



STORM WATER RESOURCE PLAN

Stanislaus County WAC Meeting

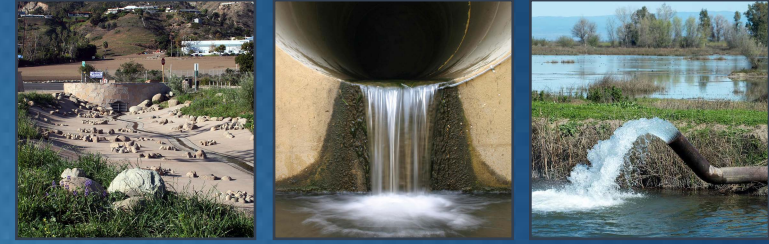
May 30, 2018

Presenter: Hawkeye Sheene

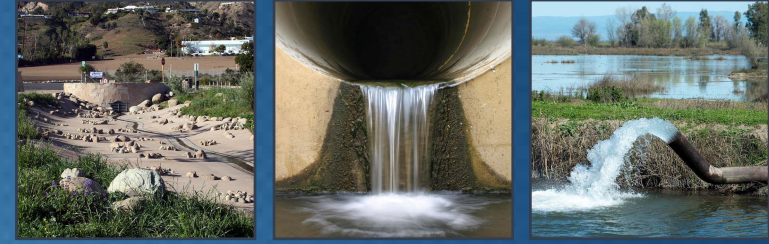


COMMITMENT & INTEGRITY DRIVE RESULTS

Agenda

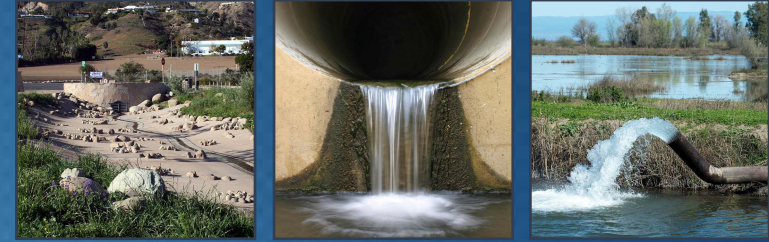


- Storm Water Resource Plan (SWRP) Overview
 - Background
 - Schedule
 - Goals and Objectives
 - Identification of Planning Area and Priorities
- Project Solicitation and Prioritization
 - Prioritization and Solicitation Approach
 - Quantification of Project Benefits
- Next Steps

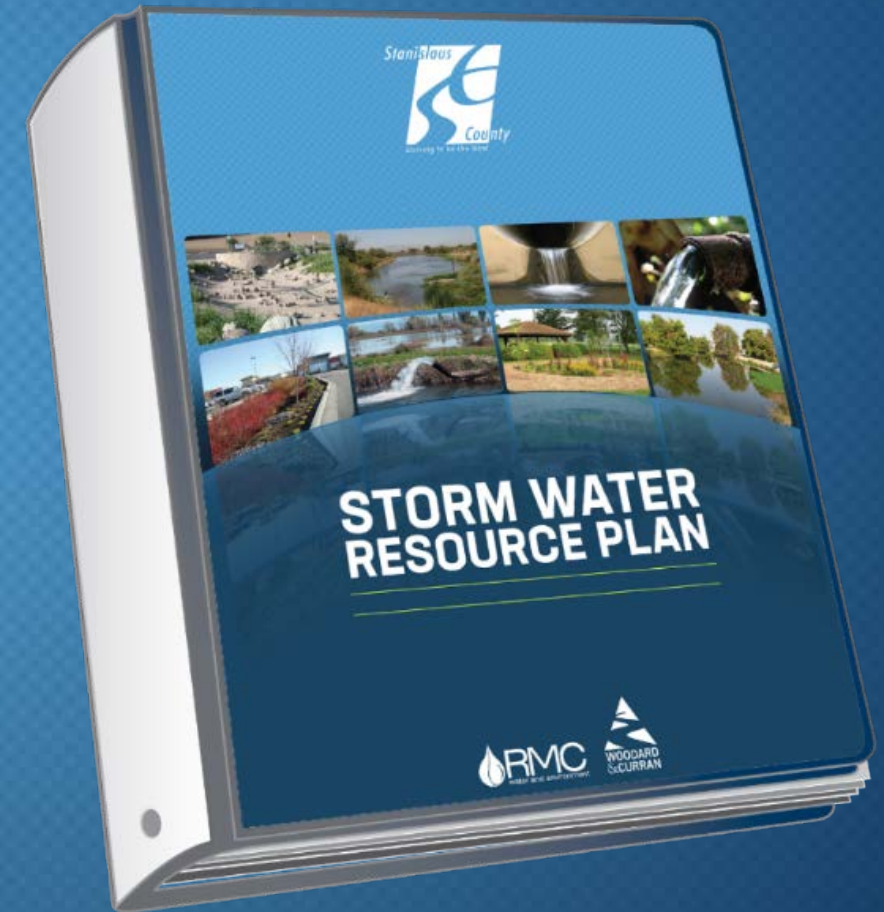


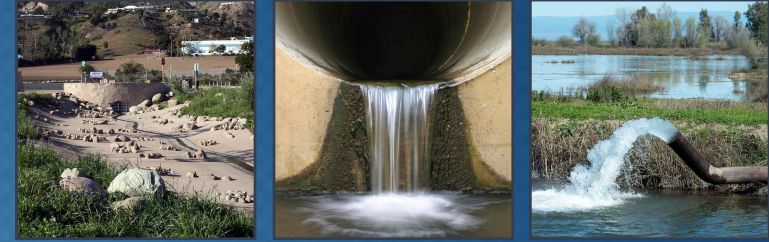
SWRP Overview

Stanislaus Multi-Agency Regional SWRP



- Integrated plan focusing on regional, watershed-based stormwater priorities to identify and assess **multiple benefit projects**
- Required for all stormwater and dry weather runoff capture projects to receive future state grant funding (per SB 985)
- Stanislaus County was awarded a SWRCB Prop 1 grant to complete a SWRP by February 2019





Major SWRP Required Elements

- Watershed/Planning Area Identification
- Water Quality Compliance
- Organization, Coordination, Collaboration
- Quantitative Methods
- Identification and Prioritization of Projects
- Implementation Strategy and Schedule
- Education, Outreach, Public Participation

Storm Water Resource Plan

Guidelines

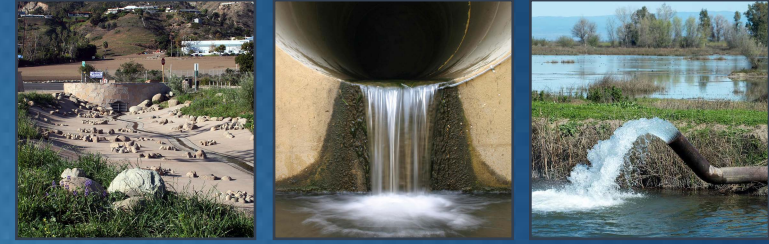


December 15, 2015

STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



Project Tasks



Task 1: Project Management

Task 2: Stormwater Outfall Monitoring

Task 3: Technical Advisory Committee

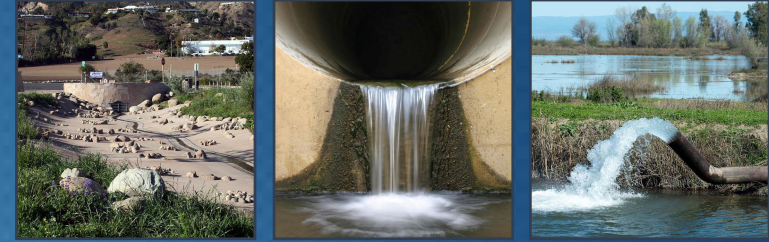
Task 4: Data Collection and Watershed Identification

Task 5: Storm Water Resource Plan Development

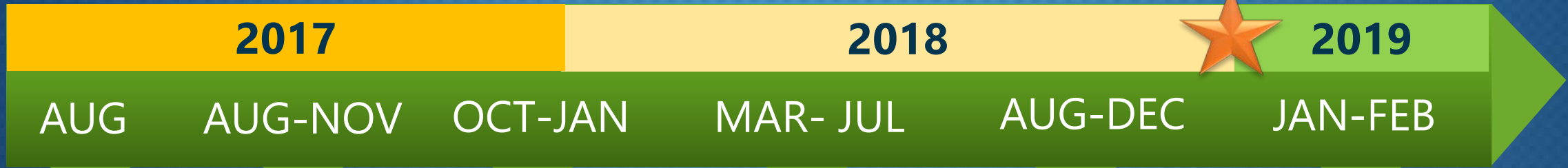
Task 6: Technical Studies to Support Development of SWRP

Task 7: Stakeholder Outreach, Education, and Public Participation

Project Timeline



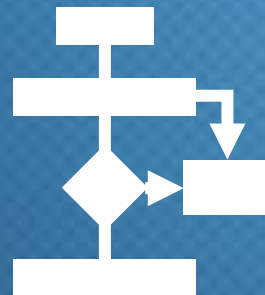
Anticipated funding solicitation



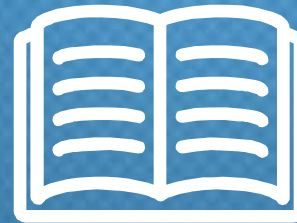
Establish TAC



Develop SWRP Components and Protocols



Solicit and Prioritize Projects



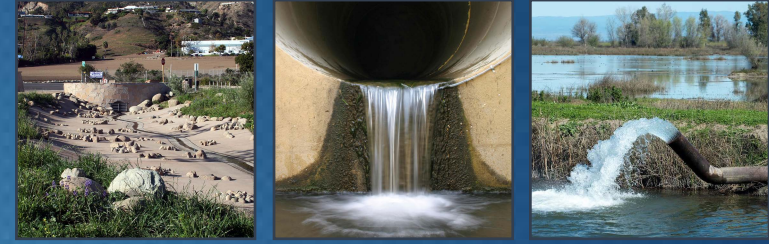
Draft Storm Water Resources Plan



Address Comments on Plan

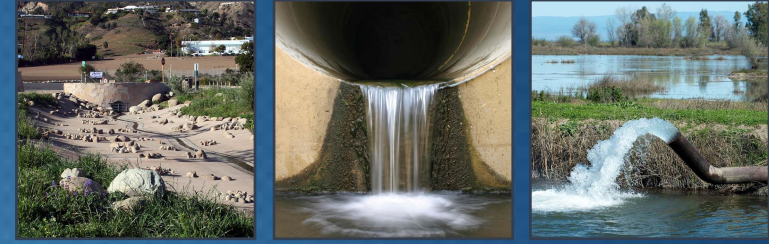


Final Storm Water Resources Plan



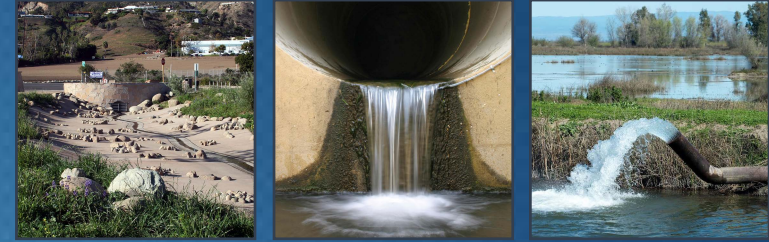
SWRP Goals/Objectives

Stanislaus SWRP Goals and Objectives



- Provide regional watershed-based planning to address challenges and opportunities for managing stormwater and dry weather runoff
- Identify and prioritize stormwater and dry weather runoff projects that provide multiple benefits to help achieve watershed and regional planning goals

