

STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS

Stanislaus Multi-Agency Regional Storm Water Resource Plan

Section 7. Implementation Strategy and Schedule

Prepared for: State Water Resources Control Board Grant Agreement No. D1612618

Submitted by: Stanislaus County, Department of Public Works

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National Experience. Local Focus.

Section 7. Implementation Strategy and Schedule

For the SWRP to be successful, projects included in the SWRP must continue to move from conceptual and planning phases toward construction and implementation. The SWRP relies on individual projects and programs to achieve the water supply, water quality, flood management, environmental, and community benefits identified in the Plan. This section describes Plan implementation, including financing options, scheduling, and ongoing SWRP management.

7.1 Implementation Strategy

7.1.1 SWRP Implementation Method

Implementing the SWRP consists of three main elements:

- Completing the design, permitting and implementation of projects included in the SWRP
- 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
- 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 of the SWRP will be completed through cooperation between Stanislaus County, the TAC, the project proponents, and stakeholders. The primary method of implementing the SWRP will be via the projects. The projects included in the SWRP all provide multiple benefits (discussed in Sections 5 and 6). Therefore, as projects are implemented, SWRP benefits will be realized. The projects included in the SWRP range from conceptual projects (which will require additional planning and design work prior to construction) to ready-to-proceed (RTP) projects (which may be ready for construction as soon as funding is secured). The status and schedule of each project was submitted to the Opti data management system by the project proponent as part of project submittal and is summarized in Section 7.1.7. Individual projects will move forward as funding and other resources become available; funding is discussed in greater detail in Section 7.2.

Regulatory mechanisms also help ensure that the SWRP is implemented. For example, the Stanislaus County Stormwater Management Program, which was developed to meet the terms of the County's NPDES MS4 permit, contains specific control measures for stormwater discharges. One of these measures requires that new development and significant redevelopment integrate low impact development (LID) strategies and other stormwater control measures. The County requires land developers to enter into an agreement to maintain the LID/stormwater control measures in perpetuity, to ensure the long-term protection of water quality. These standards are enforced under the Stanislaus County Storm Water Management and Discharge Control Ordinance. The required stormwater control measures ensure that development within the County will also serve to improve stormwater management, thereby ensuring progress toward meeting the SWRP objectives.

SWRP updates will occur every five years, or as needed due to changes in regional priorities, NPDES permits, SWRP guidelines, or watershed conditions. The project list will be updated annually or as needed in preparation for funding opportunities; updates to the project list will be made using Opti, an online database which streamlines the project solicitation process and enables continuous updates to project information. Updated project lists will be appended to the SWRP. Additional detail related to SWRP updates can be found in the following sections.

Implementation Work to Date

Prior to development of the SWRP, several studies were undertaken in the County that provided a basis for stormwater planning and project implementation. These studies support future project implementation by gathering data and presenting project alternatives that can be further developed.

- *City of Oakdale Storm Water Master Plan:* This plan, developed in 2015, contains a detailed evaluation of the existing storm drain system, identifies deficiencies in the existing system, and proposes improvements to enhance the overall performance of the system and accommodate future growth. Hydrologic and water quality analysis contained in the plan will be useful in future project development efforts.
- *Empire LID Study*: Stanislaus County conducted this study to assess stormwater design options for the community of Empire. This report provides general information and documentation necessary for the County to assess the suitability of assumptions, design criteria, and design methodology used in developing the proposed LID system to accommodate stormwater runoff in the Empire community. This study provides a knowledge base that can be used during development and implementation of future projects.
- *Eastside Water District Managed Aquifer Recharge Study*: This study identified suitable locations for intercepting diffused stormwater and directing it to potential managed aquifer recharge sites. Thirteen sites were identified as being suitable for future managed aquifer recharge projects. The site identification and hydrogeologic evaluations in this study will provide valuable direction to SWRP projects as they move toward implementation.

7.1.2 Governance Structure

The SWRP creation effort was led by Stanislaus County, with other agencies providing financial and technical advisory assistance in developing the SWRP. In 2018, a Memorandum of Understanding (MOU) was developed between Stanislaus County and several other agencies which are coordinating under the grant agreement that provided funding for creation of the SWRP. The MOU signatories are Stanislaus County, City of Modesto, City of Oakdale, City of Patterson, and the Eastside Water District. Collectively, these agencies are referred to as the plan partners.

