



# STORM WATER RESOURCE PLAN

## TAC MEETING

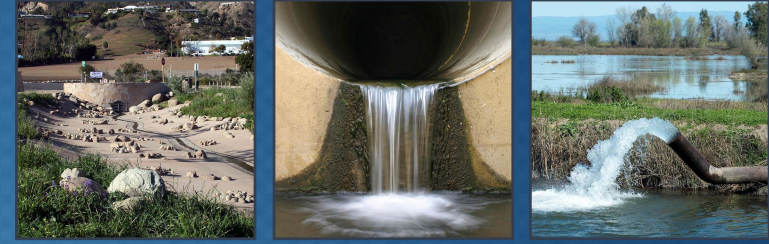
September 20, 2018  
Presenter: Hawkeye Sheene

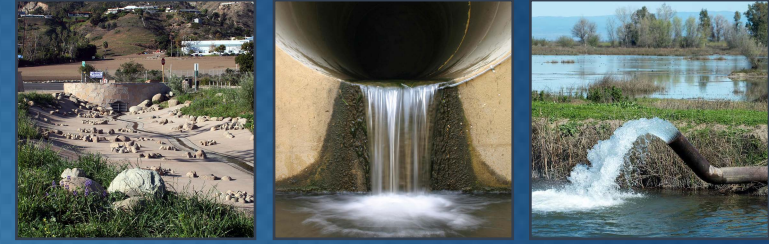




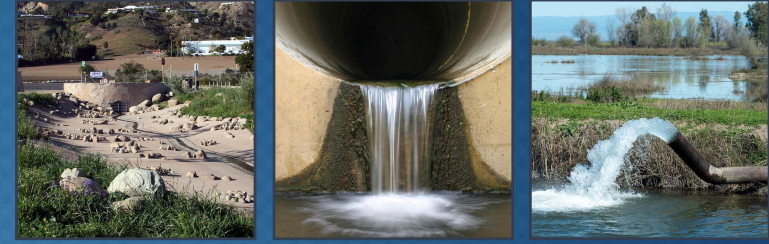
# Agenda

- Introductions
- SWRP Overview
- SWRP Sections
- Next Steps and Schedule





# Introductions

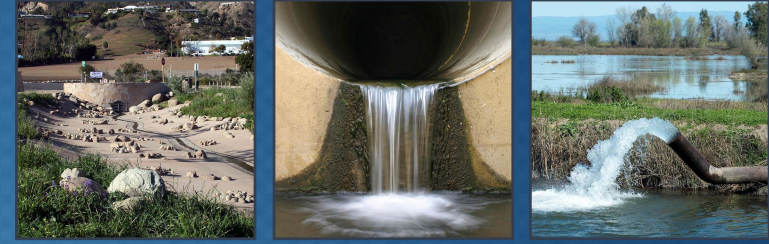


# SWRP Overview



# What is a SWRP?

Integrated plan focusing on regional watershed-based stormwater priorities and developing multiple benefit projects for upcoming funding opportunities



## Storm Water Resource Plan

### Guidelines

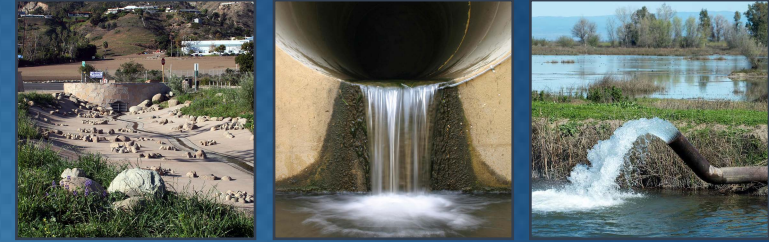


December 15, 2015

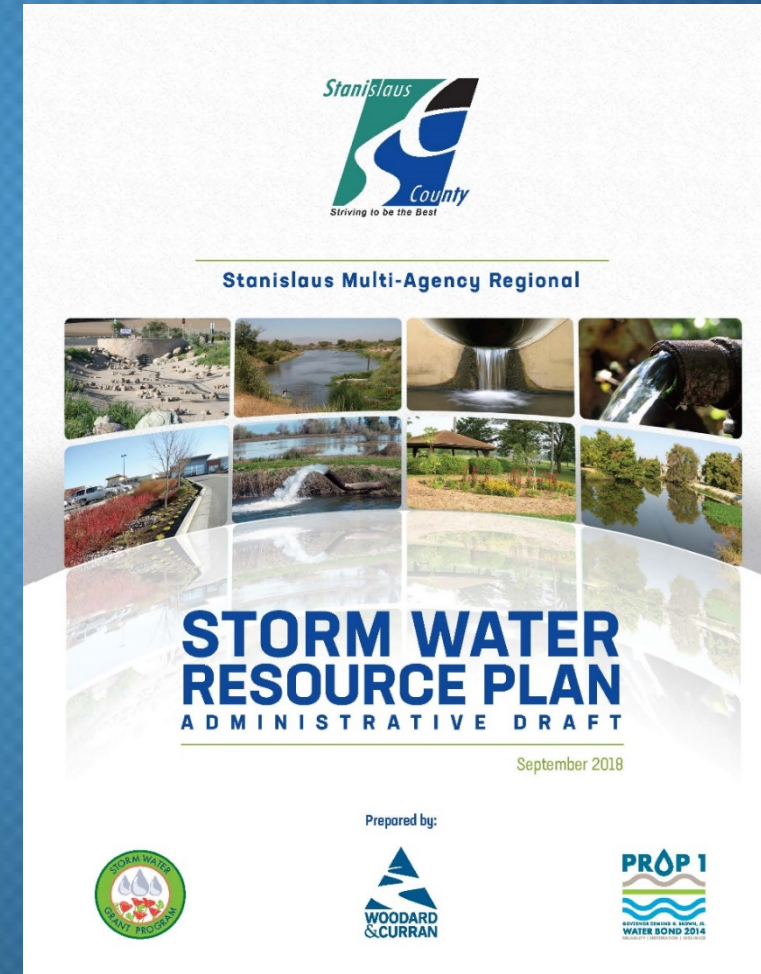
STATE WATER RESOURCES CONTROL BOARD  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



# Stanislaus Multi-Agency Regional Storm Water Resource Plan



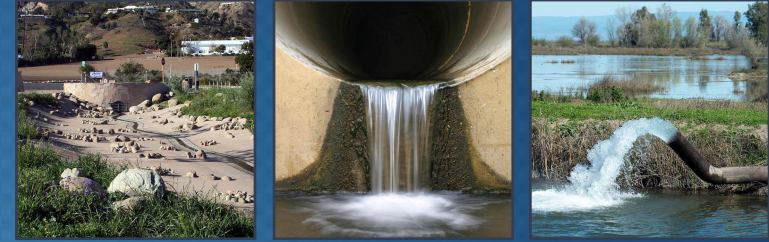
- Stanislaus County was awarded SWRCB Prop 1 grant funding to complete a Storm Water Resource Plan (SWRP)
- This SWRP is required in order for stormwater and dry weather runoff capture projects to receive future state grant funding





# Major SWRP Requirements

- 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



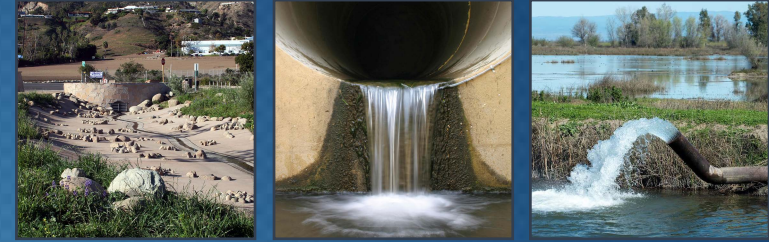
December 15, 2015

STATE WATER RESOURCES CONTROL BOARD  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



# SWRP Checklist and Self-Certification

- SWRP Checklist lists all SWRP requirements.
- SWRP was prepared to comply with guidelines and the checklist.
- Relevant sections and figures are referenced in checklist.
- Checklist to be submitted with SWRP



**Storm Water Resource Plan Checklist and Self-Certification**

The following should be completed and submitted to the State Water Resources Control Board Division of Financial Assistance in support of a storm water resource plan functionally equivalent plan. The documents submitted, including this checklist, will be used to determine State Water Board concurrence with the Storm Water Resource Plan Guidelines and

When combining multiple documents to form a functional document, submit a cover letter explaining the approach used to cover letter should explain how the documents work together.

STORM WATER RESOURCE PLAN	
Contact Info:	Frederic Clark (209) 525-430
Name	clarkf@stanc
Phone Number	
Email	
Date Submitted to State Water Resource Control Board:	Pending
Regional Water Quality Control Board:	Central Valley
Title of attached documents (expand list as needed):	Administrative Storm Water

STORM WATER RESOURCE PLAN	
Storm Water Resource Plan Title:	Stanislaus Multi-Age
Date Plan Completed/Adopted:	Pending
Public Agency Preparer:	Stanislaus County, D
IRWM Submission:	Pending
Plan Description:	The Stanislaus Multi-Age an integrated document and dry weather runoff primary purpose of the stormwater projects, private water resource manager County.

A -  
Storm Water Resource Plan Self-Certification Checklist  
September 2018

**STORM WATER RESOURCE PLAN CHECKLIST AND SELF-CERTIFICATION**

Mandatory Required Elements per California Water Code are Shaded and Text is Bold

Y/N	Plan Element	Water Code Section
	<b>WATERSHED IDENTIFICATION (GUIDELINES SECTION VI.A)</b>	
	1. Plan identifies watershed and subwatershed(s) for storm water resource planning.	10565(c) 10562(b)(1) 10565(c)
	<b>References:</b> The SWRP identifies the planning area, as well as the watershed and subwatersheds in Section 2.1 (page 2-1 to 2-3); Figure 2-1 (page 2-2)	
	2. Plan is developed on a watershed basis, using boundaries as delineated by USGS, CalWater, USGS Hydrologic Unit designations, or an applicable integrated regional water management group, and includes a description and boundary map of each watershed and sub-watershed applicable to the Plan.	
	<b>References:</b> Section 2 and 2.1 (page 2-1); Figure 2-1 (page 2-2)	

A - 2  
Storm Water Resource Plan Self-Certification Checklist  
September 2018

EDUCATION, OUTREACH, PUBLIC PARTICIPATION (GUIDELINES SECTION VI.F)	
49. Plan describes strategies to engage disadvantaged and climate vulnerable communities within the Plan boundaries and ongoing tracking of their involvement in the planning process.	<b>References:</b> Section 8.3 (pages 8-5 to 8-7)
50. Plan describes efforts to identify and address environmental justice needs and issues within the watershed.	<b>References:</b> Section 8.3 (pages 8-5 to 8-7)
51. Plan includes a schedule for initial public engagement and education.	<b>References:</b> Section 8.1.1 (pages 8-2 to 8-3)

**DECLARATION AND SIGNATURE**

I declare under penalty of perjury that all information provided is true and correct to the best of my knowledge and belief.

