

Memorandum

Date: June 22, 2018
To: Mieke Sheffield, City of Redding
From: Avery Blackwell, PE, Brandon Steets, PE, and Maia Colyar, Geosyntec Consultants
Subject: City of Redding Stormwater Resource Plan
Task 4.6: Implementation Strategy Memo
Geosyntec Project: LA0443

To encourage the long-term implementation and overall success of the Redding Stormwater Resource Plan (SWRP), a prescriptive yet flexible implementation strategy is needed. This memorandum discusses strategies for implementation of the SWRP, including:

- identification of available and potential resources and funding,
- a schedule for major implementation activities,
- a plan for ongoing Technical Advisory Committee (TAC) and community participation,
- an adaptive management framework that utilizes a decision support tool, and
- tracking and evaluation of performance measures.

The strategies described herein fulfill the requirements in Section VI.E in the SWRP Guidelines, which covers regulations under Water Code Sections 10562(d)(8) and 10562(d)(9).

Resources for Implementation

As required by Water Code Section 10562(b)(7), the SWRP will be submitted to the Northern Sacramento Valley Integrated Regional Water Management (IRWM) Group for incorporation into the IRWM Plan (IRWMP). Administration and implementation of the SWRP will be provide by the City, including activities such as inclusion of additional projects, engagement with stakeholders, and general plan updates as needed. For implementation of specific projects identified in the SWRP (design and construction), the City, in addition to any agency (or agencies) partnering in development of the project, will coordinate resources and funding necessary for the successful administration, implementation, and maintenance of the project. This includes activities

such as project scoping, developing grant proposals, acquiring funding, and implementation of the projects, which are under the responsibility of the City. Funding possibilities for project implementation may combine a variety of sources including but not limited to capital improvement plan funds, general funds, and local, state, federal, or private grant and bond funds. Financing for project implementation will be developed in the future as project designs are developed and availability of funding sources are assessed.

Implementation Schedule

Table 1 shows the schedule for activities and milestones relating to the Stormwater Grant Program (SWGP) and a proposed schedule for activities specific to the SWRP. The proposed schedule includes incorporation of the SWRP into the existing IRWMP.

Table 1. SWRP Schedule

Milestone	Date
State SWGP Activities	
Water Quality, Supply, and Infrastructure Improvement Act (Proposition 1) approved	November 4, 2014
Prop 1 SWGP final planning grant funding list (Round 1)	May 2016
Prop 1 SWGP implementation grant solicitation period closes (Round 1)	July 8, 2016
Prop 1 SWGP final implementation grant funding list (Round 1)	October 2016
Prop 1 SWGP implementation grant solicitation application period (Round 2)	2019
Redding Stormwater Program Activities	
Final Draft of the SWRP	June 30, 2018
Approval of SWRP by the City Council	Fall 2018
Submit SWRP for incorporation into the IRWMP	Fall 2018
Submittal of the SWRP to the State Water Resources Control Board	July 31, 2018
Prop 1 Implementation Grant Applications	2019
Incorporate additional eligible multi-benefit stormwater projects into the SWRP from future Total Maximum Daily Load (TMDL) Wasteload Allocation Attainment Plan and other efforts	Ongoing
Investigate additional funding options	
Evaluation of SWRP performance measures	
Pursuit of other funding options	
Planning for projects	Project-specific and TBD based on funding availability and other implementation constraints
Permitting for projects	
Design of projects	
Construction of projects	

Ongoing Collaboration

The following programs have been identified to assist the City in effective implementation of strategies and projects identified in the SWRP:

- **TAC E-mail group:** Updates related to the SWRP will be sent to the TAC by e-mail as needed. Emails will also be sent out to remind all parties of upcoming deliverables (e.g., implementation funding deadlines) and to encourage ongoing collaboration regarding project identification and planning.
- **TAC Meetings:** Meetings with the TAC will be held, as needed, to discuss more significant items relating to the SWRP implementation or modification.

Community outreach will continue during the SWRP administration and project implementation, in order to encourage community members to identify and propose additional projects for inclusion

in the SWRP and to be involved in the projects that affect them. While each project will have slightly different milestones, the following actions will be taken throughout the City regarding the SWRP administration:

- Stakeholders will receive email notifications of significant updates to the SWRP.
- Information will be distributed on the City website (www.cityofredding.org/departments/public-works/environmental-management/storm-water-management). The website will provide information on significant updates and milestones and will be easily accessible to the public.

The City will carry out project implementation in accordance with local regulations and public process requirements, allowing the community the opportunity to engage and contribute to the project through the project life, including during planning, permitting, design, and construction phases. Examples of other community outreach strategies that may be used include the following:

- Engagement with and presentations to interested stakeholder groups and other community groups.
- Public outreach related to contracting processes for project design, construction, and grant applications/acceptance (if applicable), and as required by the California Environmental Quality Act (CEQA).
- Outreach within project construction area and its vicinity prior to initiation of project construction activities.
- Post-construction outreach including ribbon cutting ceremonies, educational signage, project presentations and demonstrations at schools, for community groups and for other interested groups and organizations.