Decision-making authority related to the SWRP rests with Stanislaus County, with significant input from the other plan partners. During development of the SWRP, the County also solicited input from other stakeholders via the TAC and at stakeholder meetings. Stanislaus County intends to continue seeking feedback from stakeholders such as the plan partners, TAC, IRWM Region governing groups, NPDES copermittees, residents of disadvantaged communities (DACs), city representatives, water supplier representatives, nonprofits, and the public during future updates of the SWRP. Public participation in the SWRP will be discussed in more detail in Section 8.

7.1.3 Responsible Entities

As the lead agency preparing the SWRP, Stanislaus County will be responsible for key elements of SWRP implementation together with its plan partners. In addition to managing the development of the original SWRP for the Planning Area, Stanislaus County and plan partners will be responsible for future updates of the Plan that may be required, either due to regulatory changes or to keep information up-to-date. Projects may be submitted to the project list via Opti on an ongoing basis; the plan partners will also be responsible for new funding opportunities). The plan partners will revise the SWRP as needed based on adaptive management procedures, as discussed further in Section 7.4.3. For example, the plan partners will approve any changes to water quality priorities or benefit metrics found appropriate following regulatory changes or project performance monitoring.

Project proponents are responsible for most elements not directly related to the SWRP document itself, including securing their own project funding and developing and implementing individual projects. Project proponents are also responsible for keeping project information up-to-date in Opti as project details are solidified and benefits become better quantified. As projects are implemented, project proponents are responsible for the following:

- Complying with all federal, State, and local rules and regulations, including CEQA
- Obtaining all necessary permits for their project(s)
- Conducting pre- and post-construction monitoring, as required by applicable regulations and/or funding agreements
- Meeting the terms of any applicable funding agreements (e.g. managing schedule and budget during project implementation)
- Submitting data obtained during project implementation to the applicable agencies or databases, including to the SWRP, as applicable

The projects in the SWRP may be in various stages of planning or implementation. While inclusion in the SWRP does not obligate project proponents to implement projects as submitted, it is the intent of the SWRP that projects will be implemented to meet stormwater objectives in the Planning Area. None of projects currently on the list contain linkages with or dependencies upon other projects in the SWRP.

7.1.4 Decision Support Tools

The primary decision support tool used in the SWRP is the Opti data management system and the associated project prioritization scheme (described in detail in Section 5). Project data is gathered using Opti, which ensures that information is standardized across projects, and that all projects contribute to at least two main SWRP benefits and one additional SWRP benefit. Other information necessary to prioritize projects is also collected through the Opti system, such as whether the project supports TMDLs or augments water supply. The project scores are not intended to exclude any projects from implementation or from funding applications; the scores serve as a guideline to help weigh the project against one another in general, leaving room to take into account individual requirements or needs of an agency or funding source.

Project proponents are asked to provide a range of information when entering a project into Opti. This includes project description, location, feasibility information, cost information, planning or implementation status, schedule, and benefits (both qualitative and quantitative). Data gaps may exist, as projects in Opti may be at any stage of the planning or implementation process. For example, projects may be entered in Opti without full cost information or quantified benefits, since these are often unknown until a project is well-developed. The project prioritization method described in Section 5 awards greater points to projects with more complete information, thereby giving project proponents an incentive to fill data gaps in Opti. Section 5 provides additional detail on the data needs and gaps in Opti.

7.1.5 Community Participation Strategy in Plan Implementation

Because the primary method of SWRP implementation is via individual project implementation, community participation, with an emphasis on outreach to disadvantaged communities, will also occur as part of project implementation. Community participation in the SWRP planning process itself, in addition to project planning and design, is discussed in Section 8. Depending on the project and applicable regulations, project proponents may conduct public forums, meetings, and/or comment periods, and may notify members of the public via newspaper announcements, website postings, mail, email, and/or signage at the project site. While the plan partners do not have the authority to require that all SWRP projects provide for community participation, most projects will be subject to CEQA, which contains procedures for community outreach and participation. SWRP encourages all project proponents, and especially disadvantaged communities, to engage in a robust community involvement program prior to and during project implementation.