Authorized Signature _____	Title _____	Date _____
Authorized Signature _____	Title _____	Date _____

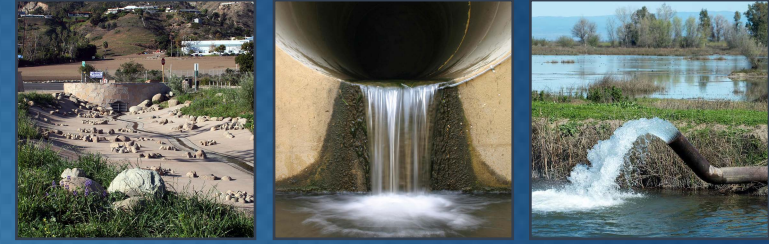
Public Agency \_\_\_\_\_

A - 3  
Storm Water Resource Plan Self-Certification Checklist  
September 2018





# Project Tasks for SWRP Grant



Task 1: Project Management

Task 2: Monitoring

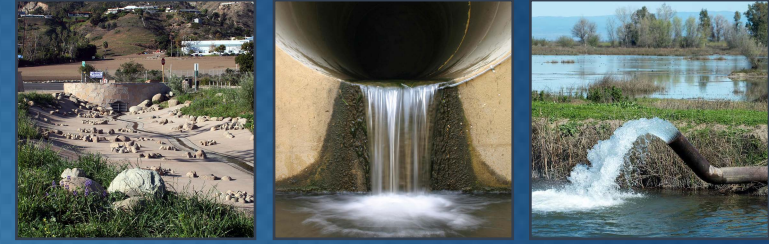
Task 3: Technical Advisory Committee

Task 4: Data Collection and Watershed Identification

Task 5: Storm Water Resource Plan Development

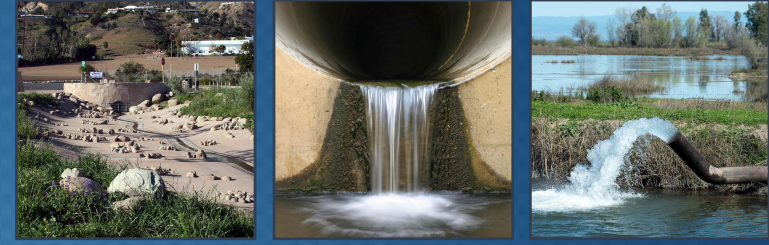
Task 6: Technical Studies to Support Development of SWRP

Task 7: Stakeholder Outreach, Education, and Public Participation



# SWRP Schedule





# Project Timeline

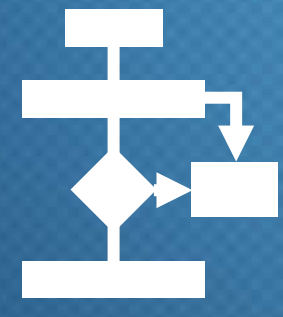
Anticipated funding solicitation  
May 2019



Establish TAC



Develop SWRP Components and Protocols



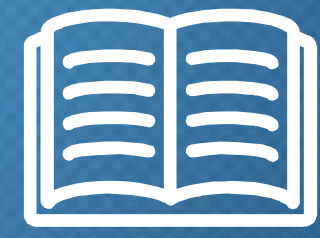
Solicit and Prioritize Projects



Draft Storm Water Resources Plan



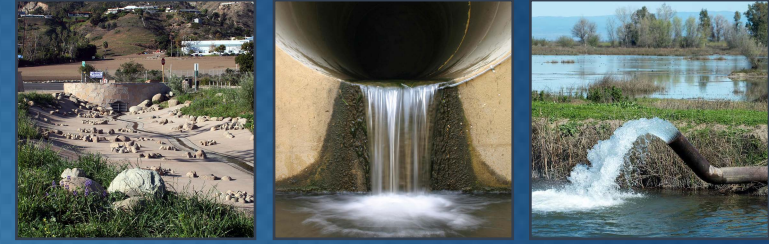
Address Comments on Plan



Public Draft Storm Water Resources Plan

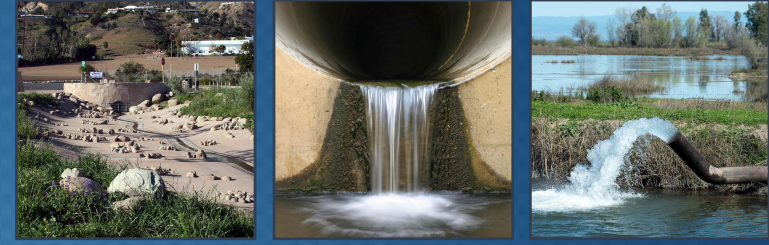


Final Storm Water Resources Plan



# SWRP Goals/Objectives

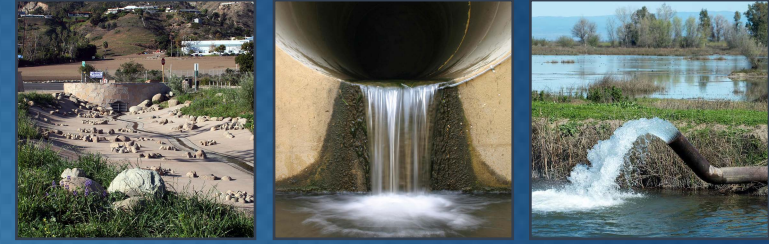




# Proposed SWRP Goals and Objectives

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

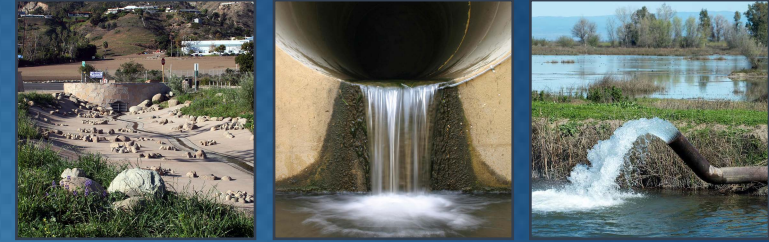




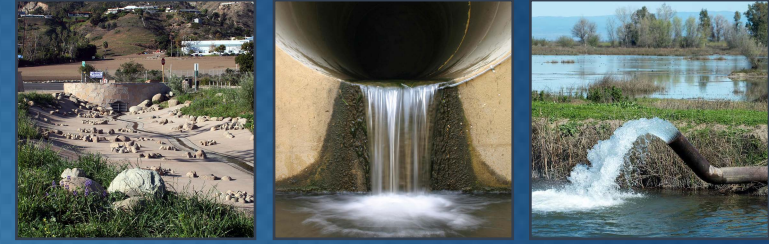
# SWRP Sections



# SWRP Sections



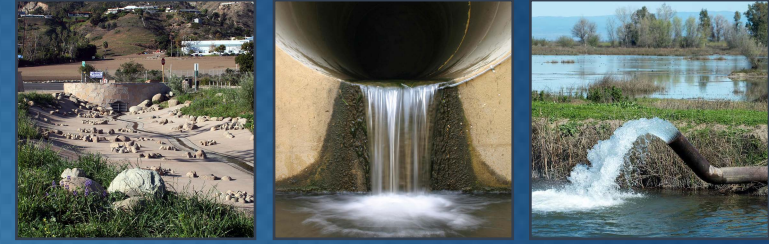
Chapter	Guidelines Section
1. Introduction	-
2. Planning Area Description	Section VI.A
3. Water Quality Compliance	Section V
4. Organization, Coordination, Collaboration	Section VI.B
5. Quantitative Methods	Section VI.C
6. Identification and Prioritization of Projects	Section VI.D
7. Implementation Strategy and Schedule	Section VI.E
8. Education, Outreach, Public Participation	Section VI.F



# Section 2: Planning Area Description

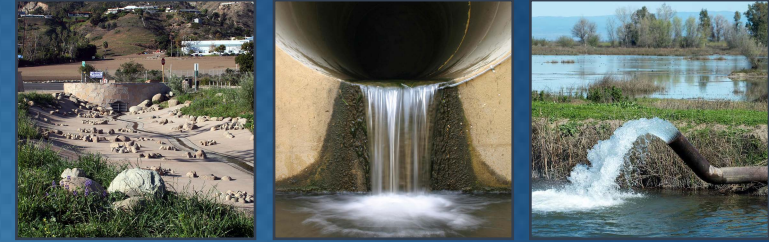


# *Guideline Requirements Overview*



- *Identify watersheds and explain selected boundary*
- *Describe internal boundaries (e.g., municipalities, water and wastewater agencies, groundwater basins, etc.)*
- *Describe potable water suppliers and supplies within planning area*
- *Discuss natural watershed processes*
- *Describe water quality priorities*

# Planning Area Description: Relevant Planning Documents



Data and documentation collection included:

- IRWM Plans
- Flood Management Plans
- Urban Water Management Plans
- Groundwater Management Plans
- Master Plans

*Stanislaus Multi-Agency Storm Water Resource Plan  
Grant Agreement No. D1612618*