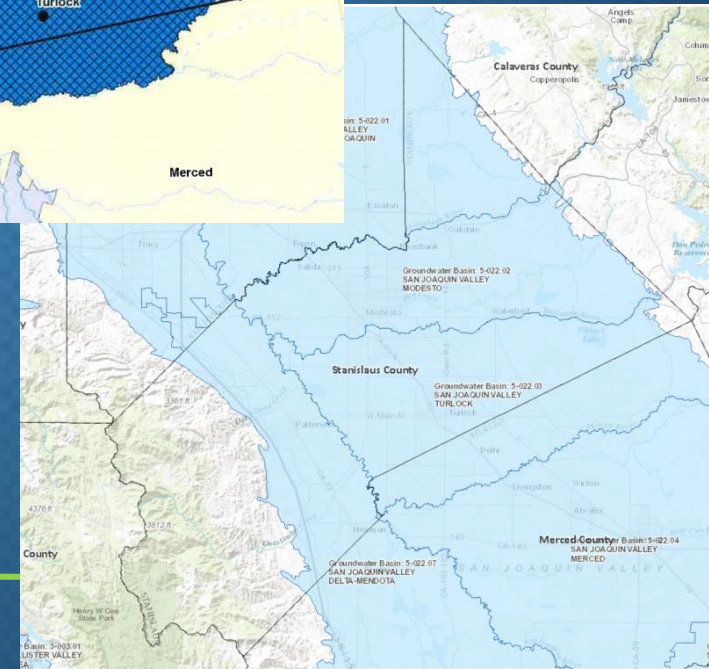
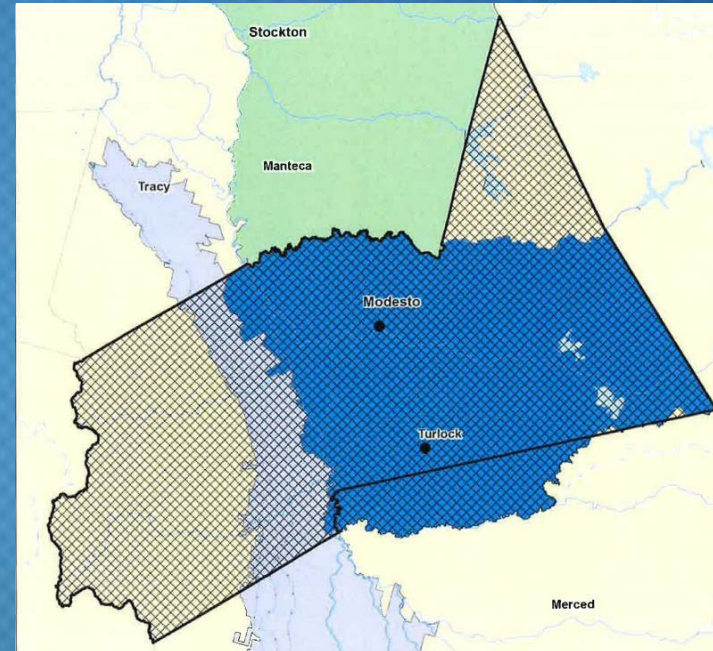
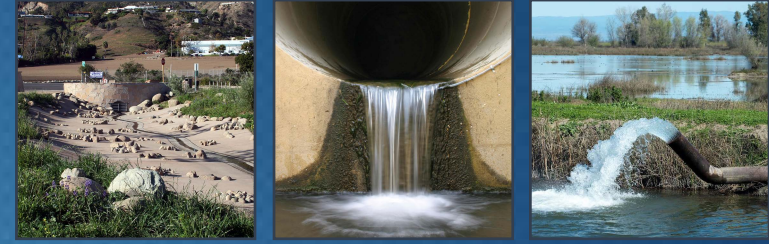




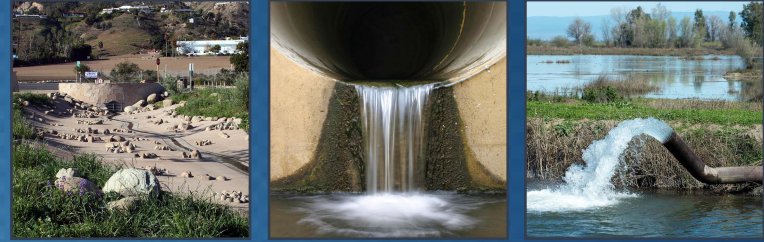
Identification of Planning Area & Priorities

SWRP Planning Area: Stanislaus County

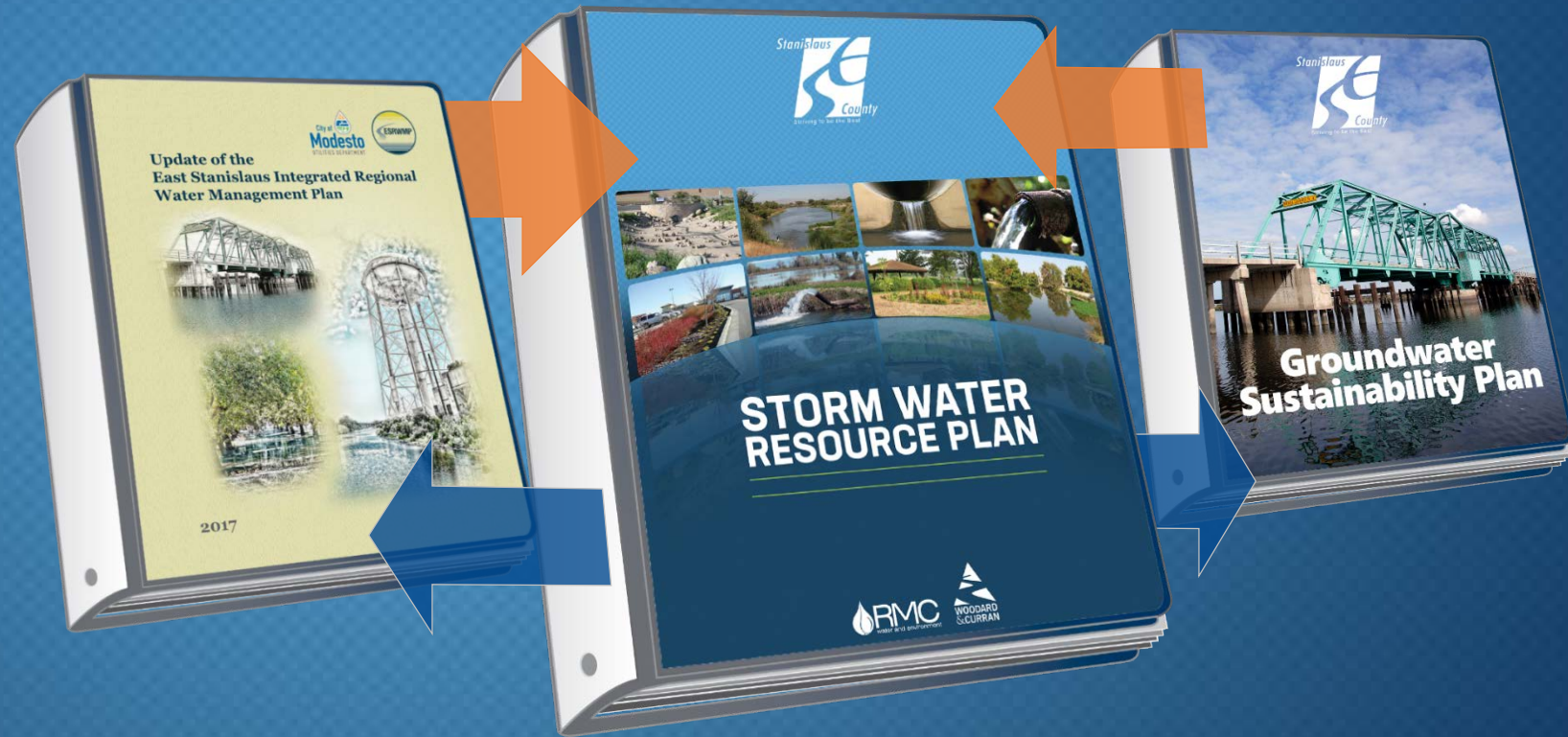
- East Stanislaus and Westside San Joaquin IRWMP areas
- Stanislaus and Tuolumne Rivers Groundwater Basin Association, Turlock Groundwater Basin Association, and San Luis & Delta-Mendota Water Authority groundwater management plan area



SWRP Planning Area: Stanislaus County

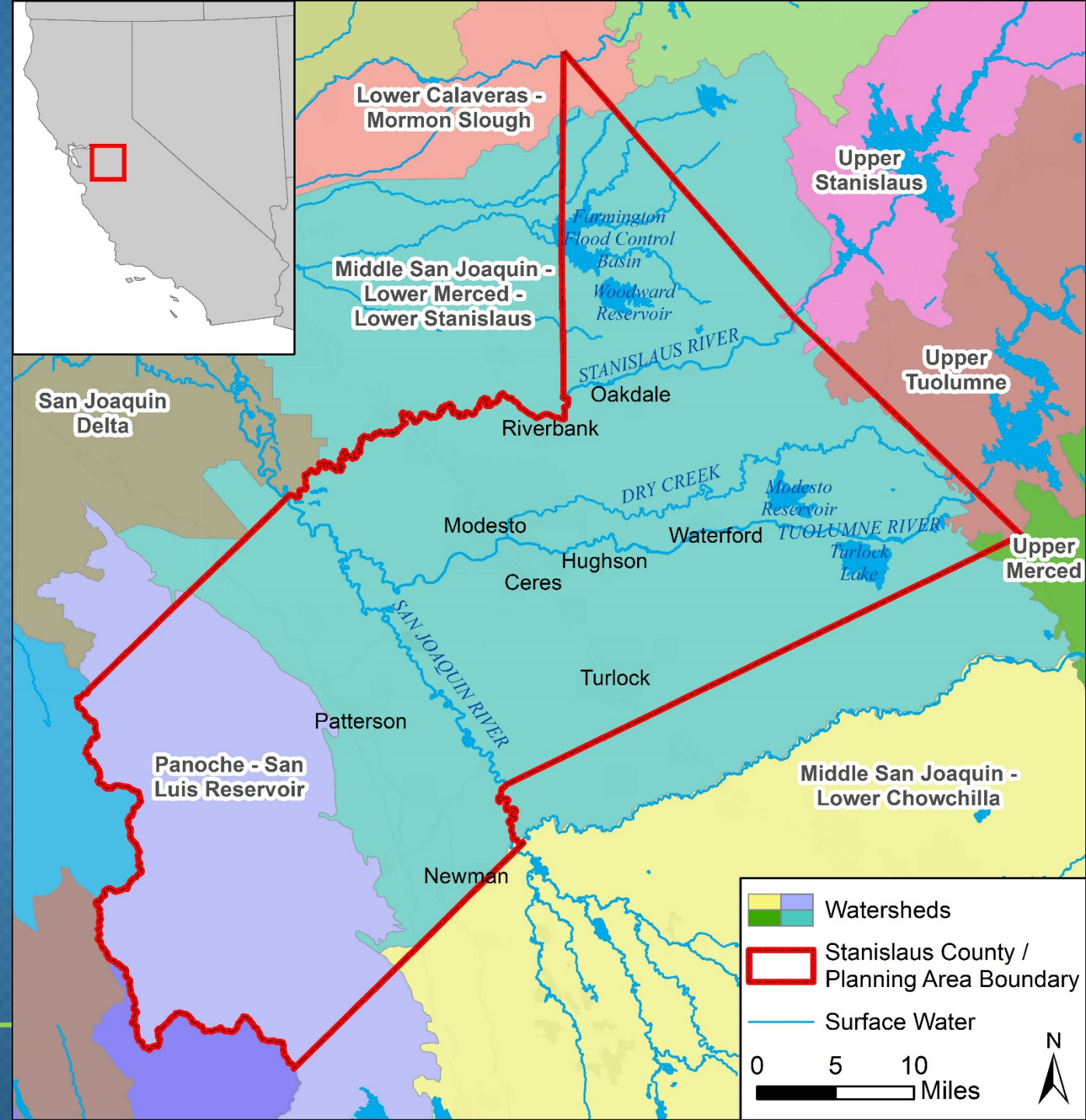


Coordination
between
concurrent water
resource planning
areas facilitates
effective regional
water planning