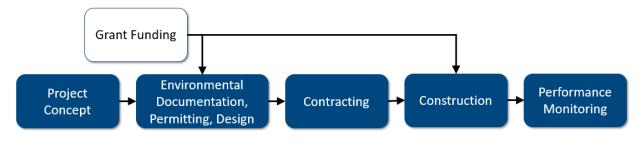
7.1.6 Permitting Strategy

Permitting will occur at the individual project level, and project proponents will be responsible for securing their own permits at the federal, state, and local level. Permitting status (relative to environmental permitting, not necessarily building or other permits) is shown in Table 1.

7.1.7 Schedule

Project implementation schedules are determined by project proponents. A typical project timeline is illustrated in Figure 1. Specific stages and the length of time required for each stage vary from project to project. Project proponents can apply for grant funding to help support both the planning and construction phases of their projects. Project proponents provide schedule information when entering their projects into Opti and can update Opti on an ongoing basis as the project element. Information can be submitted on overall project completeness, as well as the status of individual project components, such as planning, design, and construction. The schedule information that has been submitted for SWRP projects is summarized in Appendix A. Project schedules have not been vetted, but represent the information gathered during the 2017 Call for Projects. Opti serves as a living repository of the most up-to-date project schedule information.





TMDL Schedules

An overview of the schedules for the three TMDLs relevant to stormwater management in the Planning Area is provided in Figure 2.

The Sacramento-San Joaquin Delta Diazinon and Chlorpyrifos TMDL was amended to the Basin Plan in October 2007. Compliance with load allocations and waste load allocations in the Delta Waterways was required by December 2011. Table 2 lists SWRP projects that, if implemented, would contribute to the goals of this TMDL.

The Sacramento-San Joaquin Delta Methylmercury TMDL came into effect in 2011. Currently, a Phase 1 Delta Mercury Control Program Review is being prepared. Phase 2 will begin upon completion of Phase 1 or in October 2022, whichever occurs first. During Phase 2, dischargers shall implement methylmercury control programs and continue inorganic mercury reduction programs. Compliance monitoring and implementation of upstream control programs will also occur in Phase 2. Although no projects included in the SWRP explicitly stated that they would contribute to the goals of this TMDL, various projects would likely contribute to the TMDL by reducing discharge to surface waters. Mercury is assumed to be present in stormwater runoff, therefore any projects that capture runoff and prevent discharge to rivers would reduce mercury loading to rivers and assist in meeting TMDL goals.

The Central Valley Pesticide TMDL was effective in 2017. The associated Basin Plan Amendment indicates that compliance shall be achieved not later than 10 years from the effective date of the Amendment, in 2027. Table 2 lists SWRP projects that would contribute to meeting the TMDL schedule, provided that they are implemented prior to the compliance deadline.



Figure 2. TMDL Schedules

Project Name	Project Proponent	Project Category	Delta Diazinon and Chlorpyrifos TMDL	Central Valley Pesticide TMDL
North Valley Regional Recycled Water Project (NVRRWP)	City of Turlock on behalf of NVRRWP Partners	RTP		✓
Tuolumne River Regional Park	Tuolumne River Regional Park JPA	RTP	\checkmark	\checkmark
Stormwater Outfall Capture and Storage Project	City of Modesto	Concept	\checkmark	✓
Modesto Urban Stormwater Basin Recharge Enhancement Program	City of Modesto	Concept	✓	✓
Northeast Storm Drainage Interceptor Project	City of Modesto	Concept	\checkmark	✓
Stormwater Infrastructure and Dual Use Basins for County Islands (DUCs)	Stanislaus County	Concept	\checkmark	✓
Evaluation of Stormwater Management and Groundwater Recharge Projects in the Dry Creek Watershed of Stanislaus County	Stanislaus County	Concept	~	✓
Airport Neighborhood Stormwater Retention System and Dual Basin/Low Impact Strategies Stormwater Runoff	Tuolumne River Trust	Concept	✓	✓

Table 1. SWRP Project	s Contributing to TMDL Goals
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7.2 Financing

Table 3 shows project costs that were submitted by project proponents for RTP projects (not all RTP projects submitted their cost information). As projects move toward implementation, costs will become more defined. Through the use of Opti, project proponents will be able to update costs on an ongoing basis as more information becomes available, as additional work is completed (e.g., feasibility studies, design), or as funding is secured. The project costs in Table 3 are estimates provided by the project proponents during the 2017 Call for Projects; costs have not been independently verified. At the time of SWRP development, estimated SWRP project capital costs totaled over \$292 million with only approximately \$39 million in funding identified and an additional \$253 million still needed to implement the projects.