*Task 4.1 Annotated List of Data and Reports*

**Table 1. Documents Collected**

Title	Year Published	Relevance to SWRP
East Stanislaus Integrated Regional Water Management Plan	2013	Water quality Compliance, Organization, Coordination, Collaboration, Identification and Prioritization of Projects, Education, Outreach, Public Participation
Westside San Joaquin Integrated Regional Water Management Plan	2014	Water quality Compliance, Organization, Coordination, Collaboration, Identification and Prioritization of Projects, Education, Outreach, Public Participation
Mid San Joaquin Regional Flood Management Program	2014	Watershed Identification, Identification and Prioritization of Projects
Stanislaus County Post-Construction Standards Plan	2015	Watershed Identification
Oakdale Stormwater Master Plan*	2015	Watershed Identification, Quantitative Methods, Identification and Prioritization of Projects
Turlock Groundwater Basin Groundwater Management Plan	2008	Watershed Identification, Quantitative Methods
Eastside Water District – Geologic, Hydrologic, and Hydrogeologic Characterizations for Potential Managed Aquifer Recharge of Diffused Stormwater*	2014	Watershed Identification, Identification and Prioritization of Projects, Water Quality Compliance
2011 Revised Guidance Manual for Development Stormwater Quality Control Measures (City of Modesto Stormwater Management Program)	2011	Identification and Prioritization of Projects, Water Quality Compliance
Empire Community Storm Drainage Report Low Impact Development & Greening Study*	2014	Watershed Identification, Project Prioritization
Central California ID Water Management Plan	2014	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Modesto ID AWMP	2015	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Oakdale ID AWMP	2016	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Patterson ID Water Management Plan/AWMP	2016	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Turlock ID AWMP	2015	Watershed Identification, Coordination, Collaboration, Quantitative Methods
West Stanislaus ID Water Management Plan	2014	Watershed Identification, Coordination, Collaboration, Quantitative Methods

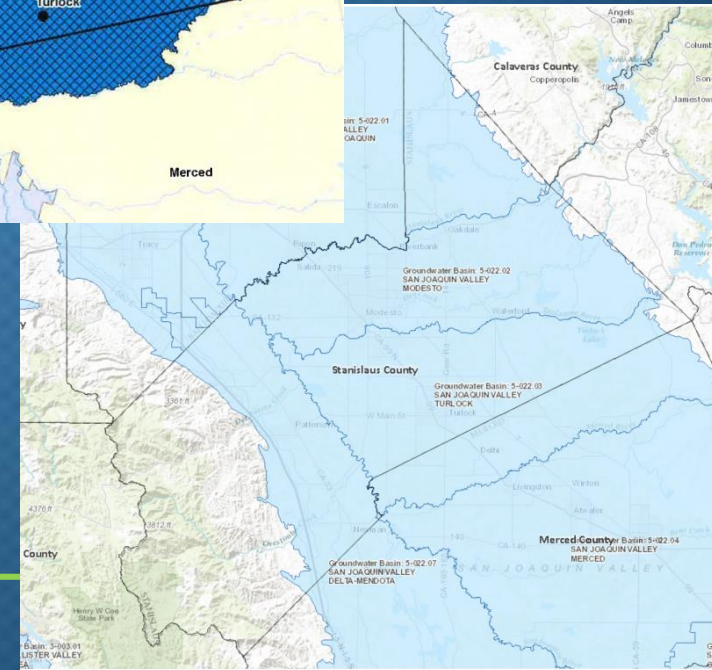
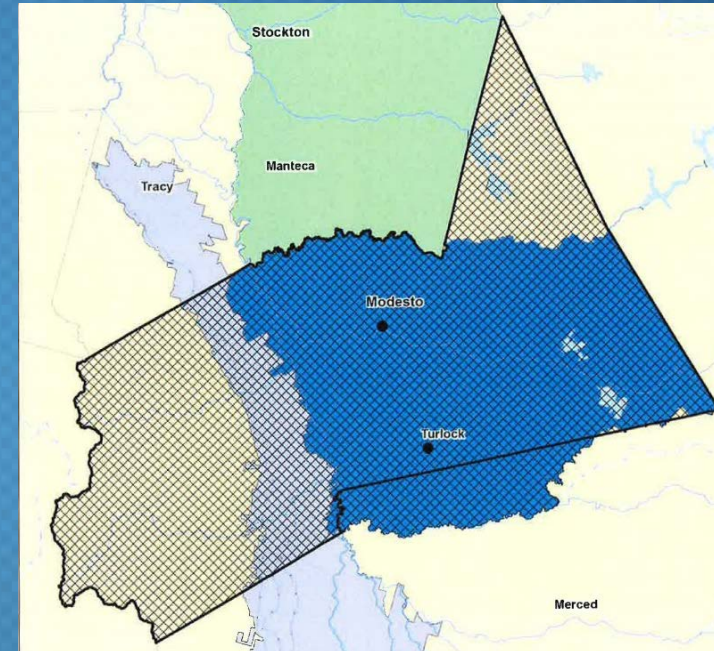
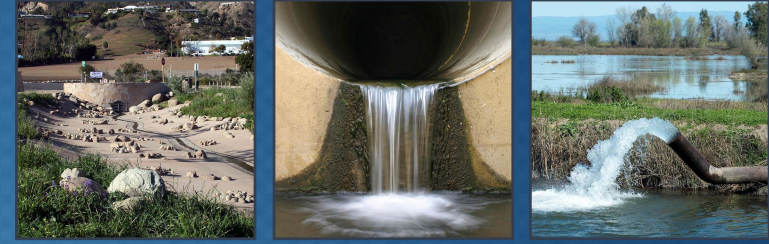
October 2017

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# Planning Area Description: Overview

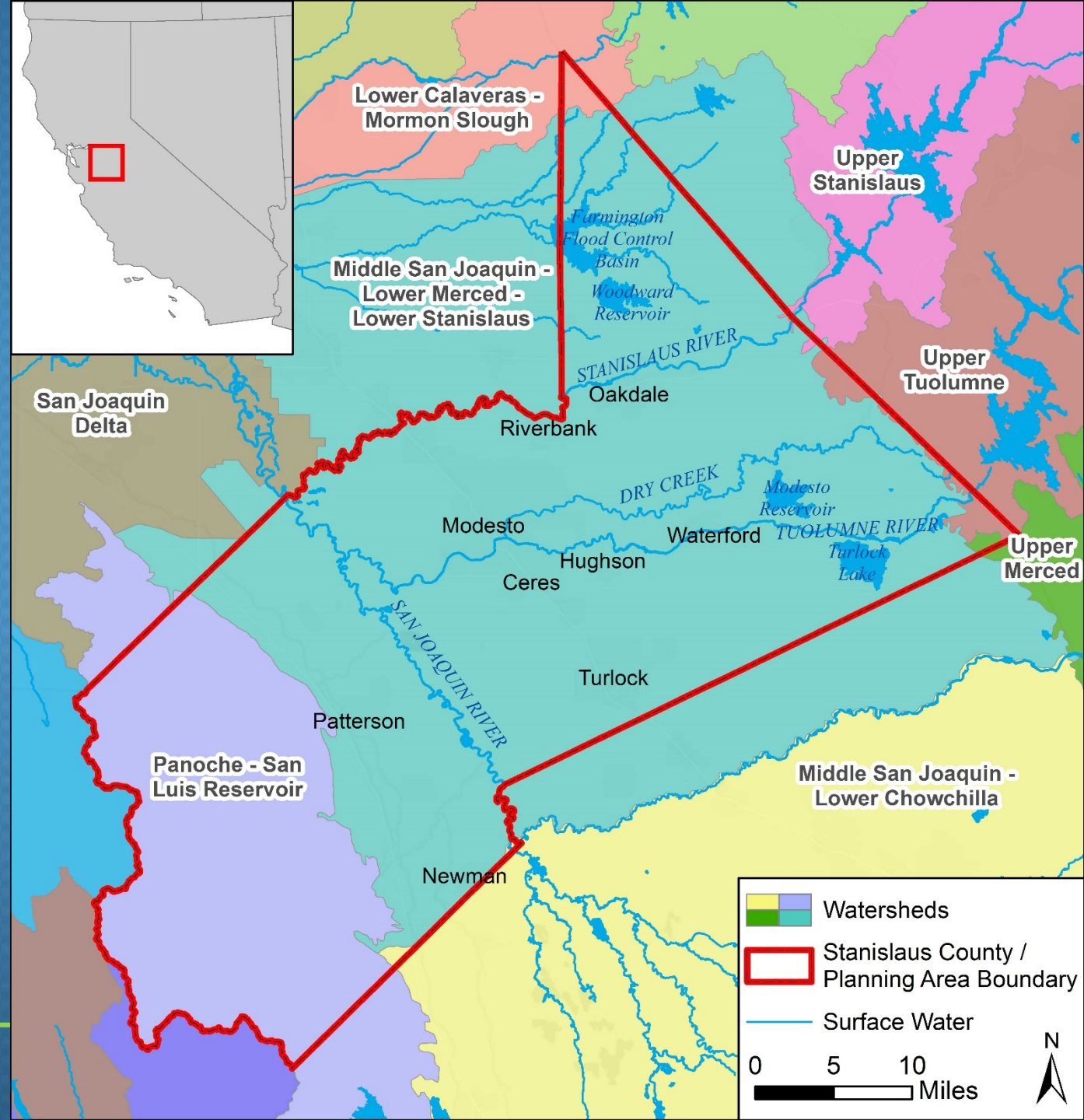
- Planning Area corresponds to Stanislaus County
- Overlaps East Stanislaus and Westside San Joaquin IRWMP areas
- Stanislaus and Tuolumne Rivers Groundwater Basin Association, Turlock Groundwater Basin Association, and San Luis & Delta-Mendota Water Authority groundwater management plan area





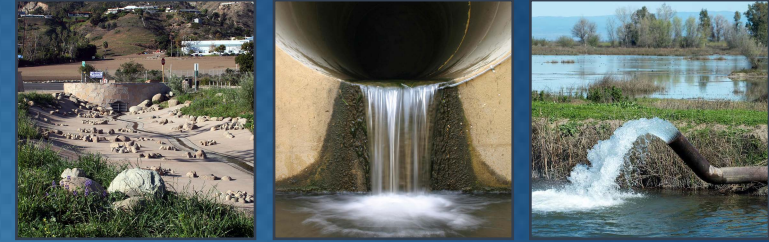
# Planning Area Description: Watersheds

- 6 Watersheds
- 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



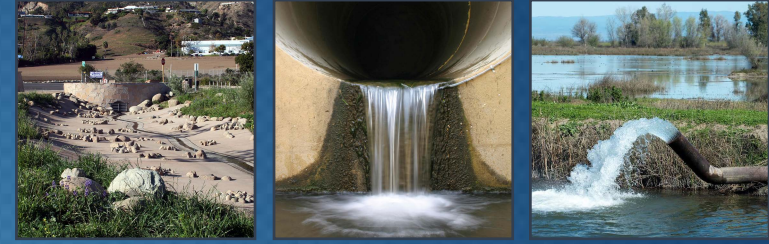


# Planning Area Description: Identify Watershed Priorities



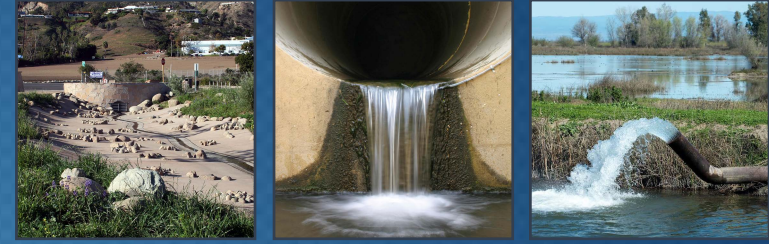
- Implement water quality improvements to support TMDL goals
- Reduce pollutant discharges into 303(d) listed impaired water bodies
- Augment water supply by capturing stormwater or dry weather runoff for recharge into a groundwater basin (where feasible)
- Provide SWRP benefits to disadvantaged communities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

