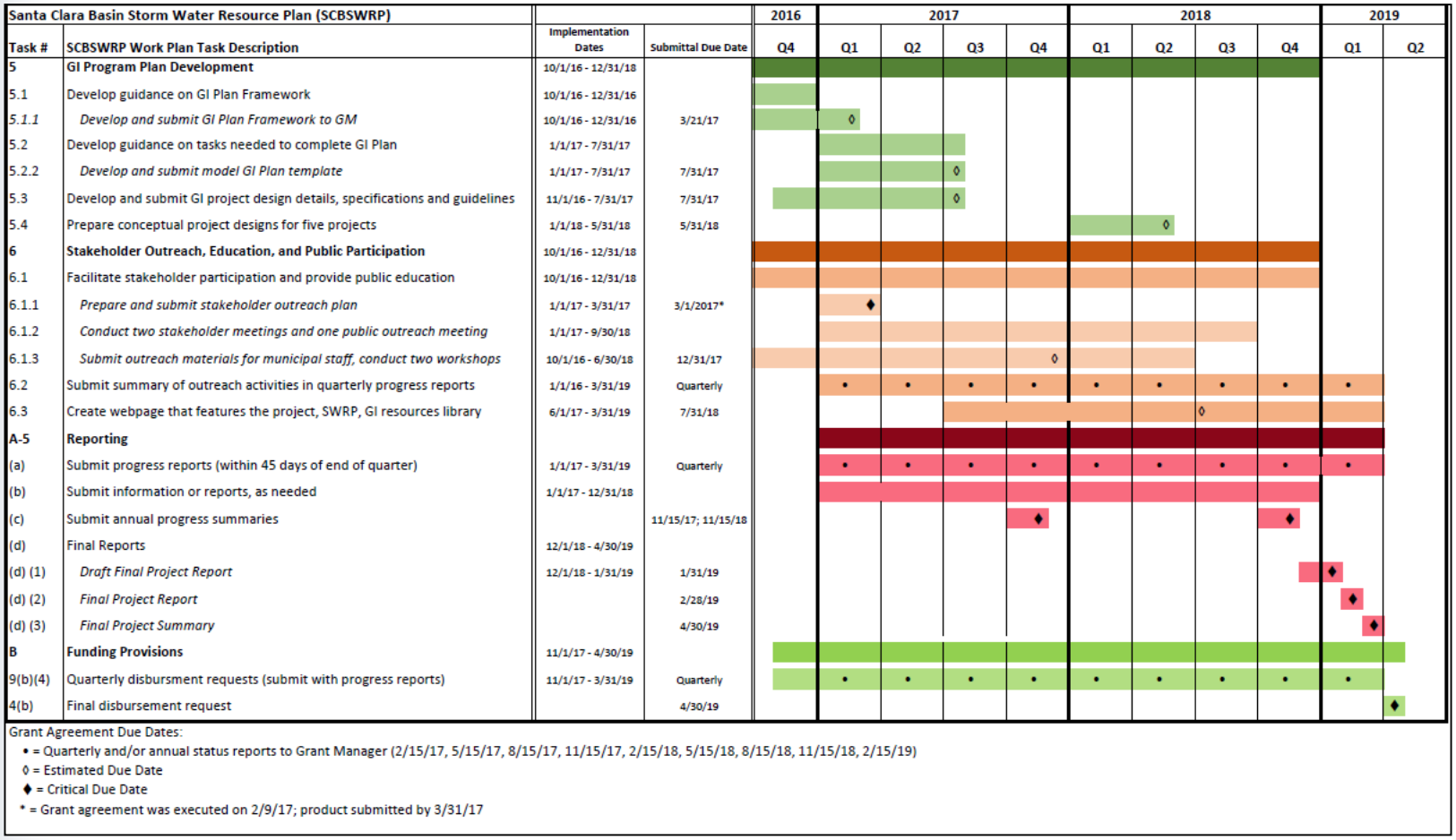
SWRP Approach, cont.