Stormwater projects have unique funding needs and issues in California. The majority of cities and Counties do not have allocated fees or taxes devoted to stormwater, making finding ongoing capital and O&M funding sources difficult. While grant programs can provide capital funds, agencies typically still need to provide a local cost share as well as cover the O&M costs to maintain the project so that the project can continue to provide benefits over project lifespan.

A handful of projects have secured local funds and/or grant funding, as indicated in Table 3. Project proponents will be responsible for securing funding for their projects; this process will be ongoing as

different projects progress on different schedules. Potential sources of funding are shown in Table 4, along with the approximate schedules for applicable funding programs. As project proponents secure funding, they may update Opti to reflect the sources of funding identified.

Project funding will be secured on a project-by-project basis by the project proponents. Implementation of the SWRP itself does not require funding separate from project funding. Costs related to updates of the SWRP, adaptive management of the Plan, and other administration related to the SWRP will be covered by Stanislaus County, although other plan partners may be identified to share in these costs in the future. The use of Opti as a living project list will help minimize these costs, as project proponents can submit new projects, as well as keep their information up-to-date independently of formal SWRP updates.

Project Name	Project Proponent	Total Estimated Capital Cost (2017 dollars) ¹	Estimated Annual O&M Cost	Existing Funding	Source of Existing Funding
7th Street Low Impact Development (LID) Storm Drainage Improvements	City of Hughson	\$380,000	not provided	-	
Modesto Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project	City of Modesto	\$4,100,272	not provided	-	
Catherine Everett Park Cross Connection Elimination	City of Modesto	\$4,465,068	not provided	-	
JM Pike Park Cross Connection Elimination	City of Modesto	\$15,874,672	not provided	-	
Orestimba Creek Flood Management Project	City of Newman	\$47,690,629	not provided	\$22,000,000	Federal grant
7th Street Outfall Rehabilitation	City of Riverbank	\$265,000	\$5,000	\$15,000	City General Fund
First Street Basin Rehabilitation	City of Riverbank	\$844,352	\$15,000	-	
North Valley Regional Recycled Water Project	City of Turlock on behalf of NVRRWP Partners	\$102,577,000	not provided	-	
F St Storm Pond	City of Waterford	\$185,300	not provided	-	
Orestimba Creek Recharge and Recovery Project (OCRRP)	Del Puerto Water District	\$1,208,500	not provided	\$1,198,500	Del Puerto Water District; San Joaquin River Exchange Contractors Water Authority; USBR grant
Rouse Lake Managed Aquifer Recharge (MAR) Project	Eastside Water District	\$9,800,000	\$980,000	\$4,900,000	Approved per-acre Charges
Mustang Creek MAR Project	Eastside Water District	\$450,000	\$30,000	\$450,000	Eastside Water District Diffused Surface Water Project Fund
Empire Community Storm Drainage Plan	Stanislaus County	\$3,000,000	\$90,000	-	
Carpenter Road/West Modesto Flood Management and Park Development	Tuolumne River Regional Park JPA	\$793,734	not provided	-	
Tuolumne River Regional Park	Tuolumne River Regional Park JPA	\$60,000,000	not provided	-	
West Stanislaus Irrigation District Fish Screen Project	West Stanislaus Irrigation District	\$40,722,988	\$46,000	\$4,313,725	Rate payers, USBR grant
Total Plan Implementation Cost	-	\$292,357,516	-	\$38,877,225	-

¹Costs that were not originally provided in 2017 dollars were converted to 2017 dollars using the ENR CCI for San Francisco (annual averages used).