# Planning Area Description: Identify Water Quality Priorities



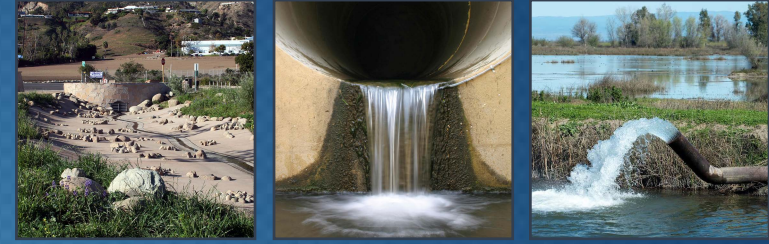
- Specific water quality priorities were also identified:
  - Total Suspended Solids
  - Mercury / Methylmercury
  - Diazinon
  - Chlorpyrifos
  - Diuron
  - Total Nitrogen





# Section 3: Water Quality Compliance

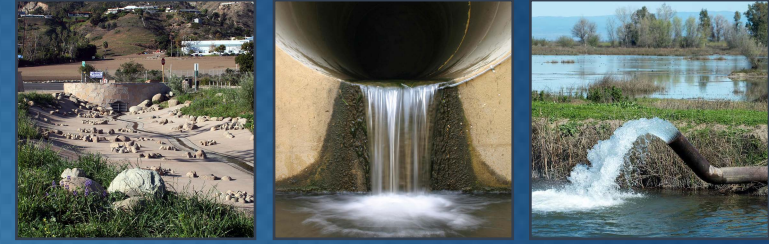
# *Guideline Requirements Overview*



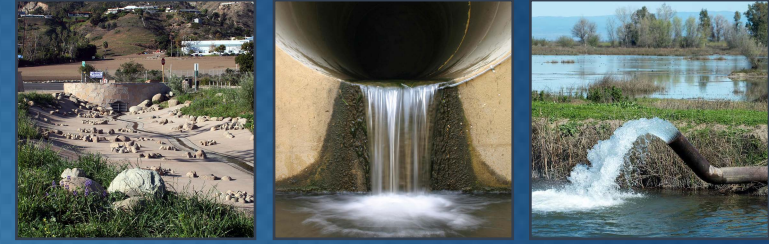
- *Identify activities that contribute to pollution or impair beneficial use*
- *Describe SWRP consistency with and support for TMDL implementation and NPDES permits*
- *Identify applicable permits and describe how the SWRP meets these*



# Water Quality Compliance: Overview



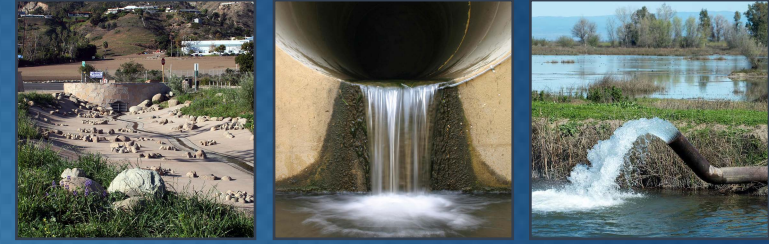
- Pollutant sources: agricultural and urban runoff
- NPDES Permits
  - Small MS4 Permit
  - Region-wide MS4 Permit
- TMDLs supported by the SWRP
  - Sacramento-San Joaquin Delta Mercury TMDL
  - Lower San Joaquin River Salt and Boron
  - Sacramento-San Joaquin Delta Diazinon and Chlorpyrifos TMDL
  - Central Valley Pesticide TMDL



# Section 4: Organization, Coordination, Collaboration

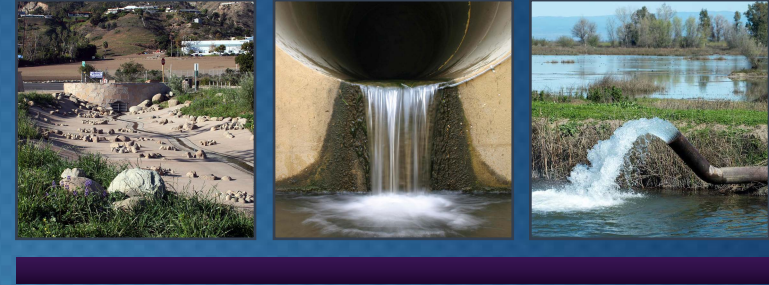


# Guideline Requirements Overview



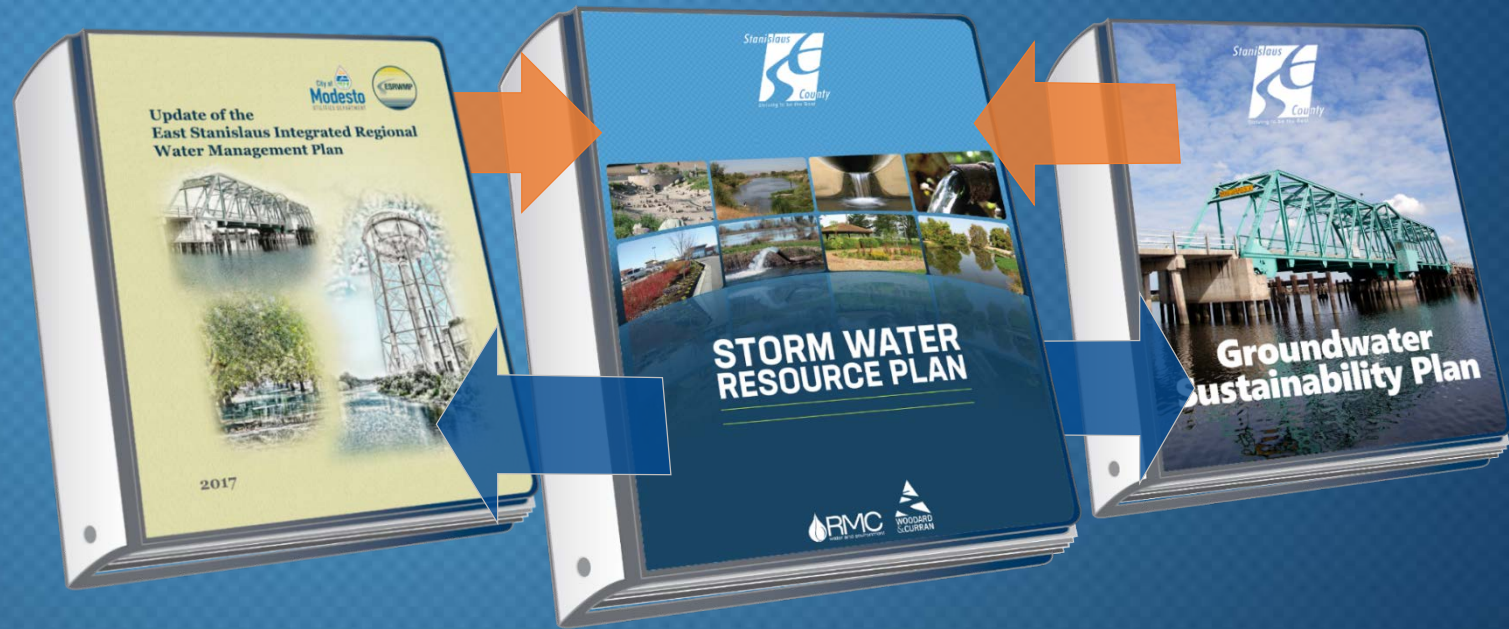
- *Describe consultation of local agencies and NGOs in SWRP development*
- *State SWRP development provided for community participation*
- *Describe IRWM groups*
- *Discuss public engagement efforts and community participation in SWRP Development*
- *Identify required decisions that must be made by regulatory agencies for SWRP implementation*
- *Describe coordination between existing local government agencies*

# Organization, Coordination, Collaboration: Overview



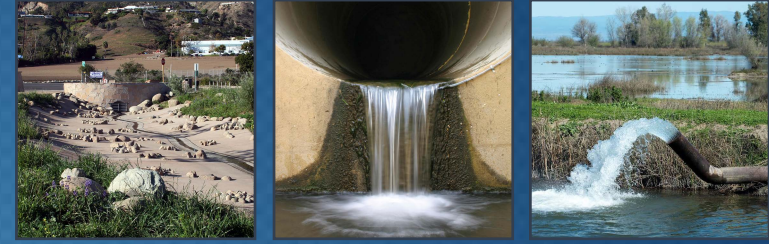
Coordination and collaboration occurred through:

- MOU to prepare the SWRP
- TAC meetings
- Stakeholder meetings
- Communication with IRWM Regions and overlapping projects



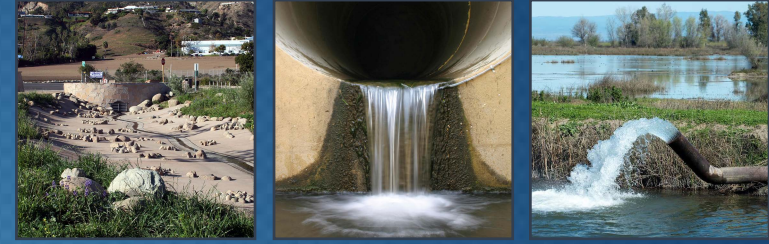
Coordination between concurrent water resource planning areas facilitates effective regional water planning