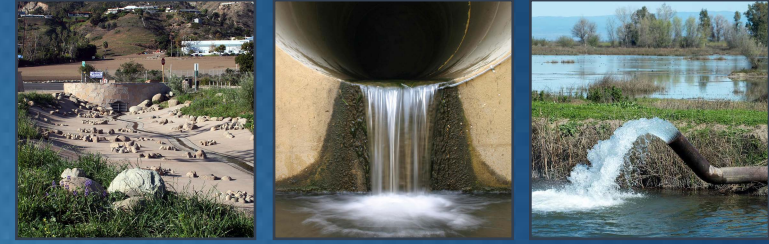


SWRP Planning Area: Stanislaus County

- Main Watersheds:
 1. Middle San Joaquin – Lower Merced – Lower Stanislaus
 2. Panoche – San Luis Reservoir
- Other Watersheds
 - Upper Tuolumne, Upper Stanislaus, Upper Merced, Lower Calaveras – Mormon Slough



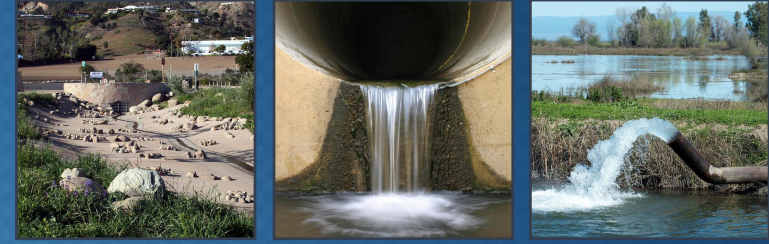
SWRP Planning Area: Water Resource Priorities

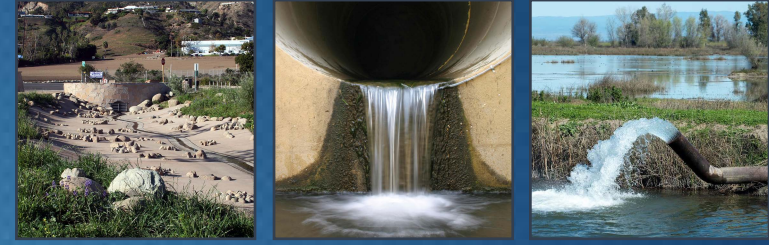


- Implement water quality improvements to support TMDL goals
- Reduce pollutant discharges into 303(d) listed impaired water bodies
- Augment water supply by capturing stormwater or dry weather runoff for recharge into a groundwater basin (where feasible)
- Provide SWRP benefits to disadvantaged communities and economically distressed areas

SWRP Planning Area: Water Quality Priorities

- Total Suspended Solids
- Mercury / Methylmercury
- Diazinon
- Chlorpyrifos
- Diuron
- Total Nitrogen

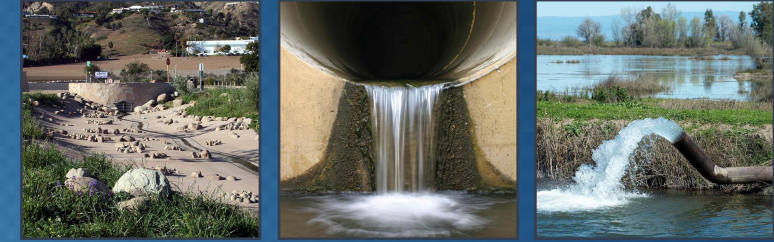




Project Solicitation and Prioritization

Project Solicitation Process

- Solicitation period October through December 2017 using Opti
- Projects were prioritized
- Benefits were summarized
- Prioritized Project List submitted to SWRCB January 2018



Home About Projects Documents Regional Map Contact Links Participation

HOME > PROJECTS

Projects

The East Stanislaus Region currently has 39 projects listed in the IRWM Plan database. The projects are reviewed and scored according to the Goals and Objectives criteria established for the Region. These submitted projects can be viewed in the OPTI Project Website. As part of the 2017 Plan update, the Region will be updating the project database.

The DWR schedule for the Prop 1 Implementation Grant Applications is expected to be due in spring 2018 with release of the Draft Guidelines and Proposal Solicitation Package (PSP) in Autumn 2017. An Implementation Grant would provide competitive-based funding to construct qualified projects within the IRWM Region for projects included in the IRWM Plan. With completion and approval of the East Stanislaus 2017 IRWM Plan Update set for early 2018, our Region would be eligible to apply for these grant funds.

If you are a stakeholder and have not signed up for OPTI, the Region's Online Project Tracking and Integration program, please click OPTI to request membership. The Region is planning to open the OPTI database for new projects and update of existing projects from August 7 through mid-September of 2017.

[Click to enter the OPTI website.](#)

The East Stanislaus IRWM Goals and Objectives can be found in the documents tab or [click here](#)

What's New

- Public Draft IRWMP Notice
- Draft IRWM Plan Public Release
- Regional Flood Management Plan

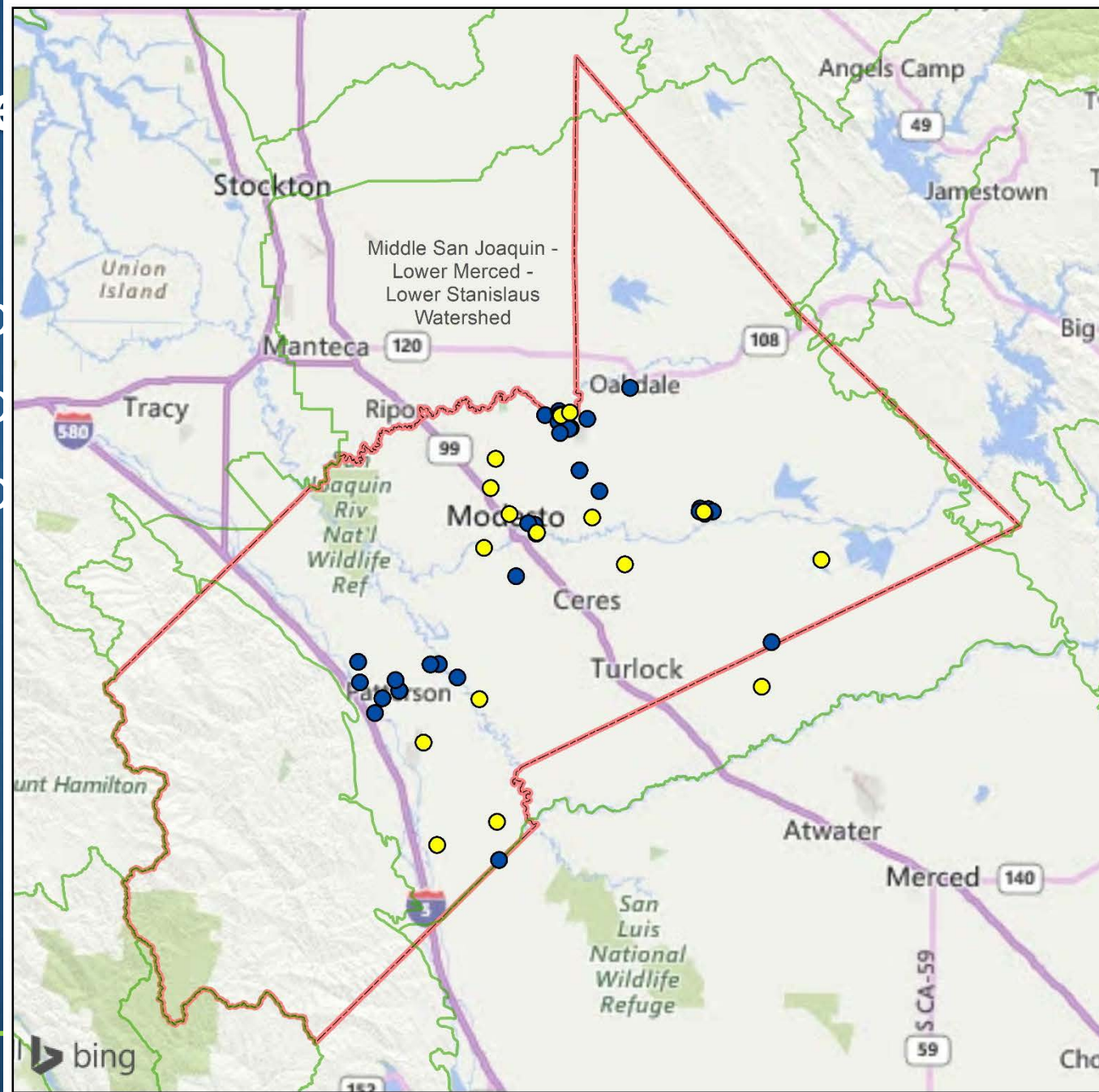
Local Agencies and Stakeholders



www.eaststanirwm.org/projects

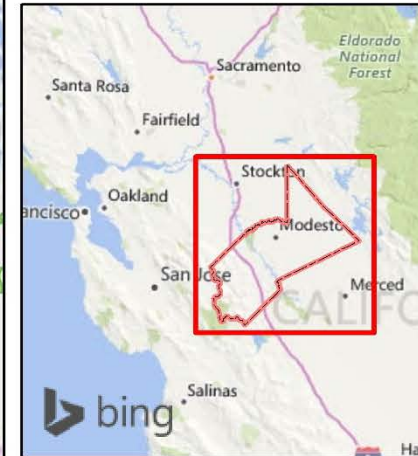
Project

- 58 projects
- 17 projects
- 41 projects

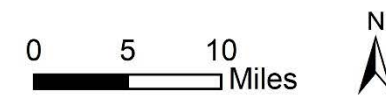


All SWRP Projects

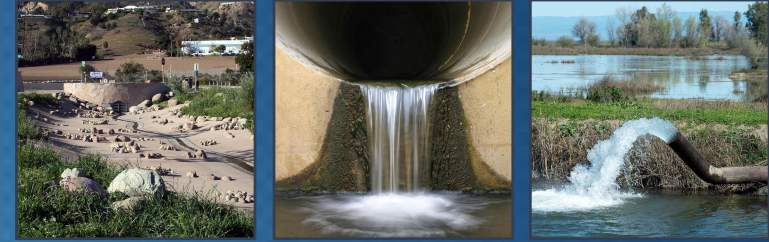
- Ready to Proceed Projects
- Concept Projects
- Watershed Boundaries
- Stanislaus County / Planning Area Boundary



See Chapter 6 for explanatory note on the inclusion of one project that falls outside the Stanislaus County boundary.