Funding Source	Estimated Timing
Local	
Ratepayer charges (per volume of water, per irrigated acreage, etc.)	Ongoing
Stormwater Parcel Tax	Unknown
City and County general funds	Ongoing
Other local agency funds (water district, irrigation district)	Ongoing
State	
Proposition (Prop) 1 IRWM Implementation Grants	Early 2019
SWRCB Stormwater Prop 1 Implementation Grants	Early 2019
Clean Water State Revolving Fund low-interest loans	Ongoing
California Department of Fish and Wildlife Prop 1 and Fisheries Restoration Grants	Unknown
California Department of Fish and Wildlife Wetlands Restoration for Greenhouse Gas Reduction Program	Unknown
California Wildlife Conservation Board Habitat Enhancement and Restoration Program Grants	Ongoing
SWRCB Clean Water Act Section 319(h) Non-Point Source Grant Program	Annually (Winter/Spring)
Federal	
US Bureau of Reclamation WaterSMART grant Programs	Ongoing
USDA Rural Development Water and Waste Revolving Fund Grants	Ongoing
USDA Water and Environmental Programs	Fall 2018

Table 3. Schedule Overview for Potential Funding Sources

7.3 IRWMP Submittal

The geographic area covered by the Stanislaus County SWRP overlies two Integrated Regional Water Management (IRWM) Regions – East Stanislaus and Westside-San Joaquin (Figure 6, Section 2).

The East Stanislaus IRWM Plan (IRWMP) was updated in 2018 and adopted by its Regional Water Management Group (RWMG) member agencies in Month(s), 2018. The East Stanislaus IRMWP incorporates the Stanislaus SWRP by reference and will include the SWRP Executive Summary as an Appendix. The SWRP is expected to be completed in February 2019. Once the SWRP is final, Stanislaus County staff will submit the SWRP to the East Stanislaus Steering Committee (which oversees the day-to-day maintenance of the IRWMP) for inclusion in the IRWMP. Stanislaus County is a member of the RWMG, and certain county staff members have been involved in both efforts, so coordination between the SWRP and IRWMP will be streamlined. Additionally, projects from the Stanislaus County SWRP are tracked in the same online data management system, Opti, as the projects in the East Stanislaus IRWMP. Opti provides public access to project information, which will enable the SWRP and IRWMP efforts to continue coordinating.

The Westside-San Joaquin (WSJ) IRWMP is undergoing an update as of spring 2018. The WSJ IRWMP is expected to be completed in late 2018. Similar to the East Stanislaus IRWMP, the WSJ IRWMP will incorporate the SWRP by reference. Specifically, the SWRP Executive Summary will be included in an Appendix and referenced throughout the WSJ IRWMP as applicable. The SWRP will be submitted to the WSJ Region's governing body, the San Luis & Delta-Mendota Water Authority (SLDMWA) upon completion (in early 2019) for inclusion in the WSJ IRWMP.

During any future updates to the SWRP, Stanislaus County will be responsible for notifying the East Stanislaus and WSJ Regions, which will allow the IRWM Regions to determine how best to incorporate SWRP updates into the IRWMPs. As of 2018, City of Modesto should be contacted regarding the East Stanislaus IRWMP, and SLDMWA should be contacted regarding the WSJ IRWMP. The East Stanislaus Region website (www.eaststanirwm.org/) and WSJ Region website (www.sldmwa.org/integrated-regional-water-management-plan/) will also be useful resources as these two planning efforts continue in parallel.

7.4 Implementation Performance Measures and Tracking

Implementation performance measures serve as a way to determine whether the SWRP is providing the multiple benefits it set out to achieve. Monitoring for the SWRP will be based on project-specific monitoring, and will help ensure the following:

- Projects included in the SWRP are being implemented
- Progress is being made to achieve the SWRP benefits
- Adaptive management is being applied during project implementation

7.4.1 Project Performance

Project-specific monitoring plans may be required for programs that receive funding from certain sources. While the SWRP does not require monitoring plans for projects, project proponents are strongly encouraged to prepare and implement performance monitoring plans to be carried out as part of project implementation. Performance data will be collected by the plan partners as it is made available by project proponents. This data will allow the plan partners to assess the success of individual projects as well as the SWRP as a whole.