# Section 5: Quantitative Methods

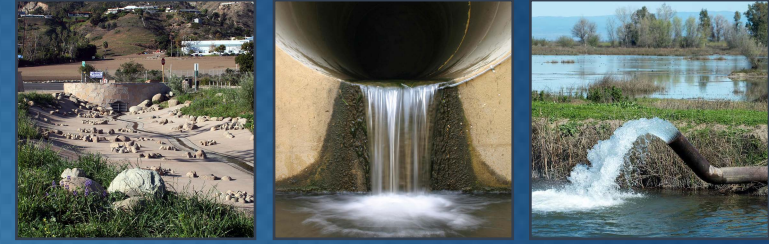
# *Guideline Requirements Overview*



- *Include an integrated metrics-based analysis to demonstrate that SWRP proposed projects will provide multiple benefits*
- *Categories that must be analyzed:*
  - *Water quality projects*
  - *Stormwater capture and use projects*
  - *Water supply and flood management projects*
  - *Environmental and community benefit projects*
- *Describe data collection and management*



# Quantitative Methods: Overview

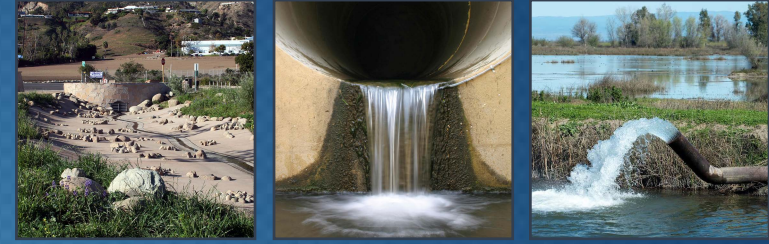


Quantitative Methods chapter describes:

- Metrics used for quantifying benefits

Benefit Category	Benefit	Quantitative Metrics
Water Quality Benefits	Increased filtration and/or treatment of runoff	<ul style="list-style-type: none"> <li>• Average annual pollutant load reduction (unit varies by pollutant)</li> <li>• Volume of water treated (mgd)</li> <li>• Volume of runoff infiltrated (AFY)</li> </ul>
Water Supply Benefits	Water supply reliability	<ul style="list-style-type: none"> <li>• Increase in water supply through direct groundwater recharge (AFY)</li> <li>• Increase in water supply through direct use (AFY)</li> </ul>
	Conjunctive use	<ul style="list-style-type: none"> <li>• Increase in water supply through in lieu recharge/conjunctive use (AFY)</li> </ul>
Flood Management Benefits	Decreased flood risk by reducing runoff rate and/or volume	<ul style="list-style-type: none"> <li>• Reduction in peak flow discharge (cfs)</li> <li>• Reduction in volume of potential flood water (AFY)</li> </ul>
Environmental Benefits	Environmental habitat protection and improvement, including wetland enhancement/creation, riparian enhancement, and/or instream flow improvement	<ul style="list-style-type: none"> <li>• Size of habitat protected or improved (acres)</li> <li>• Amount of instream flow rate improvement (cfs)</li> </ul>
	Increased urban green space	<ul style="list-style-type: none"> <li>• Size of increase in urban green space (acres)</li> </ul>
Community Benefits	Employment opportunities provided	<ul style="list-style-type: none"> <li>• Number of employment opportunities provided</li> </ul>
	Public education	<ul style="list-style-type: none"> <li>• Number of outreach materials provided, or events conducted</li> </ul>

# Quantitative Methods: Overview (cont.)



Quantitative Methods chapter also describes:

- Quantitative information for projects in each benefit category (number of projects providing each benefit, aggregated quantified benefits, maps of project locations)

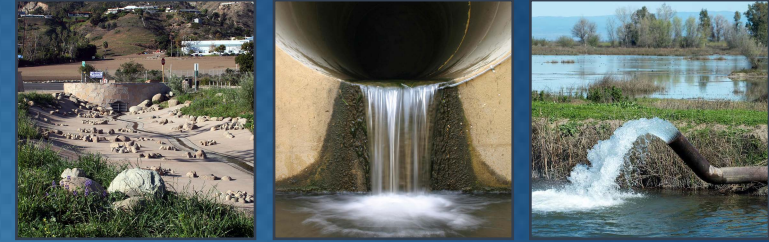
SWRP Benefit	Benefit Type	Conceptual	Ready to Proceed	Total
Increased filtration and/or treatment of runoff	Main	29	13	42
Nonpoint source pollution control	Additional	13	5	18
Reestablished natural water drainage and treatment	Additional	9	3	12

**For example:  
Water Quality Benefit Projects  
and Quantified  
Water Quality Benefits**

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



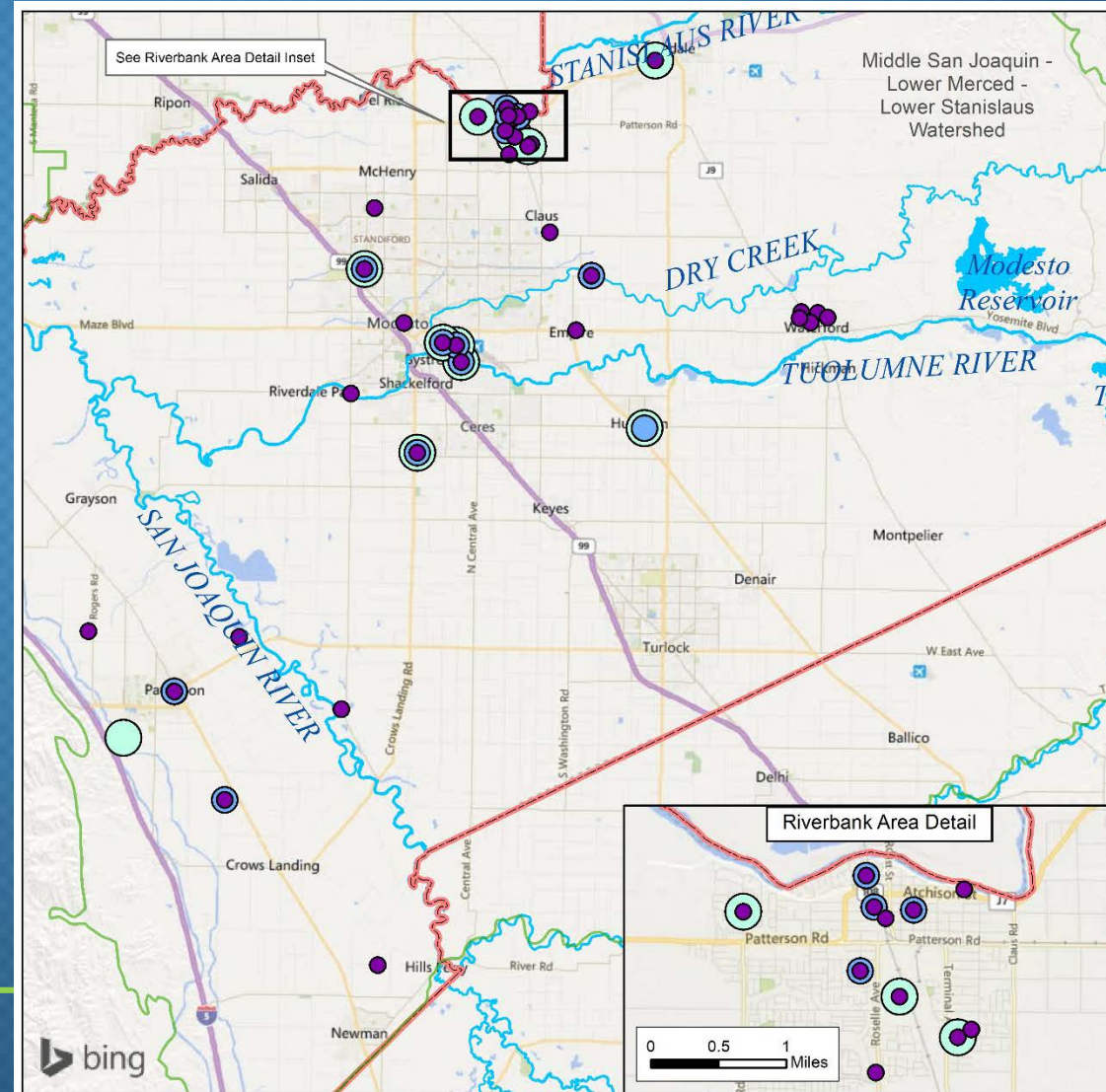
# Quantitative Methods: Overview (cont.)



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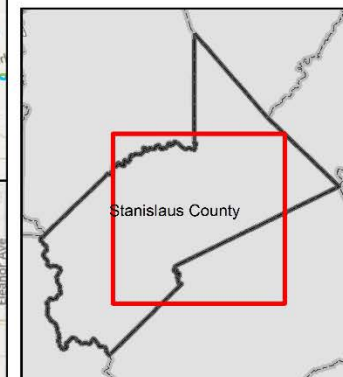
**For example:  
Projects Providing SWRP  
Water Quality Benefits**



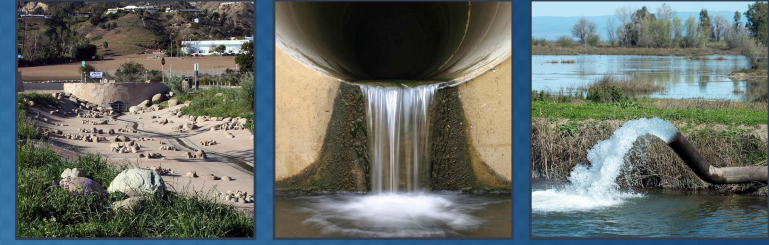
## Water Quality Benefit Projects

- Increased filtration and/or treatment of runoff\*
- Nonpoint source pollution control
- Reestablished natural water drainage and treatment
- Watershed Boundaries
- Stanislaus County / Planning Area Boundary
- Surface Water

\*Including reduced loading of constituents such as TSS, mercury, diazinon, chlorpyrifos, selenium, diuron, bacteria, pyrethroids, trash, and nitrogen.