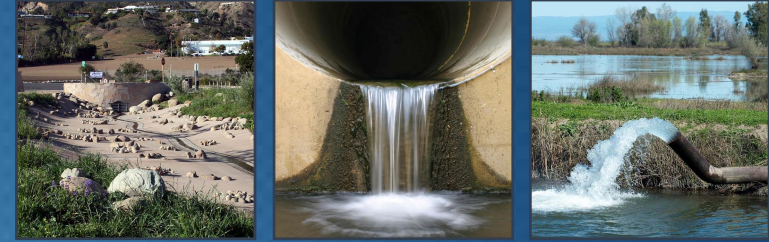
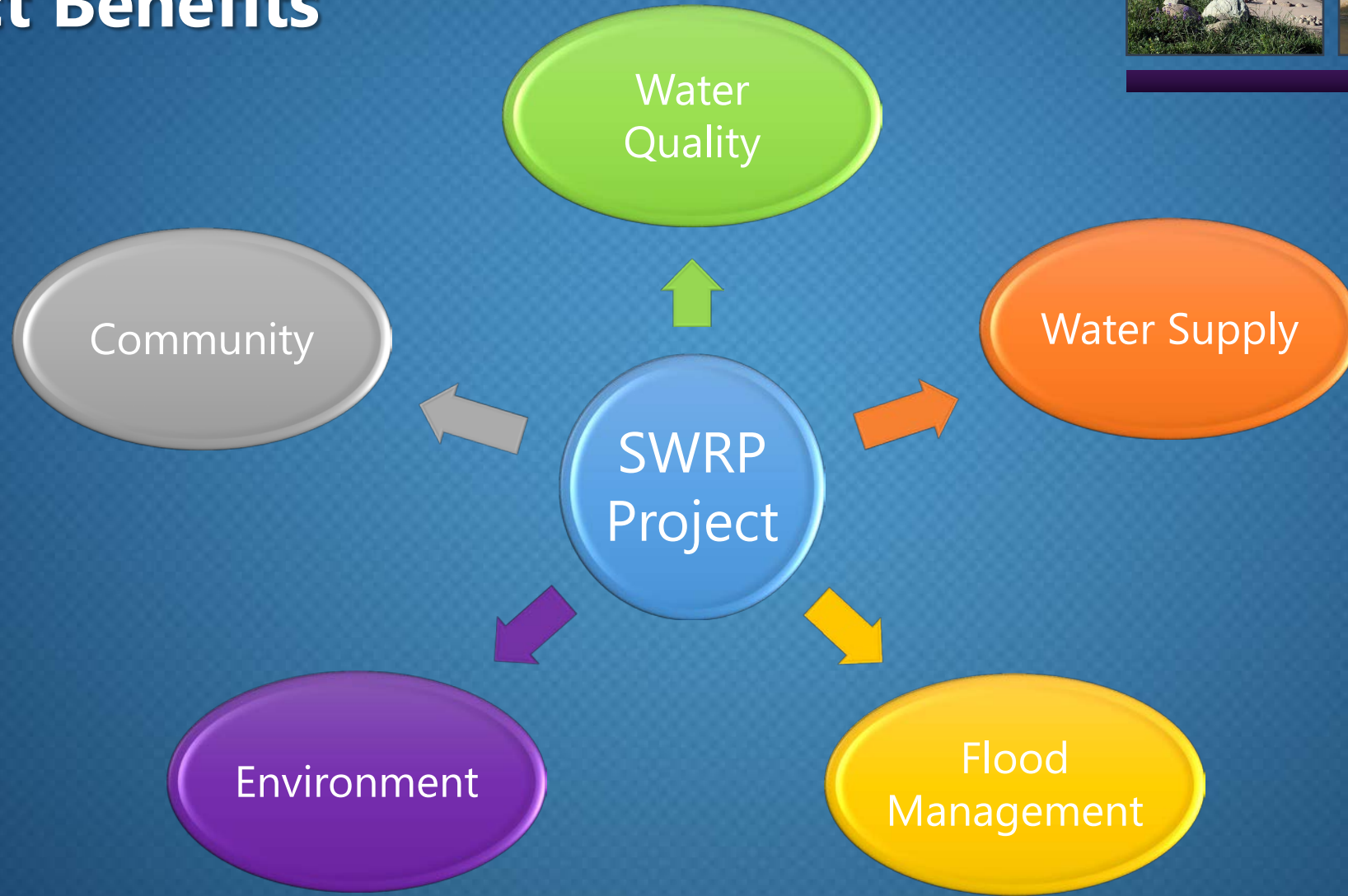
Project Prioritization



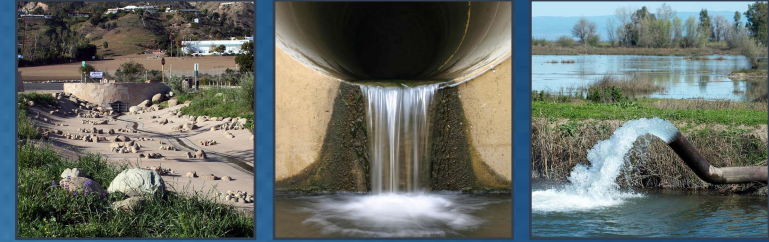
- *[A Storm Water Resource Plan] shall use measurable factors to identify, quantify, and prioritize potential stormwater and dry weather runoff capture projects. (Wat. Code, § 10562, subd. (e).)*
- Project Eligibility (Fatal Flaw Analysis)
 - Each Project must meet **all** of the following:

Can the project be sponsored by an eligible applicant?	Yes/No
Is the project a stormwater or dry weather runoff project?	Yes/No
Does the project provide two or more SWRP Main Benefits?	Yes/No
Does the project provide at least one SWRP Additional Benefit?	Yes/No

Project Benefits

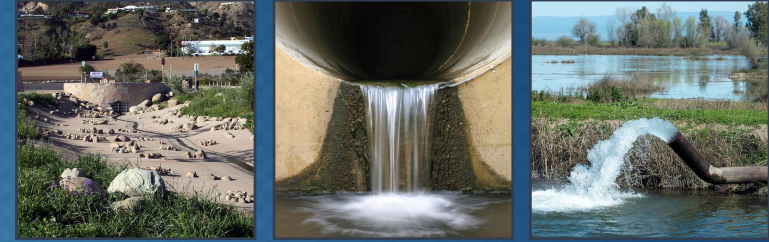


SWRP Main Benefits



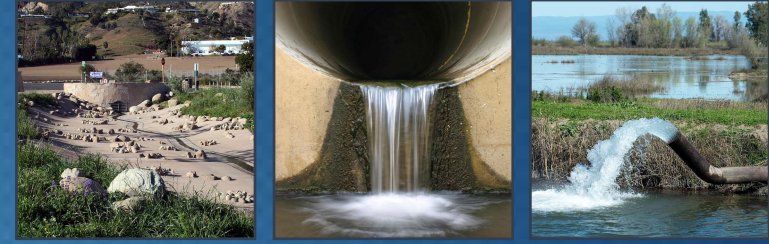
Benefit Category	Main Benefit
Water Quality	Increased filtration and/or treatment of water
Water Supply	Water supply reliability
	Conjunctive Use
Flood Management	Decreased flood risk by reducing runoff rate and/or volume
Environmental	Environmental habitat protection and/or improvement, including: <ul style="list-style-type: none"> - Wetland enhancement/creation; - Riparian enhancement; and/or
	Instream flow improvement
	Increased urban green space
Community	Employment opportunities provided
	Public education

SWRP Additional Benefits



Benefit Category	Additional Benefit
Water Quality	Nonpoint source pollution control
	Reestablished natural water drainage and treatment
Water Supply	Water conservation
Flood Management	Reduced sanitary sewer overflows
Environmental	Reduced energy use, greenhouse gas emissions, or provides a carbon sink
	Reestablishment of natural hydrograph
	Water temperature improvements
Community	Community involvement
	Enhance and/or create recreational and public use areas

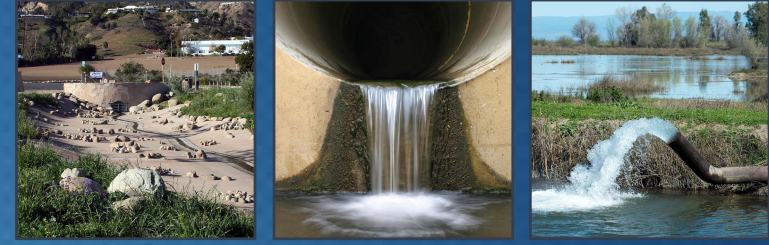
Project Prioritization Approach



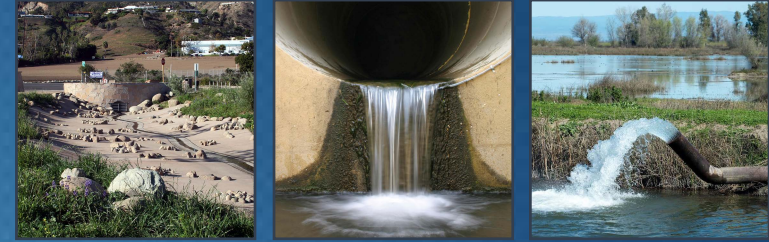
- Eligible Projects receive credit for:
 - Providing SWRP Main Benefits and Additional Benefits
 - Addressing regional watershed priorities
 - Progress towards project implementation
- Projects are prioritized based on points awarded to each project
- Project scores are intended as a tool for the Project Proponents
- Scores do **not** dictate which projects receive future funding