- SCVURPPP Tasks (match)
  - Guidance to municipalities on GI Plans
    - GI Scoping Plan and Framework Template
    - GI Education and Outreach Strategy
    - Model GI Language for Municipal Plans
    - Guidance on GI Implementation Mechanisms and Funding
    - GI Design Guidelines, Details and Specifications
    - Model GI Plan Template
  - Outreach to elected officials and municipal staff
    - Fact sheets
    - Workshops and Trainings
  - GI Webpage on Watershed Watch website
  - GI Resource Library

SWRP Schedule

Santa Clara Basin Storm Water Resource Plan (SCBSWRP)				2016	2017				2018				2019	
Task #	SCBSWRP Work Plan Task Description	Implementation Dates	Submittal Due Date	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1	**Project Administration**	1/1/17 - 4/30/19												
1.1	Technical and administrative services for project completion	1/1/17 - 4/30/19												
1.2	Notification of meetings, workshops, and trainings	1/1/17 - 12/31/18												
1.3	Provide and update detailed project schedule	12/15/17 - 2/15/19	3/21/17; Quarterly											
1.4	Conduct Project status review meetings with Grant Manager (GM)	1/1/17 - 3/31/19	As needed											
2	**Technical Advisory Committee**	1/1/17 - 12/31/18												
2.1	Establish TAC; submit list to GM	3/1/17 - 3/31/17	1/31/17*											
2.2	Convene kick-off meeting; prepare and submit meeting materials	3/1/17 - 3/31/17	2/28/17*											
2.3	Conduct three TAC meetings; prepare and submit meeting materials	3/1/17 - 6/30/18	2 weeks after TAC											
3	**Data Collection and Watershed Identification**	1/1/17 - 4/30/17												
3.1	Compile/review existing data; submit annotated list	1/1/17 - 4/30/17	4/28/17											
3.2	Review planning area boundaries; submit description, map & justification	1/1/17 - 4/30/17	4/28/17											
4	**SCBSWRP Development**	1/1/17 - 10/31/18												
4.1	Develop and submit detailed SWRP outline	1/1/17 - 3/31/17	3/1/17*											
4.2	Develop necessary SWRP components; submit updates quarterly	1/1/17 - 8/31/18	Quarterly											
4.3	Submit description of approach to address water quality requirements	2/1/17 - 3/31/17	3/31/17											
4.4	Develop quantitative metrics and methodologies	1/1/17 - 6/30/17												
4.4.1	*Evaluate and select models and tools*	1/1/17 - 4/30/17												
4.4.2	*Submit technical memo on models, tools, & quantitative methodologies*	5/1/17 - 6/30/17	6/30/17											
4.5	Opportunity analysis, project identification and prioritization	6/1/17 - 2/28/18												
4.5.1	*Identify potential SWRP projects*	6/1/17 - 9/30/17												
4.5.2	*Screen potential project opportunities*	8/1/17 - 11/30/17												
4.5.3	*Develop list of prioritized projects*	11/30/17 - 2/28/18	2/28/18											
4.6	Develop implementation strategy	12/1/17 - 4/30/18												
4.6.1	*Identify monitoring and data requirements*	12/1/17 - 1/31/18												
4.6.2	*Develop data collection, storage, and management protocols*	2/1/18 - 3/31/18												
4.6.3	*Submit technical memo of draft implmentation strategy*	3/1/18 -4/30/18	4/30/18											
4.7	Submit adminstrative draft SWRP and checklist to GM and TAC	3/1/18 - 5/1/18	5/1/18											
4.8	Revise and submit public draft SWRP to GM	6/1/18 - 7/31/18	7/31/18											
4.9	Post public draft SWRP online; submit summary of public comments	8/1/18 - 10/31/18	10/31/18											
4.10	Address comments; prepare and submit final draft SWRP	9/1/18 - 10/31/18	10/31/18											
4.11	Finalize and submit final SWRP and self-certification checklist	10/30/18 - 12/31/18	12/31/18											

SWRP Schedule, cont.