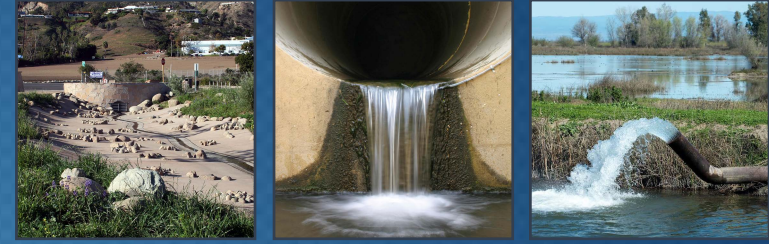


# Quantitative Methods: Overview (cont.)



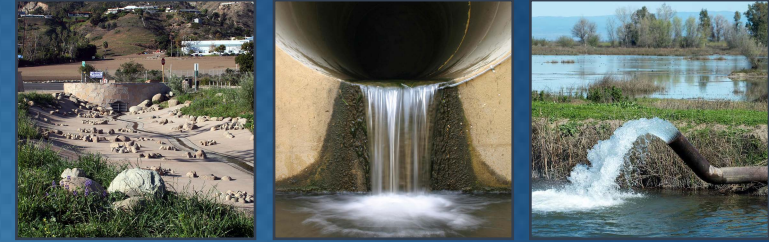
- Quantitative Methods chapter also describes:
  - Existing technical studies
  - Tools for quantitative assessment of benefits
  - Data collection (conducted by project proponents in accordance with grant agreements, if applicable; Opti can also be used for data distribution)





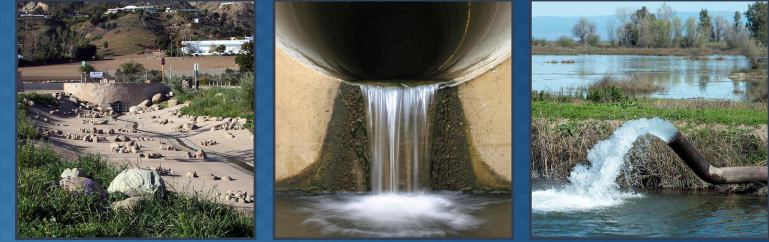
# Section 6: Identification and Prioritization of Projects

# Guideline Requirements Overview



- *Prioritize projects using a metrics-driven approach*
- *Identify opportunities to:*
  - *Augment location water supply through groundwater recharge*
  - *Provide source control of pollutants*
  - *Reestablish natural water drainage treatment and infiltration*
  - *Develop, restore, or enhance habitat and open space*
  - *Use existing publicly-owned lands and easements*
- *Identify design criteria and BMPs to be used in new development and redevelopment*





# Identification and Prioritization of Projects: Project Solicitation

- Project Solicitation Period:  
**Oct 23 – Dec 8, 2018**
- Utilized Opti Data Management System
- Requested information such as location, cost, schedule, benefits, and quantitative benefits

Time	Location	Event
Apr 25, 2016 1:00 pm to 4:00 pm	5620 Birdcage Street, Citrus Heights,	ARB IRWM Planning Forum <b>Attachments:</b> IRWMP_Meeting_Agenda_25APR16.doc
Feb 23, 2016 9:00 am to 3:30 pm	Sacramento Convention Center, 1400 J St, Room 202, Sacramento, CA, <a href="http://www.wate...">http://www.wate...</a>	Dr. Wet or Average? The Challenges of Water Operations <b>Attachments:</b> feb_23_fiver.pdf
Sep 18, 2013 10:00 am to 11:00 am	Webinar, <a href="http://waterrep...">http://waterrep...</a>	Fres EPA Webinar Series for Climate Ready Water Utilities <b>Attachments:</b> CRWU WUCA webinar fiver.pdf

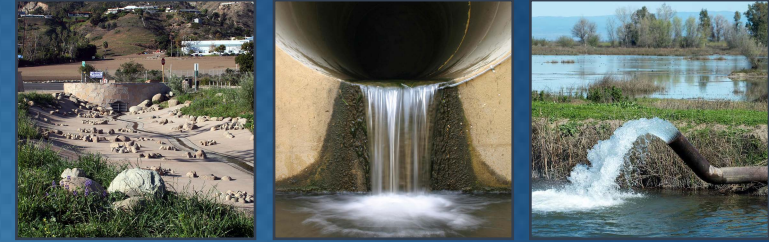
**Announcements**

- Mar 22, 2015**  
**Projects Released for Stakeholder Vetting (Water Supply, Water Quality, Flood Management, Natural Resources and Watersheds, Stormwater)**  
23 new projects have been added to the ARB IRWM database. Any comments on the projects are requested by June 17, 2015. Send comments to Rob Swartz at [rswartz@rwah2o.org](mailto:rswartz@rwah2o.org).  
**Attachments:** ARB IRWM projects to vet 15mar15.pdf
- Aug 15, 2014**  
**RWA Water Efficiency Program Revamps its Website (Water Supply, Water Quality, Flood Management, Natural Resources and Watersheds, Stormwater)**  
Get comprehensive information on regional water efficiency and the latest on conservation efforts in the current drought.  
**Website:** <http://bewatersmart.info>
- Feb 21, 2014**  
**Sacramento County Recognized for Innovative Green Street Project (Water Supply, Water Quality, Flood Management, Natural Resources and Watersheds, Stormwater)**

**Recently Added / Updated Projects**

- Capehart System Connecting Main**  
Sacramento Suburban Water District
- Barrett Ranch East Well**  
Sacramento Suburban Water District
- 2016 Meter Retrofit Project**  
Sacramento Suburban Water District
- River Bend Park Water Supply Enhancement Project**  
Sacramento County Department of Regional Parks
- Lower American River Berm Restoration**

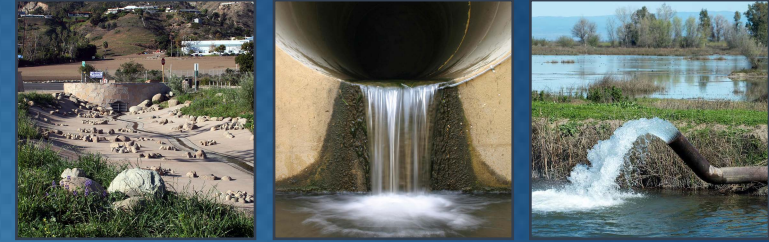
# Identification and Prioritization of Projects: Main Benefits



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"> <li>- Wetland enhancement/creation;</li> <li>- Riparian enhancement; and/or</li> </ul>
	Instream flow improvement
	Increased urban green space
Community	Employment opportunities provided
	Public education

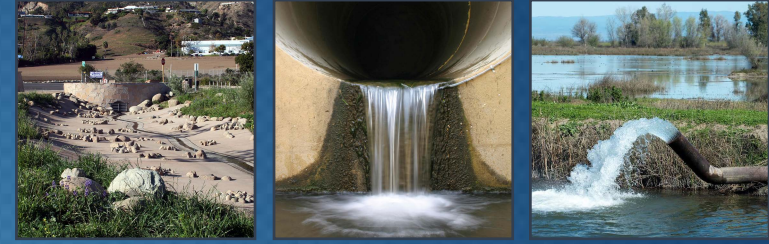


# Identification and Prioritization of Projects: Additional Benefits



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

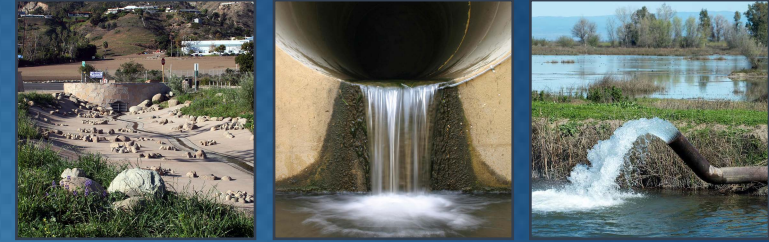
# Identification and Prioritization of Projects: Project Prioritization Approach



- Eligible Projects receive credit for:
  - Providing SWRP Main Benefits and Additional Benefits
  - Addressing regional watershed priorities identified in SWRP
  - Progress towards project implementation
- Projects are prioritized based on points awarded to each project



# Identification and Prioritization of Projects: Project Prioritization Approach (cont.)



Points Awarded Per SWRP Main Benefit and Additional Benefit

Providing SWRP Main Benefits and Additional Benefits	Points
<b>Providing SWRP Main Benefits</b>	
Points per benefit provided	4
Additional points if a quantitative metric can be provided for that benefit	2
<b>Providing SWRP Additional Benefits</b>	
Points per benefit provided	2
Additional points if a quantitative metric can be provided for that benefit	1

Addressing Regional Watershed Priorities	Points
Implements water quality improvements to help achieve the goals of an existing TMDL?	4
Reduces pollutant discharges into a 303(d) listed Impaired Water Body?	2
Augments water supply by capturing stormwater or dry weather runoff for recharge into a groundwater basin?	4
Does the project provide a SWRP Main or Additional Benefit to a disadvantaged community or an economically distressed area?	4

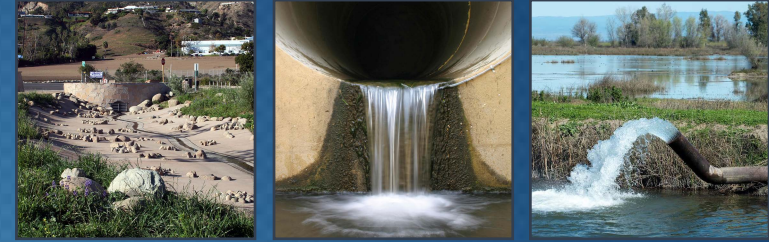
Points Awarded for Addressing Regional Watershed Priorities

Points Awarded Based on Status of Project Implementation

Progress Towards Project Implementation	Points
Is the project supported by entities that have created permanent, local or regional funding?	4
Is the project located on public land? If not, is there an existing easement or right of way agreement with a local land owner?	4
<b>Readiness of project to proceed (award points for each one completed):</b>	
Planning Study or Feasibility Study	1
Environmental Assessment/EIR	1
Preliminary Project Design	2
Acquisition of all required environmental permits	2