Quantified Project Benefits

- Summarized using maps and tables
- Broken down by benefit category



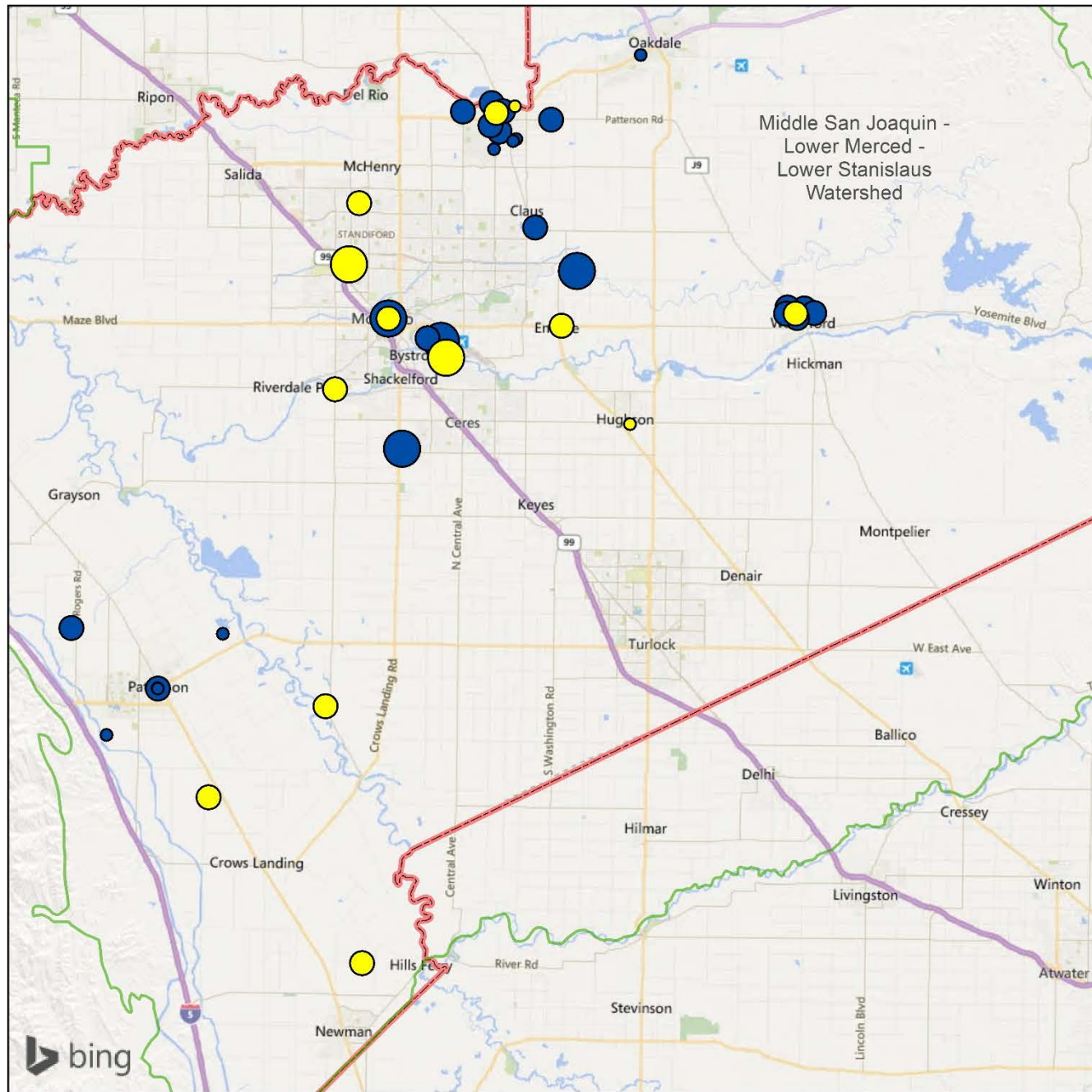
Water Quality Benefits



- 13 Ready to proceed projects
- 29 Concept projects

SWRP Benefit	Conceptual	Ready to Proceed	Total
Reduction in TSS loading (lbs/yr)	204,100	750	204,850
Trash removed (lbs/yr)	5,100	100	5,200
Volume of water treated (mgd)	510	10	520
Volume of runoff infiltrated (AFY)	2,582	3,042	5,624

Map Benefit



Water Quality Benefit Projects

Ready to Proceed Projects

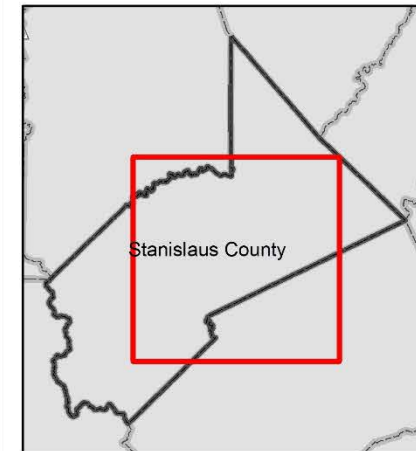
- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

Concept Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

Watershed Boundaries

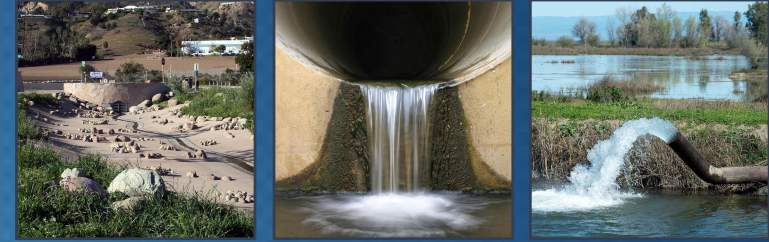
Stanislaus County / Planning Area Boundary



0 2 4 Miles



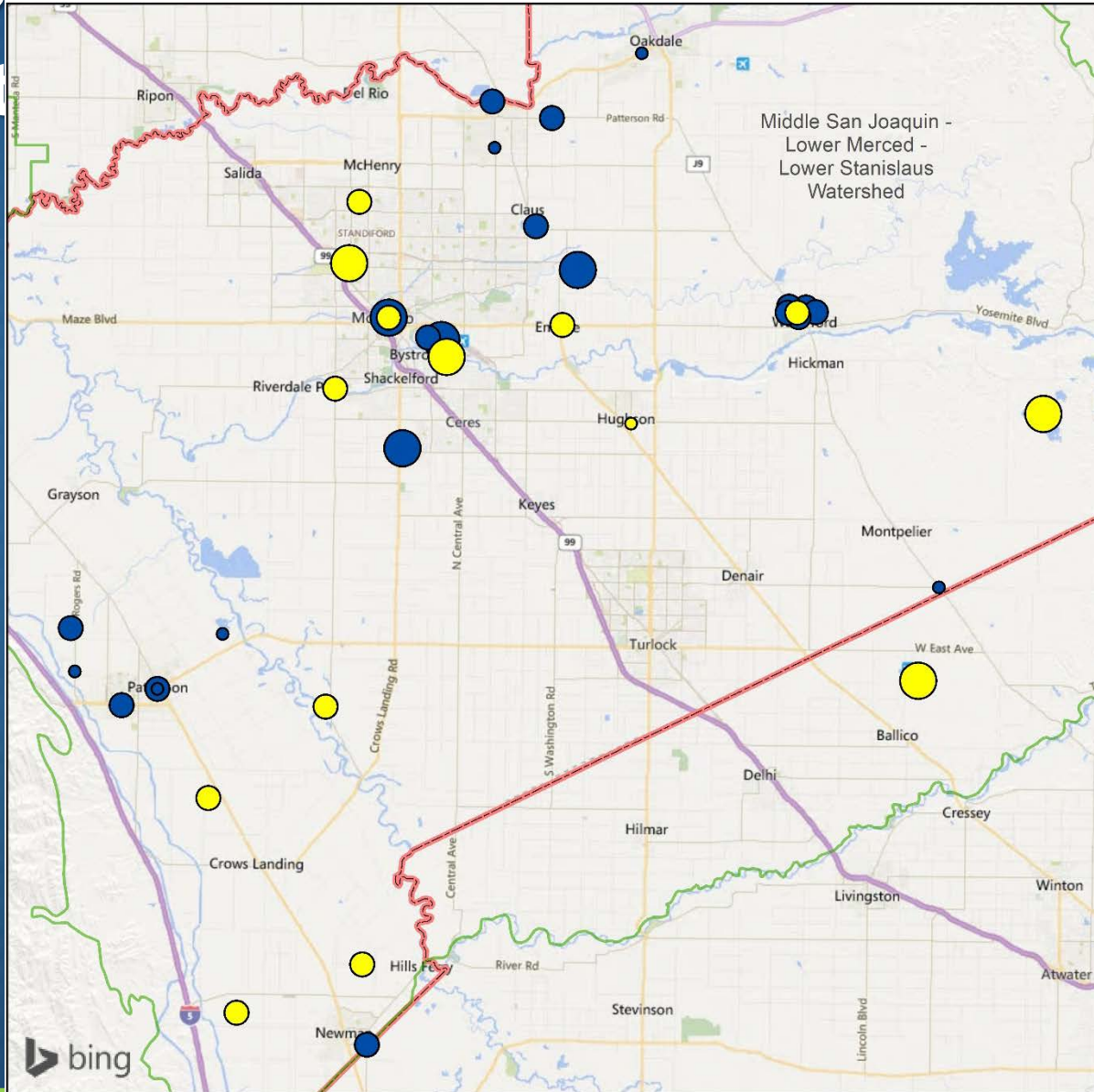
Water Supply Benefits



- 14 Ready to proceed projects
- 28 Concept projects

SWRP Benefit	Conceptual	Ready to Proceed	Total
Increase in water supply through direct groundwater recharge (AFY)	19,332	19,542	38,874
Increase in water supply through direct use (AFY)	2,572	101,000	103,572
Increase in water supply through in lieu recharge/conjunctive use (AFY)	15,000	10,000	25,000
Reduction in water use (AFY)	-	240	240

Map: Potential Water Supply Benefit Projects



Water Supply Benefit Projects

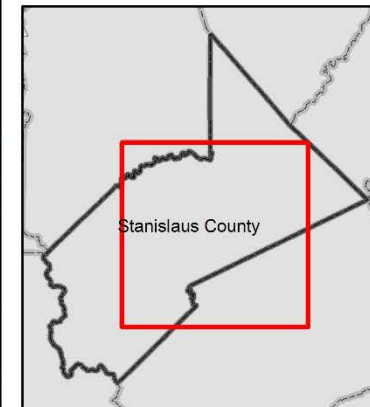
Ready to Proceed Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

Concept Projects

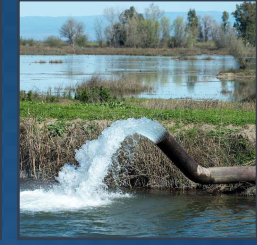
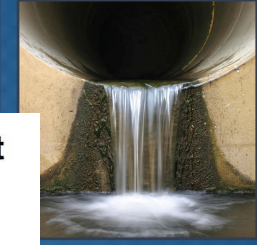
- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

- Watershed Boundaries
- Stanislaus County / Planning Area Boundary

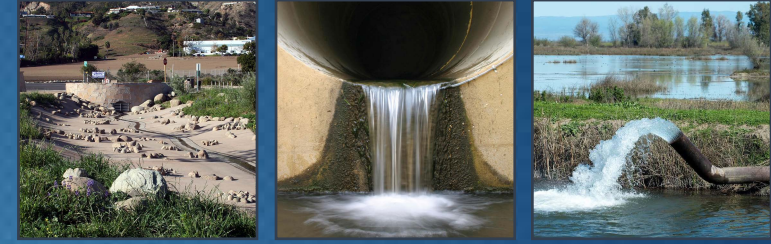


See note in Chapter 6 regarding inclusion of one project that falls outside County boundaries.