Santa Clara Basin Storm Water Resource Plan (SCBSWRP)				2016	2017				2018				2019	
Task #	SCBSWRP Work Plan Task Description	Implementation Dates	Submittal Due Date	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
5	**GI Program Plan Development**	10/1/16 - 12/31/18												
5.1	Develop guidance on GI Plan Framework	10/1/16 - 12/31/16												
5.1.1	*Develop and submit GI Plan Framework to GM*	10/1/16 - 12/31/16	3/21/17		◊									
5.2	Develop guidance on tasks needed to complete GI Plan	1/1/17 - 7/31/17												
5.2.2	*Develop and submit model GI Plan template*	1/1/17 - 7/31/17	7/31/17				◊							
5.3	Develop and submit GI project design details, specifications and guidelines	11/1/16 - 7/31/17	7/31/17				◊							
5.4	Prepare conceptual project designs for five projects	1/1/18 - 5/31/18	5/31/18							◊				
6	**Stakeholder Outreach, Education, and Public Participation**	10/1/16 - 12/31/18												
6.1	Facilitate stakeholder participation and provide public education	10/1/16 - 12/31/18												
6.1.1	*Prepare and submit stakeholder outreach plan*	1/1/17 - 3/31/17	3/1/2017*		♦									
6.1.2	*Conduct two stakeholder meetings and one public outreach meeting*	1/1/17 - 9/30/18												
6.1.3	*Submit outreach materials for municipal staff, conduct two workshops*	10/1/16 - 6/30/18	12/31/17					◊						
6.2	Submit summary of outreach activities in quarterly progress reports	1/1/16 - 3/31/19	Quarterly		•	•	•	•	•	•	•	•	•	
6.3	Create webpage that features the project, SWRP, GI resources library	6/1/17 - 3/31/19	7/31/18								◊			
A-5	**Reporting**													
(a)	Submit progress reports (within 45 days of end of quarter)	1/1/17 - 3/31/19	Quarterly		•	•	•	•	•	•	•	•	•	
(b)	Submit information or reports, as needed	1/1/17 - 12/31/18												
(c)	Submit annual progress summaries		11/15/17; 11/15/18					♦				♦		
(d)	Final Reports	12/1/18 - 4/30/19												
(d) (1)	*Draft Final Project Report*	12/1/18 - 1/31/19	1/31/19										♦	
(d) (2)	*Final Project Report*		2/28/19										♦	
(d) (3)	*Final Project Summary*		4/30/19										♦	
B	**Funding Provisions**	11/1/17 - 4/30/19												
9(b)(4)	Quarterly disbursment requests (submit with progress reports)	11/1/17 - 3/31/19	Quarterly		•	•	•	•	•	•	•	•	•	
4(b)	Final disbursement request		4/30/19											♦

Grant Agreement Due Dates:

• = Quarterly and/or annual status reports to Grant Manager (2/15/17, 5/15/17, 8/15/17, 11/15/17, 2/15/18, 5/15/18, 8/15/18, 11/15/18, 2/15/19)

◊ = Estimated Due Date

♦ = Critical Due Date

* = Grant agreement was executed on 2/9/17; product submitted by 3/31/17

Stakeholder Outreach Plan

- **Goals**
  - Inform on SWRP process and need for GI projects
  - Obtain input on locations, types of projects
  - Obtain feedback on prioritized list of projects
- **Key Messages**
  - Stormwater as a resource
  - Need for multi-benefit GI projects
  - Local agency requirements and GI efforts
  - What is the SWRP?
  - Process for identifying and prioritizing projects

Stakeholder Outreach Tasks

- Task 1 - Stakeholder Group Formation
- Task 2 - Quarterly Updates
- Task 3 - Stakeholder Group Meetings (2-3)
- Task 4 - Website Development
- Task 5 - Public Workshop

SWRP Detailed Outline

1. Introduction
2. Identification and Description of Watershed
3. Water Quality Compliance
4. Organization, Coordination & Collaboration
5. Quantitative Methods for Analysis
6. Identification & Prioritization of Projects
7. Implementation Strategy & Schedule
8. Education, Outreach & Public Participation

Thank you for
your participation!

Next meeting ~ July/August 2017