# Identification and Prioritization of Projects: Project Prioritization Approach (cont.)

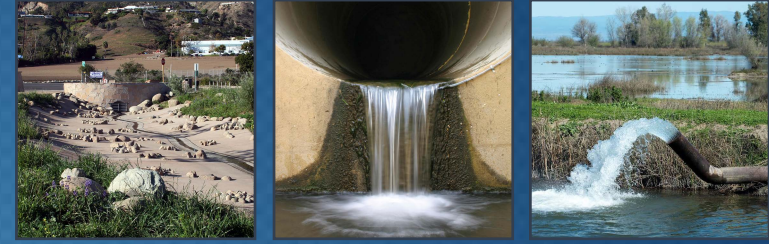
Projects are prioritized based on points awarded to each project



## Stanislaus County Multi-Agency Regional Storm Water Resource Plan Project Description and Scoring Summary Sheet

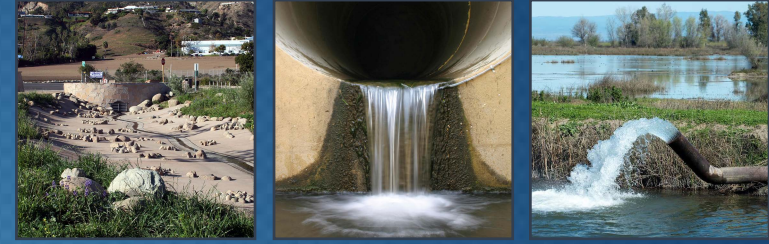
Project Name	Project Proponent	Project Description	Score	Project Type	Benefit Categories Met
<b>Ready to Proceed Projects</b>					
Tuolumne River Regional Park	Tuolumne River Regional Park JPA	Continued development of the undeveloped areas of the Tuolumne River Regional Park including the Gateway Parcel. <a href="http://www.midsjrfloodplan.org/projects/tuolumne-river-regional-park">http://www.midsjrfloodplan.org/projects/tuolumne-river-regional-park</a>	64	Ready to Proceed	Water Quality, Water Supply, Flood Management, Environmental, Community
Modesto Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project	City of Modesto	The proposed multi-benefit project captures, treats, and infiltrates stormwater. The project uses LID Techniques including bio-retention planters, infiltration trenches, and an underground retention basin under Roosevelt Park. The project recharges the groundwater aquifer, reduces stormwater flows to the wastewater treatment plant, the number of Sanitary Sewer Overflows, and improve water quality for Dry Creek, and the Lower Tuolumne River (303d water bodies).  Located in the fully developed northwest portion of Modesto which has no positive storm drainage system, the project is a cost effective and LID Alternative to constructing detention basins in undeveloped portions of the city and constructing miles of storm drains. Fourteen failed dry wells and six sanitary sewer cross connections will be removed. The project will reduce localized flooding on Granger Avenue a heavily traveled local street.	60	Ready to Proceed	Water Quality, Water Supply, Flood Management, Environmental, Community
Mustang Creek MAR Project	Eastside Water District	The Mustang Creek MAR Project will divert Mustang Creek flows during extreme flood events at an existing Bifurcation Structure located downstream of the flood control Detention Basin. The Bifurcation Structure presently diverts flood flows into a 95-acre-foot off-channel impoundment basin covering 74 acres for flood protection. The Bifurcation Structure is estimated to allow up to 210 cfs to be diverted into the existing impoundment basin. The Mustang Creek MAR Project will include ripping the 74-acre basin site to encourage percolation, similar to an agricultural practice used prior to planting an almond orchard, coordinated. Operation of the Bifurcation Structure with the upstream Mustang Creek Detention Basin will be coordinated to divert storm surges and maximize the potential diversion for groundwater recharge at the Mustang Creek MAR Project. The Project will enhance the primary function of the Detention Basin, flood control.	52	Ready to Proceed	Water Supply, Flood Management, Community
Rouse Lake Managed Aquifer Recharge (MAR) Project	Eastside Water District	This Rouse Lake MAR Project consists of the following three (3) components: 1) Four (4) or more floating lake intakes with a pumping capacity of each at about 1,500 gallons per minute; designed with screens and pumping schemes to comply with all BMPs for similar type facilities; 2) Pipelines to deliver Rouse Lake water to existing developed lands for irrigation purposes; varying from 8-inch to 30-inch in diameter; 3) Up to 20 vertical drains (dry-wells) within the receded Rouse Lake lakebed to accomplish direct groundwater recharge. This is an environmentally sensitive water supply project that achieves new yield from the conjunctive management of surface and groundwater sources; direct GW recharge via vertical drains; in-direct GW recharge via irrigation; and additional GW recharge via use of Rouse Lake as a regulatory reservoir. Benefits to supply are matched by benefits to DACs, SDACs, EDAs, and the local ecology.	52	Ready to Proceed	Water Supply, Flood Management, Community
Little Salado Creek Groundwater Recharge and Flood Control Basin	Stanislaus County	Construction of a stormwater detention basin to partially divert, retain and percolate up to 270 cubic feet per second (cfs) of flow from Little Salado Creek.	50	Ready to Proceed	Water Quality, Water Supply, Flood Management, Environmental, Community





# Section 7: Implementation Strategy and Schedule

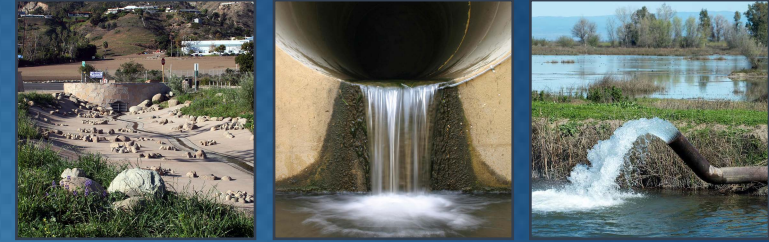
# *Guideline Requirements Overview*



- *Identify funding needs and potential sources*
- *Identify decision support tools*
- *Describe who is responsible for SWRP implementation*
- *Note procedures to track project status*
- *Establish procedures for updates and adaptive management of SWRP*



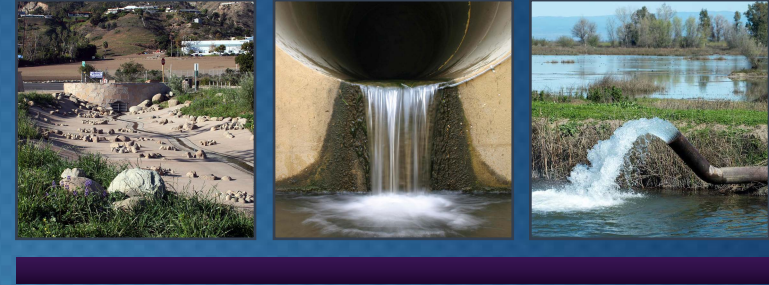
# Implementation Strategy and Schedule: Contents Overview



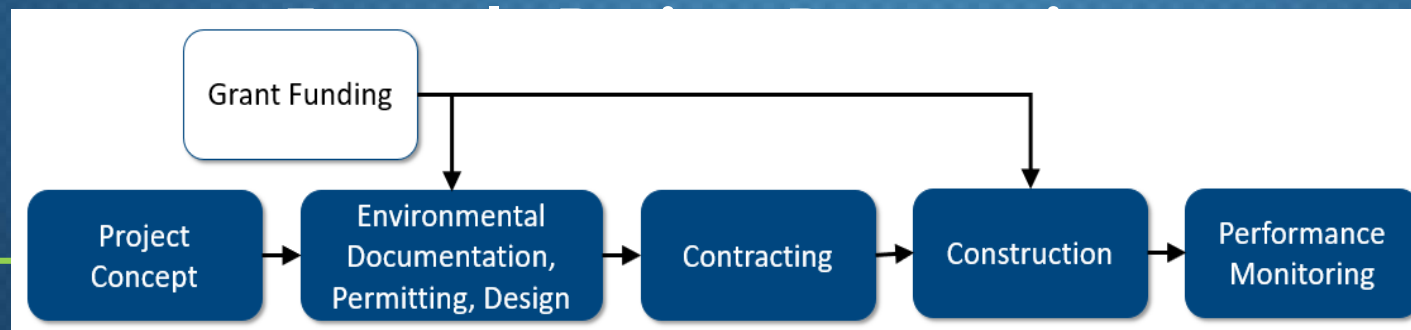
Implementing the SWRP consists of three main elements:

1. Completing the design, permitting and implementation of projects included in the SWRP
2. Monitoring the benefits produced by the projects included in the SWRP to ensure that project goals are being met and that SWRP objectives are being advanced
3. Evaluating the SWRP at regular intervals to assess cumulative progress toward meeting the SWRP objectives and adapting the plan as necessary to ensure that objectives continue to be met

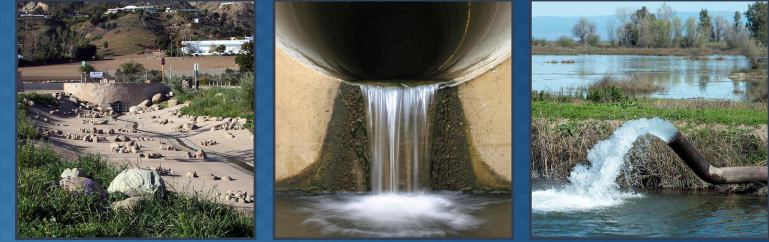
# Implementation Strategy and Schedule: Contents Overview (cont.)