SWRP projects will provide an ideal opportunity to showcase the many benefits of green infrastructure, particularly regarding stormwater capture, reduced local flooding, urban greening, and other features and functionality that will serve the community. With proper educational tools such as interpretive signage, the public can also gain a better understanding of how the project provides opportunities to capture, treat, and conserve water. As a result, constructed projects will provide a mechanism for community participation and education that will help garner support for additional projects implemented over time.

Adaptive Management Framework

The SWRP is structured as a living document and implemented as an ongoing, adaptive program. The City will be responsible for maintaining and updating the SWRP as needed, in coordination

with updates to the IRWMP, and at intervals that are aligned with stormwater regulatory requirements, grant program solicitations, and community interests. When changes to the SWRP are necessary, the City will officially propose those changes to the Northern Sacramento Valley IRWM Group and provide a revised final SWRP and a draft showing the changes for record keeping purposes. No agency will be able to modify the SWRP without the City's approval.

In order to allow the City and other local stakeholders to add new projects to the SWRP, the Redding SWRP Project Prioritization Tool (Prioritization Tool) was created. This intuitive adaptive decision support tool allows the City to:

- collect and store key project information and quantified benefits for new projects with all projects currently included in the SWRP; and
- prioritize new projects relative to all projects currently included in the SWRP.

The Prioritization Tool, a Microsoft Excel file, can be downloaded from the City's website (www.cityofredding.org/departments/public-works/environmental-management/storm-water-management), along with directions for entering new projects and submitting the populated tool to City. The Prioritization Tool contains an interface tab that project proponents will use to enter their project information, such as the project name, project type, brief description, project location and responsible jurisdiction, and quantified benefits. After the user submits their project's information, the project data is stored within the Prioritization Tool.

The Prioritization Tool stores information for record keeping purposes and also automatically calculates the quantitative and qualitative benefit scores, overall benefit scores for each benefit category, and the multi-benefit indices based on the input data provided. New projects are automatically prioritized into the appropriate "high", "medium", or "low" designation based on the calculated multi-benefit index and other information provided (i.e., if there is a willing land owner committed to performing maintenance). Based on the methodology used to calculate the benefit scores in the SWRP, it is possible that scores and the multi-benefit index for all projects will change based on a newly entered project. However, the Prioritization Tool automatically updates for all entered projects as needed. The Prioritization Tool also stores the status of each project and can easily be modified as the project moves from an idea to implemented.

Furthermore, as SWRP projects are implemented and information is gathered over time, the SWRP should be modified to reflect the most current understanding of the watershed and present a sound approach to addressing changing conditions. Future changes to the SWRP may include:

- Revising multi-benefit scores based on changing water quality priorities in the relevant watersheds according to new TMDLs or 303(d) listings.

- Updating the metrics-based, quantitative analysis of potential project benefits for new BMP performance data, new local water quality monitoring data, water quality priorities, or modifications to the project designs.
- Adding new projects or removing infeasible projects.
- Identification of completed projects.

Implementation Performance Measures

The modeling performed for each project concept, using the Load, Prioritization, and Reduction (LPR) Model, determines the expected outcomes or benefits of each proposed project. These outcomes include water quality and water supply augmentation benefits, in addition to the other benefit categories of flood management, community, and environmental benefits. For example, the SWRP estimates expected outcomes for each proposed project related to the volume of water supply that may be provided or the load of a pollutant that may be prevented from reaching the receiving water.

Relevant ongoing monitoring programs conducted in the SWRP area are outlined in Task 4.3 Description of Approach to Address Water Quality. The significant monitoring efforts currently being conducted are intended to assess the quality of groundwater used for water supply purposes, surface receiving water quality, and the impacts of MS4 discharges on receiving waters. Ongoing monitoring results will be analyzed as needed to evaluate whether the water quality effects of completed SWRP project can be seen in the receiving waters. If needed, future SWRP implementation may be adjusted based on BMP performance data collected, such that project types with monitoring data showing more effective performance are prioritized. The need for additional project-specific performance evaluation monitoring will be determined during the design phase. Grant funded projects may be expected to implement performance monitoring.

In accordance with recommendations in the SWRP Guidelines (section VI.C.3), the City will continue the current procedures for monitoring data collection and management (as described above). The procedures for the management of additional project-specific performance monitoring data (e.g., planning for how data may be accessed by stakeholders and the public, how existing water quality monitoring will be assessed and maintained, the frequency at which data will be updated, and how data gaps will be identified and addressed) will be specific to each project. GIS data files related to the SWRP, which may be used for updating or adding new projects to the SWRP in the future, will also continue to be managed in the City’s geodatabase.