0 2 4 Miles



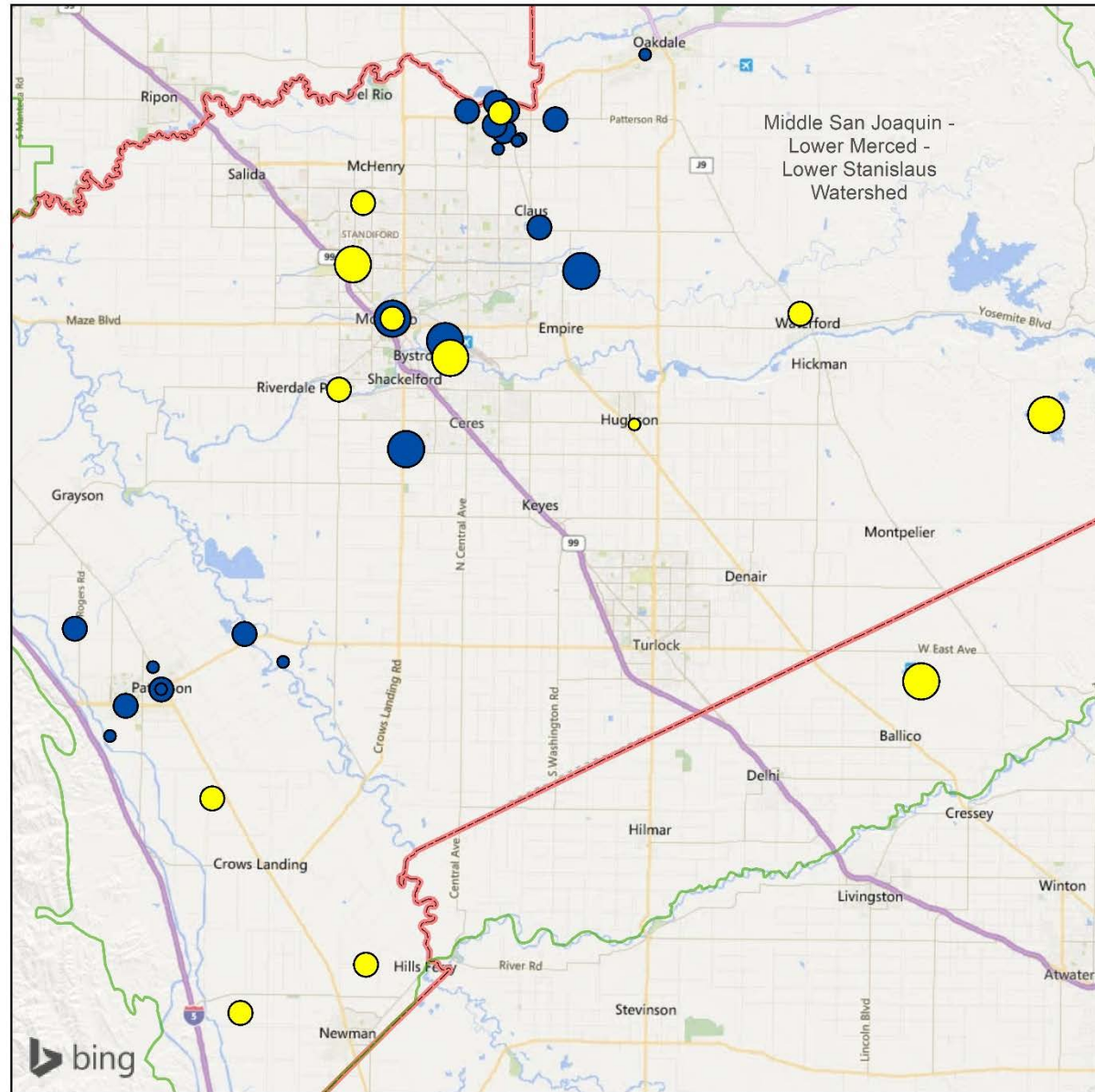
Flood Management Benefits



- 11 Ready to proceed projects
- 27 Concept projects

SWRP Benefit	Conceptual	Ready to Proceed	Total
Reduction in peak flow discharge (cfs)	145	2,685	2,830
Reduction in volume of potential flood water (AFY)	2,662	25,052	27,714
Reduction in sewer overflow volumes (AFY)	7	-	7

Map: Project Benefit



Flood Management Benefit Projects

Ready to Proceed Projects

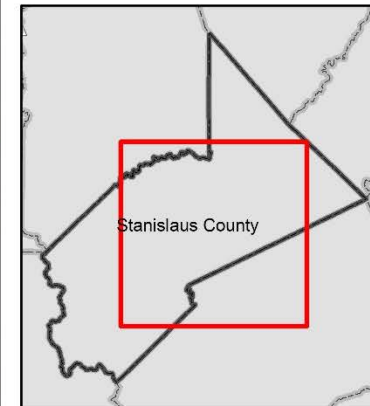
- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

Concept Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

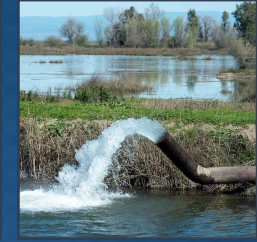
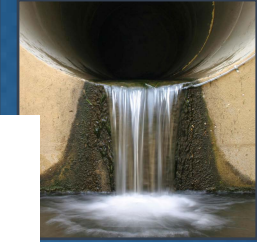
Watershed Boundaries

Stanislaus County / Planning Area Boundary

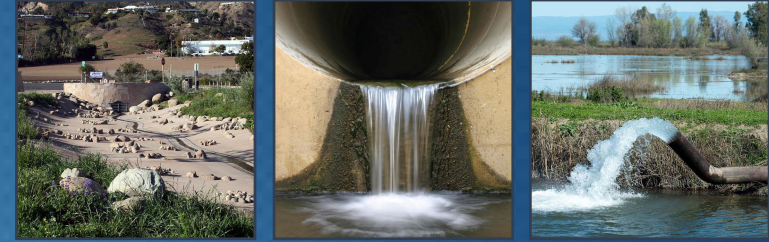


See note in Chapter 6 regarding inclusion of one project that falls outside County boundaries.

0 2 4 Miles



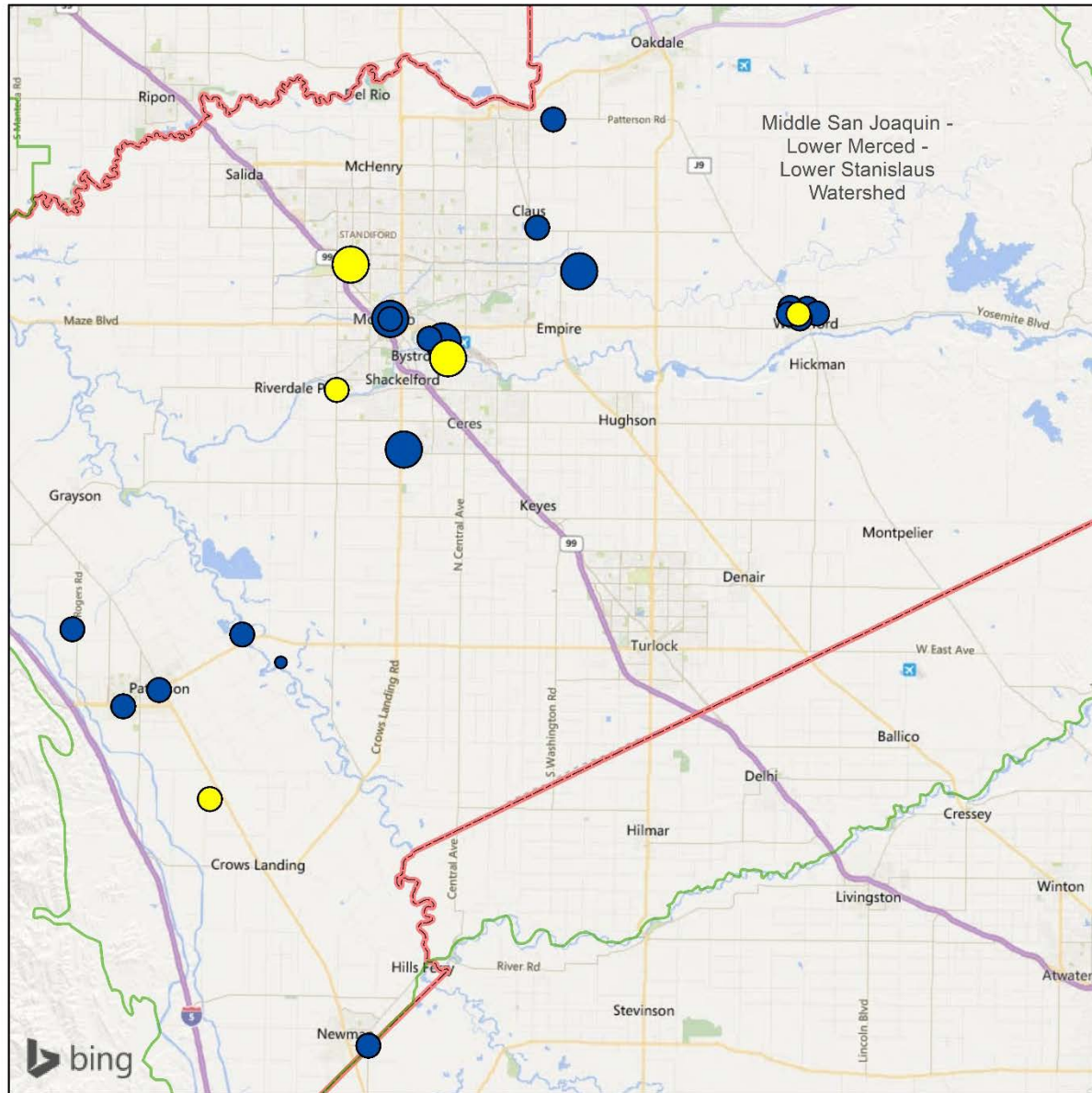
Environmental Benefits



- 9 Ready to proceed projects
- 14 Concept projects

SWRP Benefit	Conceptual	Ready to Proceed	Total
Habitat protected or improved (acres)	50	3,513	3,563
Instream flow rate improvement (cfs)	65	15	80
Energy consumption reduced (KWH/year)	525,000	997,500	1,522,500
GHG emissions reduced (tons/year)	391	743	1,134

Map: Potential Environmental Benefit Projects



Environmental Benefit Projects

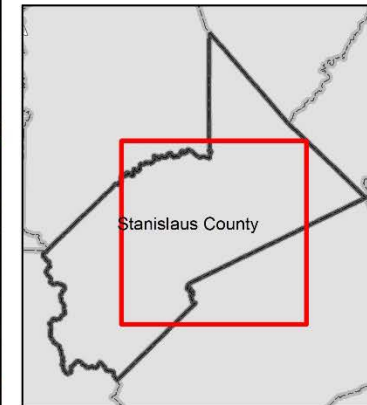
Ready to Proceed Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

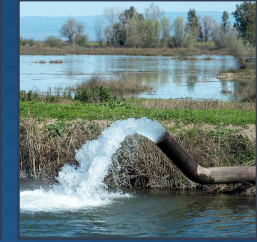
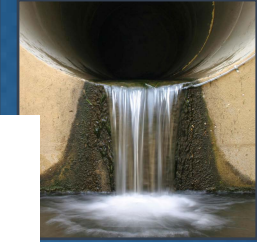
Concept Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