- SWRP is intended to be a living document
  - Project information may be viewed and updated any time via Opti
  - Use Opti to develop updated project lists to append to SWRP for future funding opportunities
- SWRP implementation occurs primarily through implementation of individual projects
  - Responsibility of project proponent to seek funding, implement and provide information to Opti as project progresses
  - Potential grant funding sources include Storm Water Grant Program, IRWM Implementation Grants, and others



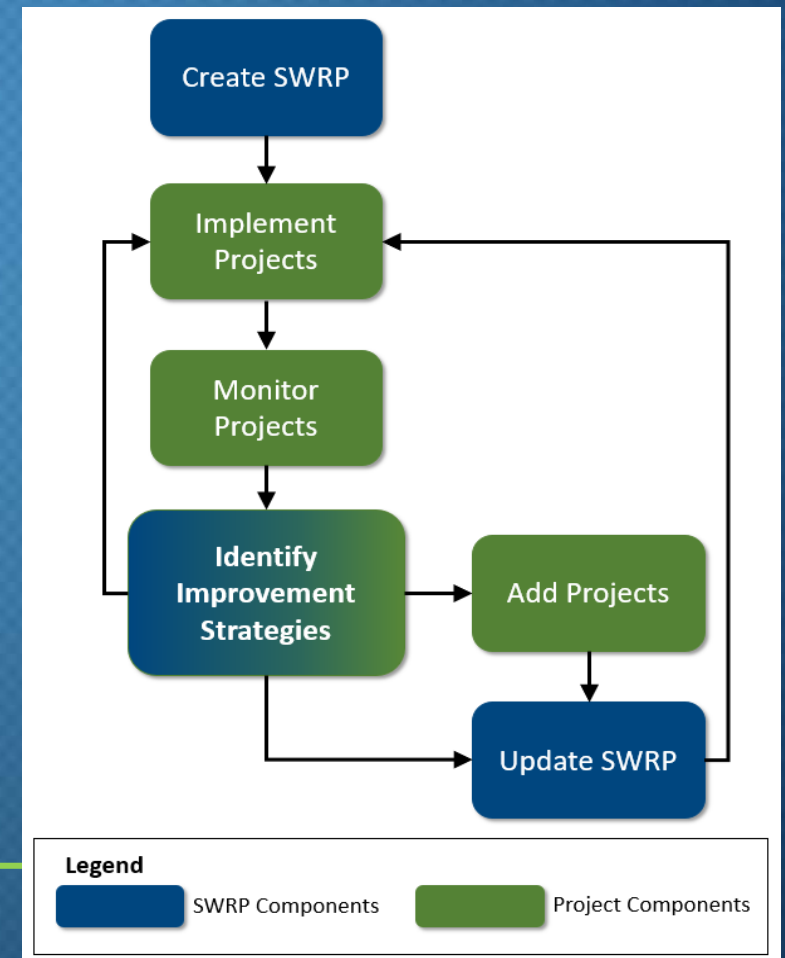


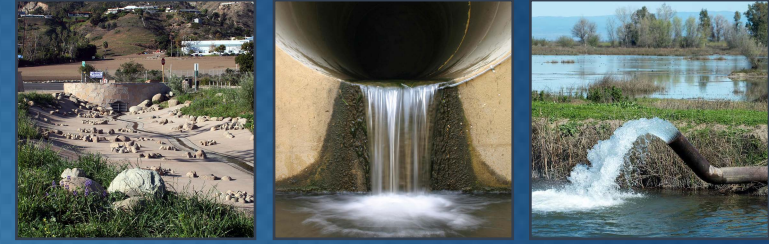


# Implementation Strategy and Schedule: Contents Overview (cont.)

- SWRP will be adopted by participating agencies in order to demonstrate support for implementation of SWRP projects
- IRWMPs will incorporate SWRP by reference and ES in appendix
- Adaptive Management
  - As the SWRP is implemented and more data becomes available, regional priorities and strategies may be revised.
- Updates - County and partners responsible for updates every 5 years or as needed.

## Adaptive Management of the SWRP and SWRP Projects

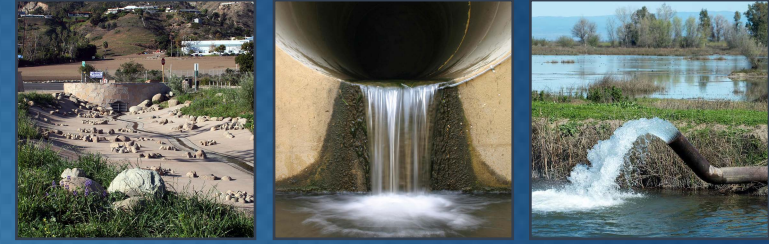




# Section 8: Education, Outreach, Public Participation

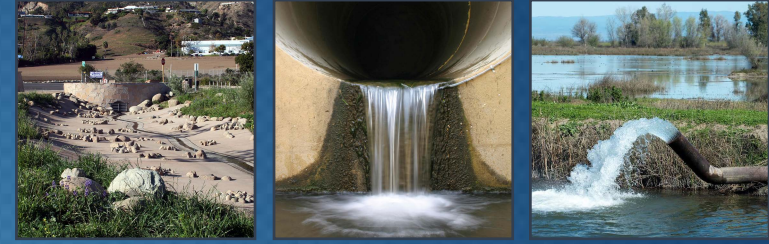


# Guideline Requirements Overview



- *Provide for community participation in SWRP implementation*
- *Describe opportunities to engage the public and mechanisms for engagement*
- *Identify specific audiences to be involved*
- *Describe strategies to engage disadvantaged communities, climate vulnerable communities, and to address environmental justice needs*

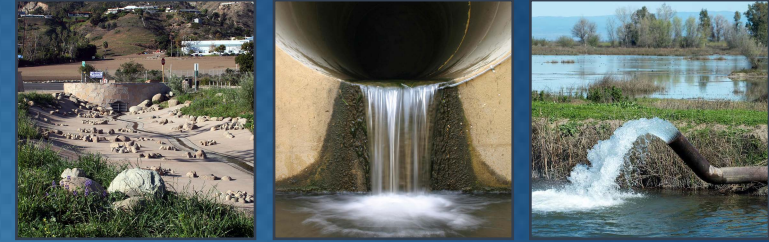
# Education, Outreach, Public Participation: Contents Overview



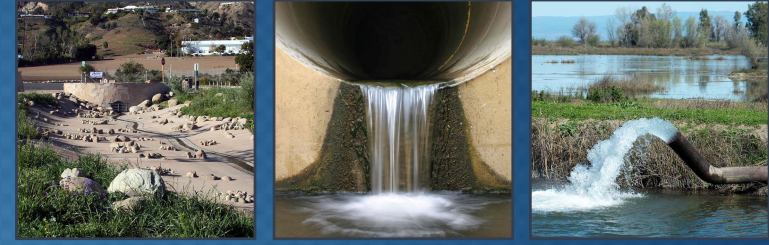
- Community participation has occurred throughout SWRP development through outreach meetings
- Public engagement may occur via stakeholder/outreach meetings, email outreach, Opti, SWRP website, public comment periods
- Outreach will also occur as part of individual project implementation under CEQA/NEPA



# Education, Outreach, Public Participation: Contents Overview

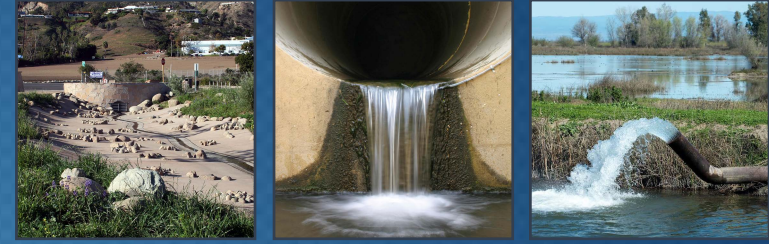


Meeting	Date	Location	Description
<b>Stakeholder Meeting #1</b>	October 23, 2017	Ceres, CA	This meeting provided an overview of the SWRP purpose and process and how to submit projects. This meeting also kicked off the Call for Projects.
<b>Stakeholder Meeting #2</b>	December 6, 2018	Conference call	This conference call provided detailed instructions on how to use the Opti system to submit projects online.
<b>Stakeholder Meeting #3</b>	May 30, 2018	Modesto, CA	This meeting provided additional details about the SWRP, including discussion of the SWRP goals and objectives, prioritization and solicitation of projects, and the implementation funding timeline.
<b>Stakeholder Meeting #4</b>	TBD – during public review period	TBD	This meeting will consist of an overview of the Public Draft SWRP and cover how public comments can be provided.



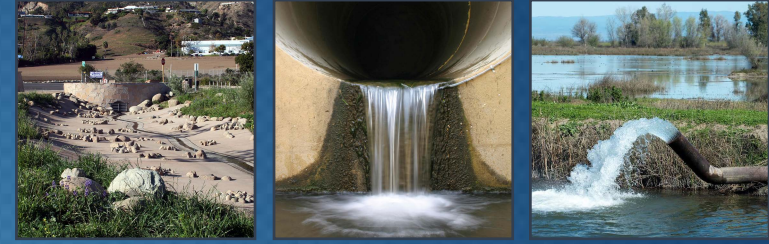
- Questions on SWRP Sections?





# Next Steps and Schedule

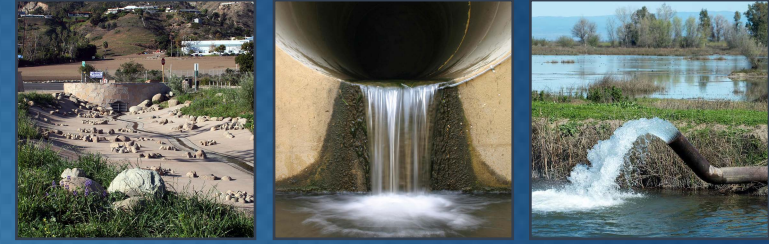
# Next Steps



- Complete SWRP Website
  - Provide information on SWRP, coordinating agencies, meeting information, plan status, and grant submittals
  - To be available in time to post public draft
- Special studies to be completed concurrently with SWRP
  - Stormwater outfall monitoring to take place 2018/2019 rainy season
  - Groundwater site assessment to take place this fall

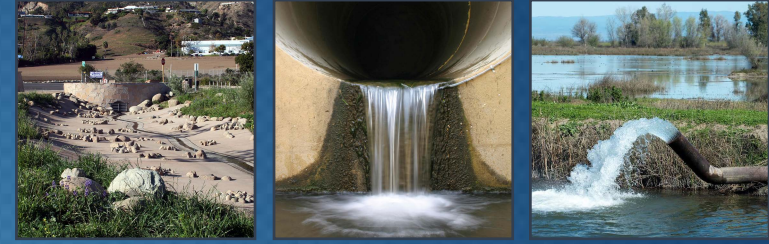


# Schedule



- TAC to provide comments on Administrative Draft by Monday, 9/24/2018
  - Via comments/track changes in document, version saved in shared folder
- Submit Administrative Draft to GM on Friday, 9/28/2018
- Receive Comments from GM
- Public Draft to be published in February 2019\*
- Receive Public Comments
- Provide Summary of Comments to GM in March 2019\*
- Incorporate public comments to prepare Final SWRP Draft – April 2019\*
- Submit final SWRP and signed checklist to State – May 2019\*
- *Dates extended (if needed) to complete stormwater monitoring. Report will be appended to Public or Final Draft of SWRP*

# Questions/Comments?



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Woodard & Curran