In general, project monitoring plans should contain the project goals and objectives, quantitative metrics to measure progress toward the objectives, and procedures to address any problems encountered during monitoring. Each monitoring plan should include specific methodologies to ensure consistent data throughout all monitoring, and project proponents will provide the results to the plan partners. Quantitative metrics, such as those discussed in Section 5, are necessary in order to evaluate the impact of the project. Examples of metrics include:

- Pollutant load reduction (lbs/year or MPN/year)
- Increase in water supply (AF/year)
- Reduction in peak flow discharge (cfs)
- Reduction in sewer overflow volume (AF/year)
- Instream flow improvement (cfs)
- Energy consumption reduced (kWh/year)
- Community involvement (participants/year)

Project performance data may be uploaded to Opti, where it can be viewed by stakeholders and members of the public. Opti will serve as both a data repository and distribution mechanism. Project proponents will be responsible for quality control of the data they provide and for uploading data to Opti as it becomes available.

Project performance will be evaluated based on how well the targets established in the monitoring plan are met. Provided that monitoring data is available, the plan partners will review project performance following project implementation/construction and at intervals of no less than five years; this review may be conducted as part of updates to the SWRP.

7.4.2 SWRP Performance

The plan partners will evaluate SWRP performance as needed, but no less than every five years. The project list will be updated annually or as needed, and updated project lists will be appended to the SWRP as they are available. The plan partners will assess the progress toward SWRP implementation using metrics such as the following:

- Number of projects completed
- Progress toward achieving SWRP objectives, as measured using the quantitative metrics listed in Section 5 (Quantitative Methods)
- Watershed priorities supported (e.g. reduced discharges into 303(d) listed impaired water body, support for disadvantaged communities, etc.)
- Project funding secured by project proponents

The plan partners will also assess data gaps during its reviews of SWRP performance. This information will be used during future updates of the SWRP to improve the document and processes, as discussed in Section 7.4.3. The plan partners may choose to convene the TAC to provide feedback and assistance on changes to the SWRP.

SWRP performance information will be shared with stakeholders via announcements on the Opti platform, posting on the SWRP website, and by direct outreach to project proponents who provided monitoring information.

7.4.3 Adaptive Management

Adaptive management is the method by which a process or project is evaluated, and the information obtained is then used to improve the process or project. For example, as a project is implemented, useful information can be gathered and fed back into the project's management structure to adapt the project to better meet its overall objectives. The SWRP contains policies for adaptive management of the SWRP itself, and project proponents are also encouraged to engage in adaptive management of individual projects, where feasible. Feedback obtained from community participation and public perception of individual project benefits is expected to be an integral part of the adaptive management process for project proponents.

The SWRP will be assessed at regular intervals to determine whether updates are necessary to keep the SWRP current and thorough. The plan partners will conduct this assessment as needed, but no less than once every five years. Updates to the SWRP may be necessary due to changes in NPDES MS4 permits, regional priorities, SWRP Guidelines, or other factors. As watershed conditions change, the plan partners may need to alter elements of the SWRP, including water quality priorities, pollutant source assessments, project effectiveness, and quantitative analysis methods. The plan partners will maintain responsibility for completing any SWRP updates or changes that it deems necessary. The plan partners will evaluate the performance of the SWRP in terms of benefits achieved (as identified in Section 5, Quantitative Methods). The adaptive management process for the SWRP is illustrated in Figure 1. Actions related to the SWRP (shown in blue) would be the responsibility of the plan partners. Actions related to individual projects (shown in green) would be the responsibility of individual project proponents. At the project level, adaptive management could be used to improve management of the same project, or feedback could be applied to future projects undertaken by the same project proponent.

Through the use of Opti, project proponents have the ability to modify project information and add new projects at any time. Opti is publicly accessible, therefore the plan partners can monitor project changes on

an ongoing basis. The plan partners will continue to rely on project proponents to update project information as it becomes available.

The SWRP also may need to change as new stakeholders are identified or as new permittees emerge. During the periodic assessments of the SWRP, the plan partners will determine whether changes to the SWRP are needed, either in terms of governance structure or SWRP content.