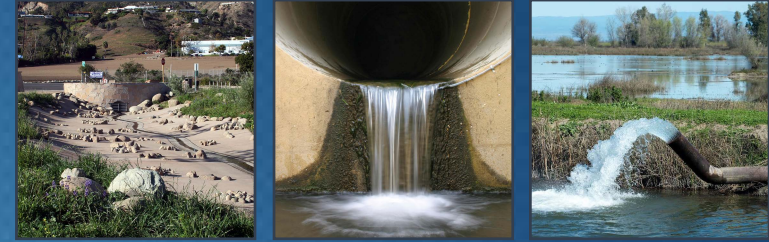
- Watershed Boundaries
- Stanislaus County / Planning Area Boundary



0 2 4 Miles



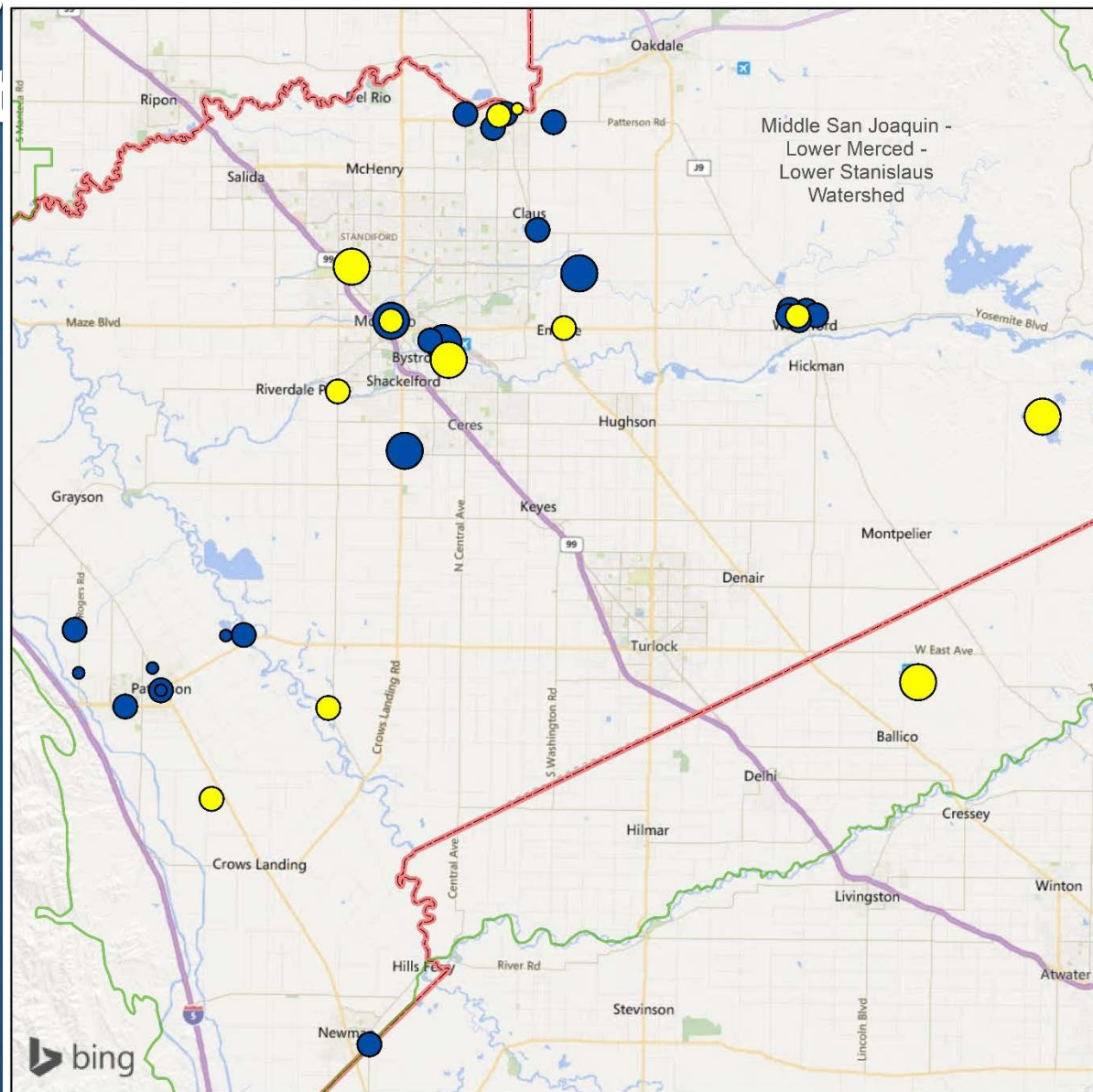
Community Benefits



- 6 Ready to proceed projects
- 13 Concept projects

SWRP Benefit	Conceptual	Ready to Proceed	Total
Number of employment opportunities provided	-	4	4
Participants per year	62	200	262
Number of outreach materials provided or events conducted	-	27	27
Estimated visits per year	20,250	10,200	30,450

Map: Project Benefit



Community Benefit Projects

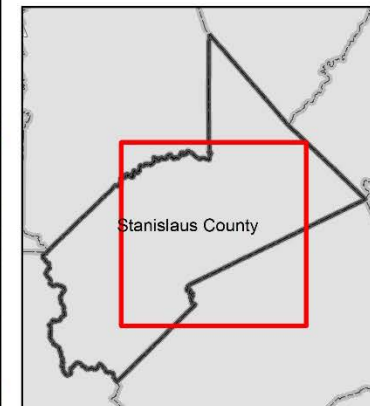
Ready to Proceed Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

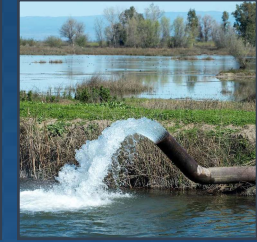
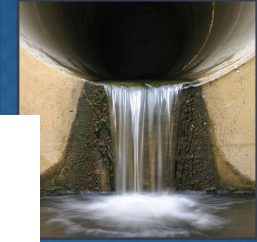
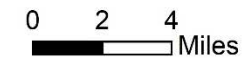
Concept Projects

- 15 - 30 Points
- 31 - 50 Points
- 51 - 69 Points

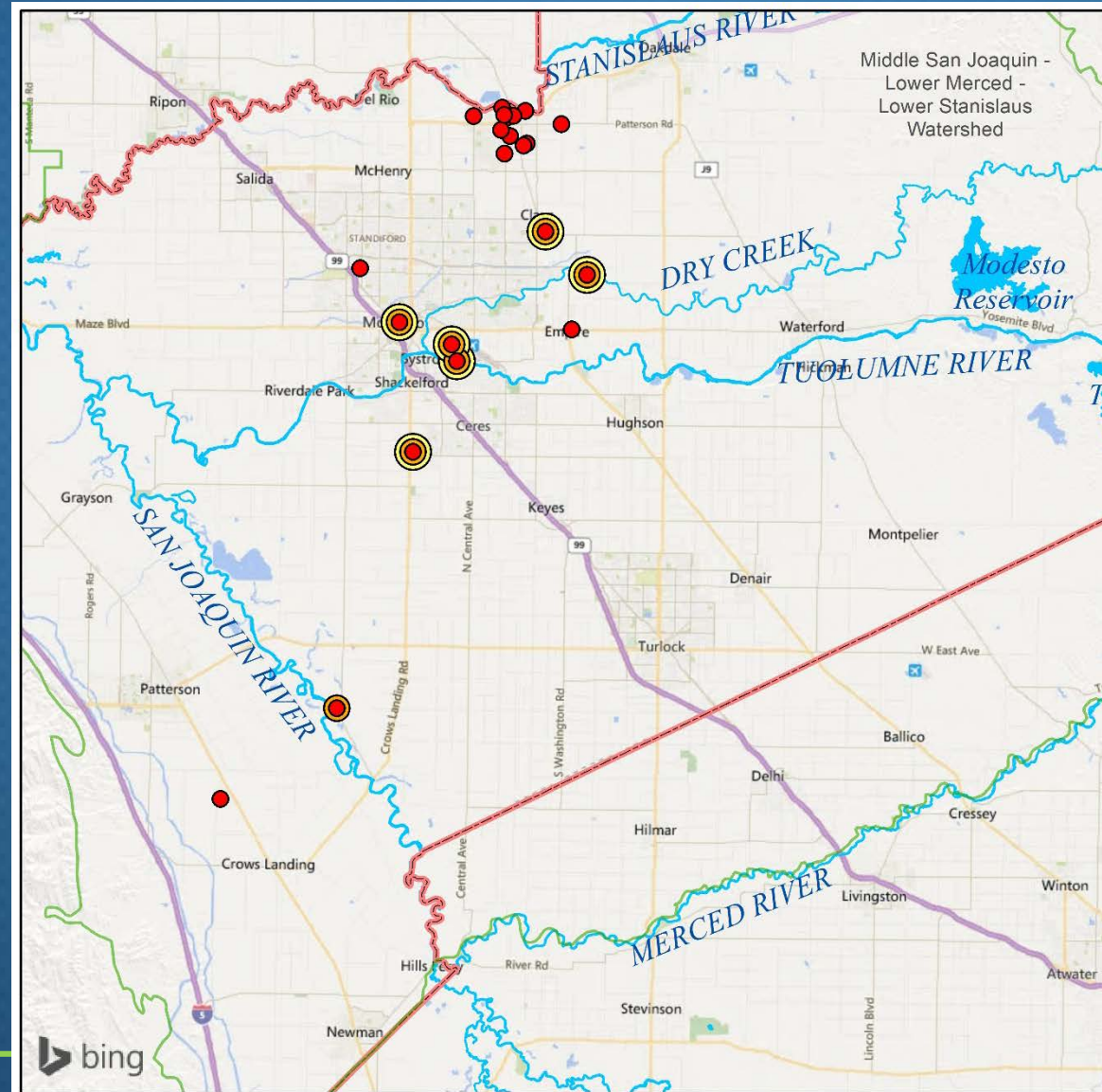
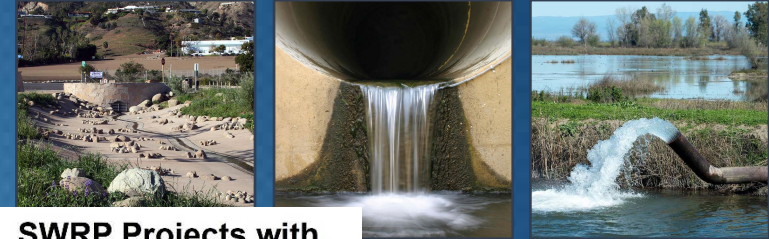
- Watershed Boundaries
- Stanislaus County / Planning Area Boundary



See note in Chapter 6 regarding inclusion of one project that falls outside County boundaries.