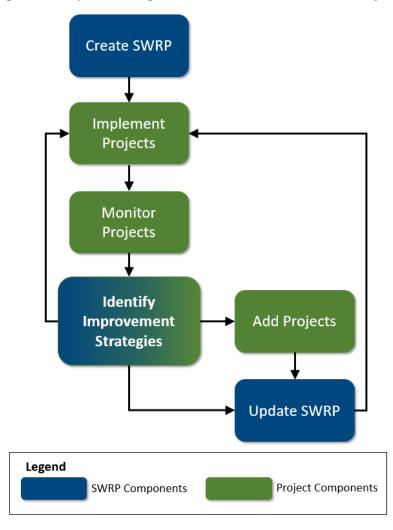


Figure 3. Adaptive Management of the SWRP and SWRP Projects

Table A-1. Summary of Project Schedule Information Provided by SWRP Project Proponents

Project Name	Organization	Project Category	Planning Status	Feasibility Status	Environmental Documentation Status	Design Status	Environmental Permits Status	Construction/ Implementation Status
	Organization	RTP			Status	Design Status	Fermis Status	Status
7th Street Low Impact Development (LID) Storm Drainage Improvements	City of Hughson		N/A	N/A	N/A	Not Started	N/A	Not Started
Modesto Area 2 Stormwater to Sanitary Sewer Cross- Connection Removal Project	City of Modesto	RTP	Completed	Completed	Completed	In Progress	In Progress	Not Started
Catherine Everett Park Cross Connection Elimination	City of Modesto	RTP	Completed	Completed	Not Started	In Progress	Not Started	Not Started
JM Pike Park Cross Connection Elimination	City of Modesto	RTP	Completed	Completed	Not Started	In Progress	Not Started	Not Started
Orestimba Creek Flood Management Project	City of Newman	RTP	Not Started	Completed	Not Started	Not Started	Not Started	Not Started
First Street Basin Rehabilitation	City of Riverbank	RTP	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
7th Street Outfall Rehabilitation	City of Riverbank	RTP	In Progress	In Progress	Not Started	In Progress	Not Started	Not Started
Little Salado Creek Groundwater Recharge and Flood Control Basin	Stanislaus County	RTP	-	-	-	-	-	-
Empire Community Storm Drainage Plan	Stanislaus County	RTP	Completed	Completed	Completed	Completed	Completed	Not Started
Carpenter Road/West Modesto Flood Management and Park Development	Tuolumne River Regional Park JPA	RTP	Completed	-	-	Not Started	Not Started	Not Started
	City of Turlock on behalf of NVRRWP	RTP						
North Valley Regional Recycled Water Project (NVRRWP)	Partners	DTD	In Progress	Completed	In Progress	Completed	In Progress	Not Started
F St Storm Pond	City of Waterford	RTP	In Progress					
Orestimba Creek Recharge and Recovery Project (OCRRP)	Del Puerto Water District	RTP	In Progress	Completed	Completed	Completed	In Progress	In Progress
Mustang Creek MAR Project	Eastside Water District	RTP	Completed	Completed	Completed	Completed	Completed	Not Started
Rouse Lake Managed Aquifer Recharge (MAR) Project	Eastside Water District	RTP	In Progress	In Progress	In Progress	In Progress	Not Started	Not Started
Tuolumne River Regional Park	Tuolumne River Regional Park JPA	RTP RTP	Completed	-	Completed	In Progress	In Progress	In Progress
West Stanislaus Irrigation District Fish Screen Project	West Stanislaus Irrigation District	RIP	Completed	Completed	In Progress	Completed	In Progress	Not Started
Stormwater Outfall Capture and Storage Project	City of Modesto	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Modesto Urban Stormwater Basin Recharge Enhancement Program	City of Modesto	Concept	In Progress	Not Started	Not Started	Not Started	Not Started	Not Started
Northeast Storm Drainage Interceptor Project	City of Modesto	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Install Storm Drainage Capture and Recharge Systems in								
Flood-prone Areas	City of Modesto	Concept	In Progress	Not Started	Not Started	Not Started	Not Started	Not Started
Newman LID Water Quality and Conservation Project	City of Newman	Concept	Not Started	Completed	In Progress	Not Started	Not Started	Not Started
F Street / Bryan Groundwater Recharge	City of Oakdale	Concept	Completed	Completed	Not Started	Not Started	Not Started	Not Started
Old Downtown Green Street Improvements	City of Patterson	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Patterson Green Street Improvement Project	City of Patterson	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Percolation Ponds for Stormwater Capture and Recharge	City of Patterson	Concept	Not Started	In Progress	Not Started	Not Started	Not Started	Not Started
San Joaquin Riverfront Park Project	City of Patterson	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Patterson Green Alley Retrofit Project	City of Patterson	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Salado Creek Landscape and Pedestrian Path Project	City of Patterson	Concept	Not Started	Not Started	Not Started	In Progress	Not Started	Not Started
City of Patterson Storm Treatment Compliance Program	City of Patterson	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started