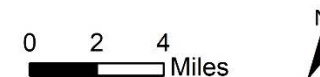


Projects with TMDL and 303(d) List Benefits

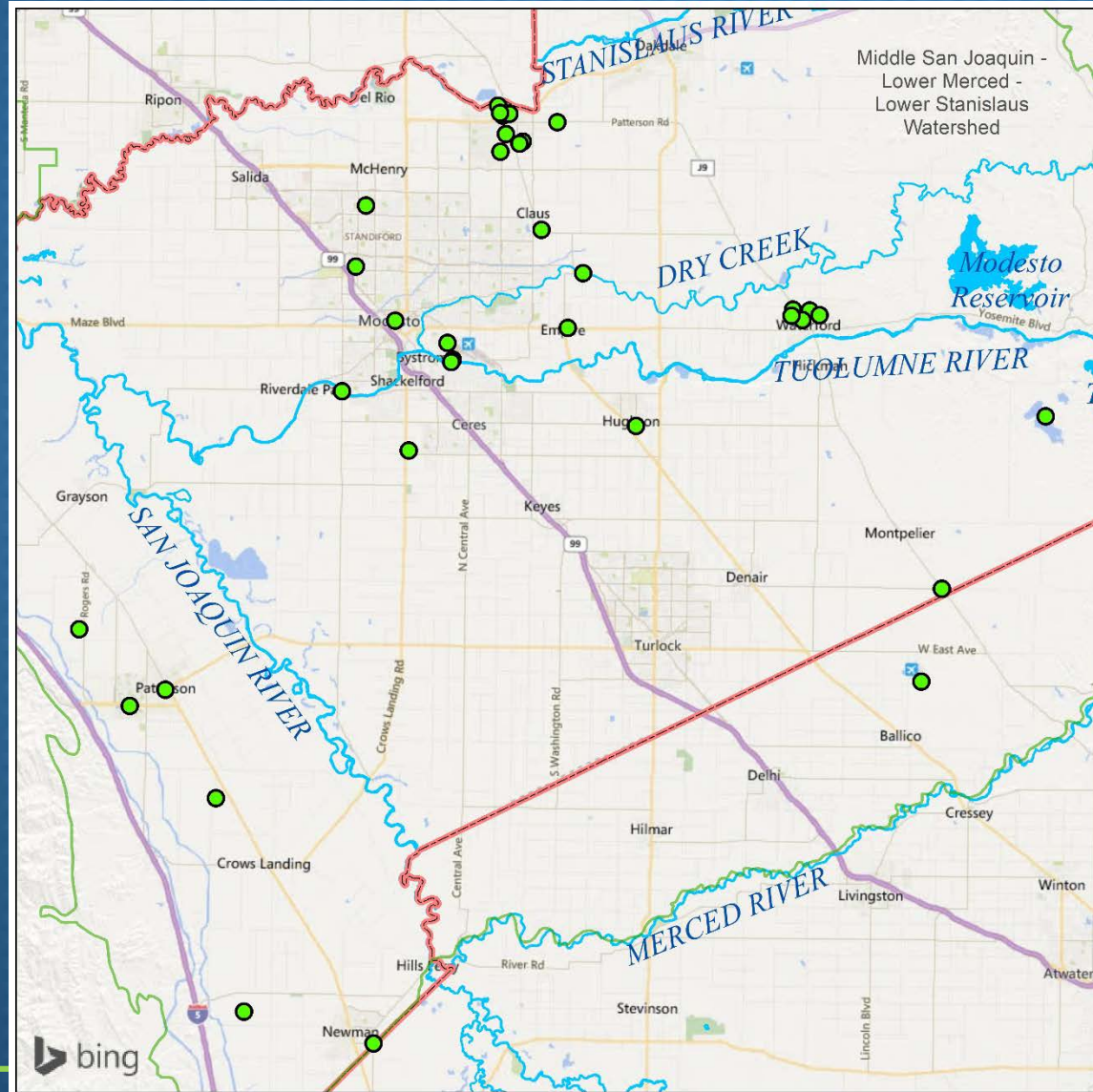


SWRP Projects with TMDL and 303(d) List Benefits

- Project reduces pollutant loading to 303(d)-listed water body
- Project supports Central Valley Pesticides TMDL
- Project Supports Delta Diazinon and Chlorpyrifos TMDL
- Watershed Boundaries
- Stanislaus County / Planning Area Boundary
- Surface Water

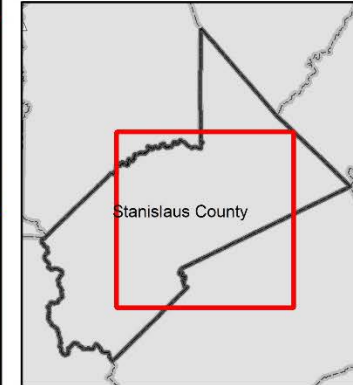


Stormwater Capture and Recharge Projects



Stormwater Capture and Recharge Projects

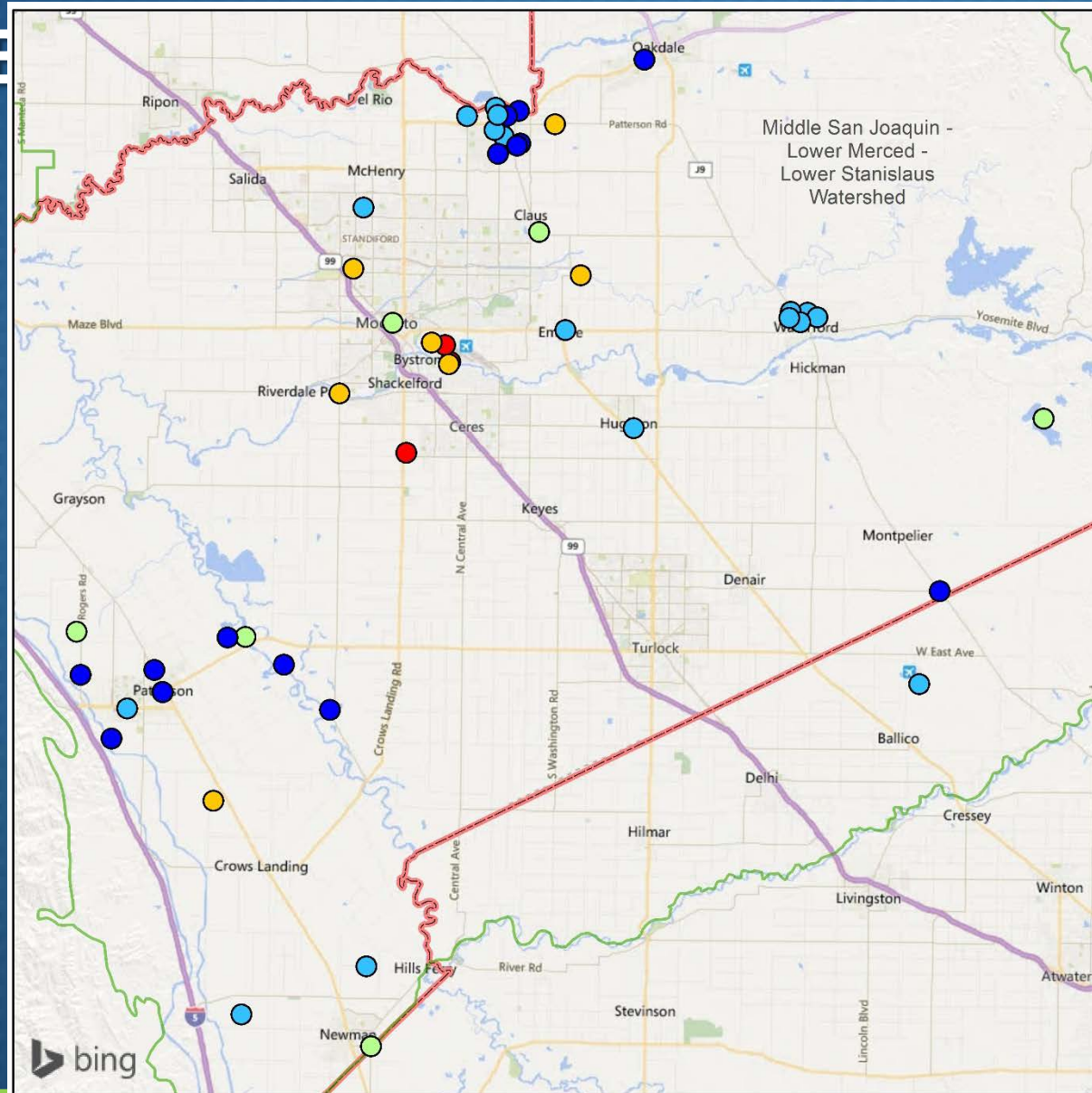
- Project augments water supply via SW capture and direct and/or in-lieu GW recharge
- Watershed Boundaries
- Stanislaus County / Planning Area Boundary
- Surface Water



See note in Chapter 6 regarding inclusion of one project that falls outside County boundaries.



Multi-E

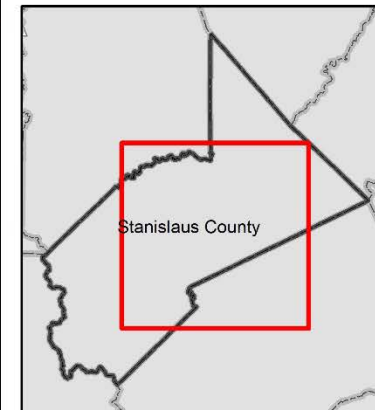


SWRP Projects

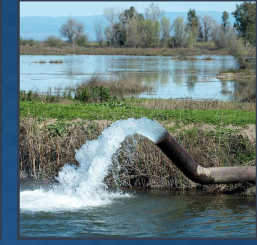
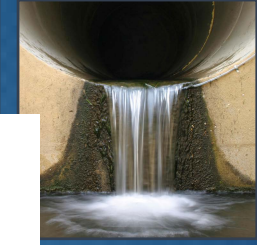
Total Number of Benefits Provided

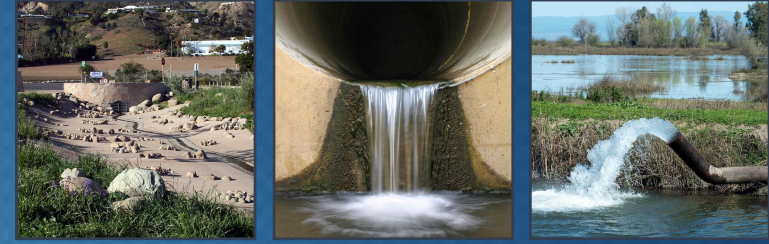
- 3 - 4
- 5 - 6
- 7 - 8
- 9 - 11
- 12 - 14

- ▭ Watershed Boundaries
- ▭ Stanislaus County / Planning Area Boundary



See note in Chapter 6 regarding inclusion of one project that falls outside County boundaries.



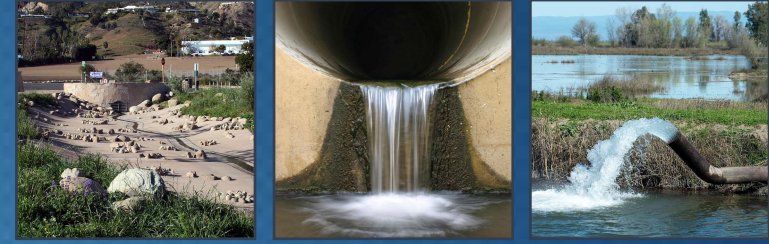


Next Steps

- Continue to prepare SWRP sections
- Continue outreach to stakeholders, disadvantaged communities (DACs), and public
- Assess stormwater capture/groundwater recharge sites
- Conduct stormwater monitoring (October 2018)

The SWRP will be completed so that included projects will be eligible for SWGP and IRWM Implementation Funding in late 2018/early 2019

Questions/Comments?



Hawkeye Sheene

415.321.3427

hsheene@woodardcurran.com

Woodard & Curran