Section 7 Implementation Strategy and Schedule – Appendix A

Project Name	Organization	Project Category	Planning Status	Feasibility Status	Environmental Documentation Status	Design Status	Environmental Permits Status	Construction/ Implementation Status
Non-Potable Pipeline Connection to WQCF	City of Patterson	Concept	Not Started	Completed	Not Started	Not Started	Not Started	Not Started
City of Patterson Zone 3 Storage Tank	City of Patterson	Concept	Not Started	N/A	Not Started	Not Started	N/A	Not Started
New Tertiary Filtration System at WQCF	City of Patterson		Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Patterson Wellhead Treatment	City of Patterson	Concept	Not Started		Not Started	Not Started	Not Started	Not Started
		Concept		In Progress				
Storm Drainage Enhancements along Salado Creek	City of Patterson	Concept	In Progress	Not Started	Not Started	Not Started	Not Started	Not Started
Salado Creek Flood Management and Repair Project	City of Patterson	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
Eastside Regional Storm Recharge Basin	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Candlewood Storm Drainage System Upgrade	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Various Storm Water Pipeline Rehabilitation projects	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Various Storm Water Basin and Outfall Projects	City of Riverbank	Concept	In Progress	In Progress	In Progress	Not Started	Not Started	Not Started
Storm Filter Installation Projects	City of Riverbank	Concept	In Progress	In Progress	In Progress	In Progress	N/A	Not Started
Safreno Park Storm Drainage System Upgrades	City of Riverbank	Concept	In Progress	Not Started	Not Started	Not Started	Not Started	Not Started
Castleberg Storm Drainage System Upgrades	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Gangi Cannery Site MS4 Compliance	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Townsend Avenue storm drainage improvements to reduce								
repeated flood events.	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
City of Riverbank/OID Roselle Avenue Basin Improvements	City of Riverbank	Concept	In Progress	In Progress	Not Started	Not Started	Not Started	Not Started
Borax Ct Storm Basin	City of Waterford	Concept	-	-	-	-	-	-
Dry Well Rehabilitation, Rejuvenation, Reconstruction	City of Waterford	Concept	-	-	-	-	-	-
Forrestal Storm Basin	City of Waterford	Concept	-	-	-	-	-	-
G St and Church Storm Basin	City of Waterford	Concept	-	-	-	-	-	-
Stein Basin	City of Waterford	Concept	-	-	-	-	-	-
EWD Diffused Surface Water Project Merced County Dry Creek Project	Eastside Water District	Concept	In Progress	Completed	In Progress	In Progress	N/A	N/A
Stormwater Infrastructure and Dual Use Basins for County Islands (DUCs)	Stanislaus County	Concept	-	-	-	-	-	-
Evaluation of Stormwater Management and Groundwater Recharge Projects in the Dry Creek Watershed of Stanislaus	-							
County	Stanislaus County	Concept	Not Started	In Progress	Not Started	Not Started	Not Started	Not Started
Airport Neighborhood Urban Greening Project	Stanislaus County	Concept						
Hydraulic and Channel Migration Studies	Stanislaus County	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started
· · · · · ·	Tuolumne River							
Tuolumne River Flood Management Feasibility Study	Regional Park JPA	Concept	Completed		Not Started	Not Started	Not Started	Not Started
Airport Neighborhood Stormwater Retention System and Dual	Tuolumne River	Concert	Not Started	Not Storted	Not Storted	Not Storted	Not Storted	Not Startad
Basin/Low Impact Strategies Stormwater Runoff	Trust	Concept	Not Started	Not Started	Not Started	Not Started	Not Started	Not Started

Note: RTP refers to a ready-to-proceed project.

Section 7 Implementation Strategy and Schedule – Appendix A